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INSTITUTE OF ENGINEERING
PULCHOWK CAMPUS

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**RESETTLEMENT PREFERENCES OF INFORMAL SETTLEMENTS
ALONG THE BAGMATI RIVER**

By

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THESIS

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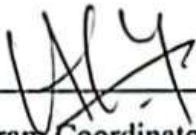
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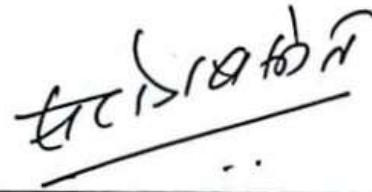
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DECLARATION

I hereby declare that the thesis entitled “**Resettlement Preferences Of Informal Settlements Along The Bagmati River**”, submitted to the Department of Architecture in partial fulfillment of the requirement for the degree of Masers of Science in Urban Planning, is a record of an original work done under the guidance of Dr. Sanjaya Uprety, Institute of Engineering, Pulchowk Campus. This thesis contains only work completed by me except for the consulted material which has been duly referenced and acknowledged.



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ABSTRACT

Informal settlements along the Bagmati River in Kathmandu face persistent challenges due to tenure insecurity, environmental vulnerabilities, and the lack of affordable housing and inclusive urban planning. Recent flood risks have highlighted the urgent need to adopt proactive measures for the resettlement of these communities. While eviction has long been the dominant state response, this thesis explores resettlement as a more sustainable alternative for affected communities. This research examines the resettlement preferences of these communities, focusing on how socioeconomic factors shape their choices. Using a mixed-methods approach, including surveys and key informant interviews, the study identifies critical determinants such as income stability, household structure, employment opportunities, and access to essential services. Findings indicate that while land ownership remains a primary concern, preferences for resettlement models vary across demographic and economic groups. The research also evaluates past resettlement projects like Kirtipur Housing and Ichangu Housing, highlighting their strengths and limitations in meeting community needs. The study underscores the importance of participatory planning, advocating for alternative strategies such as private public partnerships and subsidized credit schemes for affordable housing. Ultimately, the thesis advocates for policy reforms and incentive-based resettlement strategies that prioritize both flood resilience and social equity in the urban development of Kathmandu.

Keywords:

Informal settlements, resettlement preferences, land tenure, affordable housing

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LIST OF ACRONYMS

ACHR	Asian Coalition for Housing Rights
DUDBC	Department of Urban Development and Building Construction
FAR	Floor Area Ratio
FDG	Focus Group Discussion
HH	Households
HPBCIDC	High Powered Bagmati Civilisation Integrated Development Committee
KII	Key Informant Interview
LIG	Low Income Groups
NBBSS	Nepal Basobas Basti Samrakchan Samaj (Nepal Settlement Protection Society)
NLHDF	Nepal Land & Housing Developers Federation
NRB	Nepal Rastra Bank
SDI	Slum Dwellers International

CONTENTS

COPYRIGHT.....	I
CERTIFICATE OF THESIS APPROVAL	II
DECLARATION	III
ABSTRACT.....	IV
ACKNOWLEDGEMENT	V
List of acronyms	VI
CHAPTER 1: Introduction	1
1.1 Background	1
1.2 Need.....	4
1.3 Importance.....	5
1.4 Problem Statement	5
1.5 Research Objective.....	7
1.6 Research Ethics	8
1.7 Limitations.....	8
CHAPTER 2: Research Design	9
2.1 Paradigm Discussion.....	9
2.2 Methodology	10
2.3 Methods.....	11
CHAPTER 3: Literature Review	15
3.1 Informal Settlements	15
3.2 Plans and Policies.....	21
3.3 Managing Informal Settlements	27
3.4 Resettlement	30
3.5 Decision Making	38
3.7 Kirtipur Housing Project (KHP).....	45
3.7 Ichangu Housing Project	51
3.8 Housing for Economically Weaker Section (EWS), Madras	53
3.9 Housing Need Fulfillment Practice In Pakistan: Orangi Pilot Project	53
3.10 Baan Mankong in Nakhon Sawan, Thailand.....	53
3.11 Credit Linked Interest Subsidy (CLSS) – PMAY (Pradhan Mantri Awaas Yojana) ...	55
3.12 The Low-Income Housing Finance from Commercial Banks in Nepal.....	55
3.11 Real Estate Financing in Nepal	56
3.12 NRB Unified Directives 2081	58

3.13 Monetary Policy	60
3.14 Earthquake subsidy Loan	61
3.15 Private Developer incentives for developing affordable housing	62
CHAPTER 4: Study Context	64
4.1 Case Area	64
4.2 Socio Economic Conditions	66
CHAPTER 5: Findings and Analysis	78
5.1 Findings and Analysis of Case Area: Jagritinagar Informal Settlement	78
5.2 Findings and Analysis of Case Area: Thapathali Informal Settlement	87
5.3 Findings and analysis from Key Informant Interview.....	91
5.3.1 Regarding resettlement of Informal Settlements	91
5.3.2 Regarding Access to finance for Informal Settlements	95
5.3.3 Housing provision through private developers.....	99
CHAPTER 6: Discussion.....	100
CHAPTER7: CONCLUSION	111
CHAPTER 8: Recommendation	112
8.1 Subsidised Loan	112
8.2 Housing Provision through private housing developers.....	113
REFERENCES	113
APPENDIX A: SITE AND KII PHOTOGRAPHS	121
APPENDIX B: QUESTIONNAIRE.....	123
APPENDIX C: IOEGC PAPER APPROVAL	137
APPENDIX D: PLAGIARISM TEST REPORT	146

Figure 1 Process of Informal settlement formation in Kathmandu. Source: (Sharma & Rabe, 2010)	17
Figure 2 Squatter Settlements in Kathmandu Valley.....	17
Figure 3 Demographic Status of Squatter Settlements in Kathmandu Valley.....	18
Figure 4 Communities affected by the project.....	46
Figure 5 Kirtipur Housing Project	48
Figure 6 Paliphal housing unit types. Source: (Shrestha M. , 2011)	49
Figure 7 Ichangu Narayan Housing Project.....	52
Figure 8 Residence construction in Thapathali Informal Settlement.....	65
Figure 9 Residences in Jagritinagar Informal Settlement	66
Figure 10 Jagritinagar Informal settlement: Presence of water taps in individual houses.....	72
Figure 11 Thapathali Informal settlement: Presence of only communal water taps and toilets	72
Figure 12 House construction in Jagritinagar informal settlement.....	74
Figure 13 House construction in Thapathali informal settlement.....	74

Figure 14 Framework for Subsidised Loan Provision	110
Figure 15 KII at HPCIDBC	123
Figure 16 KII at Lumanti	123
Figure 17KII at DUDBC.....	123
Figure 18 KII at DUDBC.....	123
Table 1 Respondents of Survey	11
Table 2 Respondents of Interview: Regarding resettlement of informal settlements	11
Table 3 Respondents of Interview: Regarding home loan subsidies	12
Table 4 Case study area	14
Table 5 NUDS strategies on housing for EWS and informal settlements (MoUD, 2017)	23
Table 6 Determinants of Resettlement Preferences	43
Table 7 Methodology Review.....	43
Table 8 Share of Real estate lending on total lending. Source: (NRB, Real Estate financing in Nepal: A Case Study of Kathmandu Valley, 2011).....	57
Table 9 Types of Customers. Source: (NRB, Real Estate financing in Nepal: A Case Study of Kathmandu Valley, 2011).....	57
Table 10 Borrower Documents required to take loan. Source: (SiddharthaBank, n.d.)	60
Table 11 RII (Jagritinagar).....	84
Table 12 RII of facility provisions (Thapathali informal settlement).....	90
Table 13 Home Loan Details summary	97
Table 14 Low Cost Housing Sizes.....	106
Table 15 Calculation of Subsidy Loan.....	107
Table 16 NLSS 2024 Household Income	107

CHAPTER 1: INTRODUCTION

1.1 Background

Informal settlements, characterized by the lack of legal rights to land and inadequate living conditions, have become a significant challenge in rapidly urbanizing cities worldwide. The United Nations Habitat defines squatters as individuals occupying land or buildings without tenure security, often in hazardous or unsanitary areas, without adequate access to basic services (UN-HABITAT & G.L.T.N., 2012). Urban informal settlements are often labeled as slums because of their poor living conditions, overcrowded environments, and lack of essential public services like education, healthcare, clean drinking water, sanitation, and waste management (Khatiwada, 2013). In Kathmandu, informal settlers, known locally as "Sukumbasi" or "landless people," face a range of challenges due to their insecure housing, often situated in flood-prone areas or on steep slopes. These communities are highly vulnerable to natural disasters, particularly flooding, which has been exacerbated by the effects of climate change and rapid urbanization.

As per the Nepal Landless Democratic Union Party, over 29,000 landless individuals were residing in 73 squatter settlements across the Kathmandu Valley in 2012, with many having lived on the land for more than forty years. Among them, 1,082 families were officially recorded as squatters in 2012 (Baidar, 2021). Community groups such as the Nepal Basobas Basti Samrakshan Samaj (NBBSS), Nepal Mahila Ekata Samaj (NMES), together with federations of informal settlements, play an active role in advocating for and safeguarding the rights of informal settlers (Shrestha, Joshi, Deuja, & Panday, 2021). They discourage property transactions without land certificates, helping to provide legitimacy to the squatter communities. For instance, NMES engages in activities such as savings and credit cooperatives, and the distribution of family identity cards, which help enhance the sense of security among residents. Many informal settlers report feeling more secure once they have received documentation, such as citizenship cards or migration certificates, which affirm their residence in Kathmandu. Such documents not only provide a sense of informal ownership but also help mitigate the risk of eviction. NBBSS, NMES and CDYN submitted the Housing Bill for Squatter and Unplanned Settlements (2007) on the occasion of World Habitat Day 2007 (Tanaka, 2009). These initiatives, which began in the early 2000s with the

support of organizations like Lumanti and the Kathmandu Metropolitan City Office (KMC), have been instrumental in improving the sense of security among informal settlers. Through community-driven initiatives, they have addressed various needs, such as education, skill-building, savings, credit cooperatives, and basic infrastructure. However, without secure land tenure, the fundamental right to adequate housing remains unattainable at the community level.

In the Kathmandu Valley, informal settlements exhibit diversity in ethnicity, caste, place of origin, family composition, occupations, and the underlying reasons for squatting (Tanaka, 2009). While many of these settlements are home to disadvantaged groups, squatting itself is not necessarily an indicator of poverty. Residents have varied income levels and occupations, but they are often classified as informal wage workers and considered part of the urban poor. Most of these settlements are situated along the Bagmati River banks, a zone that faces growing risks during the monsoon season, which not only threatens the physical stability of their homes but also exacerbates their insecure land tenure (Lumanti, 2008). Despite their vulnerability, these settlements persist due to a lack of affordable housing options, proximity to employment and essential services. In the absence of government support, informal settlers are compelled to take their own initiatives to mitigate flood risks. However, the ongoing threat of eviction and lack of secure land tenure prevent them from making long-term investments in home improvements or flood adaptation measures (Dangol & Day, 2017). The vulnerability of these settlements was starkly highlighted by the floods of 2024, which caused significant damage and displacement among residents, underscoring the urgent need for effective and sustainable resettlement strategies.

Resettlement is described as a deliberate process of transforming informal and unauthorized settlements into legally recognized, officially regulated, and administratively managed land structures, often due to environmental vulnerabilities, legal pressures, or urban development projects, to alternative living arrangements. The National Plan of Action (NPA) of 1996 proposed that informal/squatter settlements be upgraded to create a safe environment. The tenth national plan also mentions “preparing plans to systematize the unplanned and informal settlements of the Kathmandu Valley in the coordination of all concerned stakeholders.” Article 37 of Constitution of Nepal states that every citizen has right to proper housing. It guarantees the public right to

housing and enjoying the benefits that are inseparable from housing. The 20-Year Strategic Development Master Plan (2015-2035) outlines that informal settlements will no longer be permitted on vulnerable public lands. It aims to establish a new approach to institutional housing, with 10% of land in the urban core designated for such housing projects. The plan includes the restoration of the river systems in the Kathmandu Valley (KVDA, 2016). In view of these plans, numerous commissions have been formed to solve the issue of the informal settlements however, the efforts have not improved the situation. For many informal settlers, resettlement is not merely about physical relocation but about ensuring an improvement or at least the preservation of their current quality of life, while addressing the factors that made their original settlement precarious. In this context, the informal community's needs and preferences for resettlement have often been overlooked, often employing a one size fits all approach leading to repeated failures in resettlement initiatives. (Beng.H.S.K., 2000)

Informal Settlement Federations and Lumanti recognize the need to relocate informal settlements situated in high-risk areas, such as flood-prone riverbanks. They emphasize that clear guidelines must be in place to safeguard the livelihoods and well-being of relocated families, ensuring their integration into new communities. As Lakpa Lama stated, for resettlement efforts to succeed, “the government needs to provide community, not just housing.” Collaborative efforts between development agencies, the government, and informal communities—along with their leaders—can shape slum upgrading and resettlement policies, allowing for context-specific solutions that address the unique needs of each settlement (Brooks, 2016).

The objective of this research is to explore the resettlement preferences of informal settlements along the Bagmati River, particularly focusing on how socioeconomic and environmental factors shape these preferences. The study focuses on the dynamic intersection of informal settlements and government regulations and interventions. By examining past resettlement models, such as Kirtipur Housing and Ichangu Housing, as well as studying current informal communities, the research aims to study the preferences of informal settlers on resettlement initiatives. The research highlights the need for a participatory approach, where the perspectives of informal communities are integral to the design and execution of resettlement policies.

Ultimately, this study seeks to contribute valuable insights to improve resettlement practices in Kathmandu and other urban areas facing similar challenges, supporting the development of policies that prioritize the rights, safety, and livelihoods of informal settlers.

1.2 Need

SDG 11, which seeks to “Make cities and human settlements inclusive, safe, resilient and sustainable,” focusing on Target 11.1 — “By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums”. At the 2020 U.N. High-Level Political Forum (HLPF), it was highlighted that Target 11.1 is among the five targets moving backward. Urban slums and informal settlements play a significant role in shaping the social, economic, and environmental dynamics of cities, as well as their development potential. As a result, advancing SDG 11 and specifically Target 11.1 is crucial for driving progress across the broader 2030 Agenda for Sustainable Development (Shulla & Kőszeghy, 2021). The World Bank Group: Country and Climate and Development report recommends to plan for integration of informal settlements in urban areas including in service delivery, job creation and social cohesion.

The devastating effects of the September Flood 2024 calls for an urgency to plan and implement resettlement strategies of the squatters exposed to high risks of flood along the Bagmati river. The settlements have been inundated multiple times in the past, forcing residents to be temporarily relocated to safer areas (Dhakal, 2022). According to OCHA, the September 2024 flood damaged approximately 2,100 homes, impacting around 7,600 families living in informal and marginalized settlements along the rivers in Kathmandu and Lalitpur (OCHA, 2024) whereas a total of 10,927 households were affected in Bagmati Province (NDRRMA, 2024). The July flood in 2024 even led to the death of a squatter settler, Ram Swarup Mahato who lived in Balkhu (Republica, 2024). The increasing frequency and intensity of floods have made the informal settlements highly vulnerable, as highlighted by the devastating Bagmati floods of 2024, bringing forth that it needs to be viewed from a risk perspective as well. In response to the increasing risk factors along the rivers in Kathmandu, the Supreme Court (SC) of Nepal has directed the authorities concerned to create an additional 20-meter buffer zone along the banks of all rivers in the Kathmandu Valley in order to

mitigate flooding and protect the river ecosystems, which would require a number of the informal settlers to be resettled elsewhere (Pahari, 2024).

This also necessitates realizing the need for a participatory approach involving real participation while designing homes, and a context-specific approach that accounts for the unique needs and characteristics of the resettled communities can lead to more-inclusive and successful housing solutions that foster greater satisfaction and long-term well-being (Shrestha, Uprety, & Pokharel, 2023).

1.3 Importance

This research serves as a crucial tool for informing policymakers about effective strategies to address informal settlement challenges. It focuses on the needs and priorities of the informal settlements to formulate resettlement strategies. Beyond immediate resettlement concerns, the research explores social inclusion and urban development, assessing how security of tenure influences the settlers. This research can serve as a guide for local governments, NGOs, INGOs, private organizations and academia alike regarding the resettlement approaches, its challenges and implementation strategies.

1.4 Problem Statement

The issue of informal settlements in Kathmandu is often framed as a legal and administrative challenge, overshadowing its deeper roots as a humanitarian crisis that reflects the city's socio-economic inequalities. For many families, living in these settlements is the only viable option to secure better opportunities, as they are often located near jobs, schools, and healthcare facilities. The settlers claimed that in the past, people from the city would attempt to set their settlements on fire since their homes use to be constructed out of bamboo. A pervasive fear of forced eviction shapes the response of the informal settlers to government interventions, with many seeing eviction as an ever-present threat. This fear significantly impacts their willingness to invest in flood adaptation measures, especially when government support is absent. Informal settlers along riverbanks, despite the high risk of flooding during the monsoon, have been known to take their own initiatives for flood adaptation, but their fear of eviction hinders more significant investments in long-term solutions (Dangol & Day, 2017; Karki & Singh, 2022). The disproportionate burden of environmental hazards and pollution on informal settlements, particularly those inhabited by marginalized and

vulnerable populations, makes a case for environmental injustice. (Singh & Singh, 2024)

Forced eviction is against a range of the international human rights ratified by Nepal (Khatiwada P. , 2012) and the spirit of the 2015 constitution which obligates the state to pursue policies related to “implementing international treaties, agreements to which Nepal is a party”. Despite this, the government has carried out—and repeatedly attempted—evictions of informal settlers, especially those residing along riverbanks. Eviction efforts saw a significant rise, especially during periods of political unrest, with opposing political leaders labeling the actions as “opportunistic bulldozer terrorism.” (Sengupta & Sharma, 2009). In response to the challenges faced by squatters, 14 squatter commissions, three high-level land reform commissions, and five committees focused on land registration and management have been formed (Republica, 2021). Despite these efforts since 2009 to systematically provide land to squatters, the problem persists and has put adverse ecological impacts on the surrounding environment. At times, the government has managed to evict and relocate informal settlers to peripheral areas, as seen in the case of Kirtipur. More frequently, settlers have opposed relocation efforts and have (re)settled on the same land. Recently, informal settlements in risk-prone riparian areas have been evicted, with the government primarily targeting these communities, although some formal settlers were also affected. Evictions persisted even during the COVID-19 pandemic.

Past threats of eviction cause squatters to be more organized and prepared (Tanaka 2009). Community leaders state that both squatter federations emerged as a response to a longstanding history of threats and forced evictions carried out by the government and civil society. The settlers are aware that “if the government has the power to evict, then they have the power to relocate”. As a result, the primary demand of NMES and NBBSS is an end to forced evictions (Brooks, 2016).

Residents of Thapathali described their reaction to eviction as one of violence, driven by the fear of losing the livelihoods they had established in their community. After reconstructing the settlement, Aashish BK asserted that their return to the settlement serves as a form of resistance to eviction—a peaceful protest aimed at demanding land certificates (Brooks, 2016). Community leaders argue that evictions carried out without resettlement plans or community involvement are inherently confrontational. Despite

numerous interventions, the lack of participatory approaches in informal resettlement planning in Kathmandu has led to recurring failures in ensuring sustainable and equitable solutions. It is imperative for implementing agencies, policy-makers, and other stakeholders to incorporate a participatory process during the planning and design stages of such projects (Baniya, 2021)

"If the government sends a team, we are not insisting on staying by the riverside forever. We live here out of necessity. In winter, the river smells; in monsoon, we live in fear of floods. We're only here because we have no choice. The government must provide food, housing, education, and healthcare."

- (Rajbhandari, 2024)

A one-size-fits-all approach to addressing informal settlements is ineffective. Solutions should go beyond mere eviction and be tailored to the specific needs and characteristics of each settlement, rather than applying a uniform prototype. While these customized approaches may require significant time and resources, they are ultimately more cost-effective than the repeated failures of generic projects by government or private entities (Beng.H.S.K., 2000).

This research seeks to bridge this gap by exploring community-driven resettlement preferences based on their socio economic and environment conditions and proposing context-specific solutions. By involving squatters in decision-making processes, they can engage as equal partners in negotiations with the government, fostering solutions that balance the interests of both parties. The successful design and implementation of resettlement policies rely on partnerships among development agencies, government bodies, and squatter community leaders, ensuring that interventions are context-specific and address the unique social and environmental realities of each settlement.

1.5 Research Objective

The primary research objective is –

To understand how socioeconomic factors shape the resettlement preferences of informal settlements.

The secondary research objectives are

- To identify and assess the socio economic conditions of the informal settlements.
- To assess the past resettlement experiences of informal settlers in Kathmandu.
- To investigate the features informal settlements and other stake holders consider essential in resettlement models.

1.6 Research Ethics

Research ethics encompass a set of principles guiding the ethical conduct of research involving humans, animals, and the research process itself. This study follows the principles of research ethics which includes obtaining informed consent, ensuring privacy and confidentiality, maximizing benefits while minimizing harm, promoting justice in participant selection, maintaining research integrity and transparency, respecting participant autonomy, complying with institutional review processes, and disclosing conflicts of interest. Upholding these principles is vital for protecting participants, ensuring research integrity, and building public trust in the scientific community.

1.7 Limitations

This study focuses on the social and economic parameters influencing the resettlement preferences of informal settlers along the Bagmati River. Parameters such as institutional factors and environment factors have been assessed from the social and economic point of view. While these factors provide critical insights into the livelihoods, income levels, employment opportunities, and social networks that shape relocation decisions, the study excludes other important dimensions such as political factors. While political factors, influence resettlement, they are often external forces that settlers have little direct control over. On the other hand, economic survival and social support systems shape daily decision-making and are more pressing concerns.

Economic opportunities, affordability, and social networks hold greater weight in resettlement decisions compared to political factors, which often remain secondary concerns until they pose an immediate threat. As a result, while the findings offer valuable insights into the economic and social realities of informal settlers, they do not provide a holistic understanding of all factors influencing resettlement preferences. Future studies could integrate these additional dimensions to present a more

comprehensive analysis of the complexities surrounding informal settlement relocation along the Bagmati River.

CHAPTER 2: RESEARCH DESIGN

2.1 Paradigm Discussion

Ontology is defined as the exploration of 'being', focusing on the actual entities present in the world that humans can comprehend. It aids researchers in determining the certainty they can attribute to the nature and existence of the objects under investigation (Moon & Blackman, 2017). This research critically examines the dynamics and intricacies of resettlement within the context of the squatter settlements in Kathmandu Valley. The focus is on unraveling the multifaceted realities experienced by key stakeholders, including the squatter community, public sector, NGOs, squatter committees and other pertinent participants. The ontological assumption is that “Resettlement preferences of squatter communities are shaped by multiple, intersecting realities influenced by their unique socioeconomic and environmental contexts. By understanding their needs and priorities, well-designed resettlement models can be developed, ensuring a safer, more inclusive, and better-facilitated life for its members.”

Epistemology involves the examination of knowledge. It delves into various aspects of the legitimacy, range, and methodologies employed in gaining knowledge. This includes a) determining what qualifies as a valid knowledge assertion; b) exploring the means by which knowledge can be gained or generated; and c) evaluating the degree to which its applicability can be ascertained. Epistemology holds significance as it shapes how researchers conceptualize their research endeavors in their quest for knowledge discovery.

The epistemological framework of this research involves a methodologically diverse exploration of the factors shaping resettlement within the context of squatter communities residing in flood prone areas along the bagmati river. The qualitative dimension comprises employing surveys, Key Informant Interviews (KIIs), and Focus Group Discussions (FGDs) to gather rich insights from stakeholders. These qualitative measures aim to capture the nuanced perspectives and experiences of key actors involved in squatter resettlement initiatives. Quantitative dimension consists of the household data about factors such as family size, compensation, house area, cost of housing etc. This approach ensures a comprehensive understanding of the intricacies

influencing squatter community resettlement dynamics within the natural setting, ultimately contributing to a more holistic knowledge base.

Interpretivism in research is an approach that highlights the subjective and context-dependent nature of human experiences. Unlike positivism, it acknowledges the diversity of perspectives and the influence of social and cultural contexts on how individuals interpret events. Researchers employing interpretivism use qualitative methods to explore the rich details of human behavior, emphasizing the importance of understanding the complexities of lived experiences. This approach is particularly relevant in fields such as sociology and anthropology, encouraging a deeper understanding of social phenomena by appreciating the multiple meanings people attribute to their world. The approach recognizes and values the complexity of human experiences within the policy process, aiming to provide a comprehensive and enriched understanding that extends beyond mere statistical or quantitative analyses.

The pragmatic paradigm in research is rooted in a practical and problem-solving orientation, focusing on the application of knowledge to address real-world issues. Pragmatic researchers often adopt a mixed-methods approach, combining qualitative and quantitative methods to gain a comprehensive understanding of a phenomenon. As this study aims to provide a comprehensive understanding of the phenomenon and corresponding resettlement models, which is an outcome of qualitative and quantitative analysis, this study lies in the pragmatic paradigm.

2.2 Methodology

This research adopts a mixed-methods approach grounded in the pragmatic research paradigm to comprehensively explore the resettlement preferences of squatter communities along the Bagmati River. By incorporating a transactive approach, integrating qualitative and quantitative methods, the study seeks to capture the complexities of resettlement dynamics, focusing on how socioeconomic factors shape community preferences. The methodology ensures a balance between the nuanced perspectives of stakeholders and measurable insights derived from household-level data.

2.3 Methods

2.3.1 Literature Review

To establish a strong theoretical foundation, a detailed literature review will be conducted, drawing from academic papers, government reports, policy documents, and case studies. This review will provide a global and local context to resettlement policies and practices, aligning the research with international frameworks such as Sustainable Development Goal (SDG) 11 while identifying gaps in current approaches.

2.3.2 Data Collection

Primary data collection will involve semi-structured interviews and questionnaire surveys. Questionnaire design was prepared in collaboration with Dr. Sanjaya Uprety and analysed by the author. Stratified sampling was ensured for representation of diverse household characteristics. Semi-structured interviews with key stakeholders—including community leaders, policymakers, government officials, and NGO representatives—will explore past resettlement experiences, challenges, and opportunities for collaboration. The flexibility of this method allows for a deeper understanding of stakeholder perspectives while maintaining a focus on the study's objectives. Qualitative interviews will complement these methods by capturing collective community insights on resettlement preferences, priorities, and challenges, fostering a participatory approach to the research.

Table 1 Respondents of Survey

INFORMAL SETTLEMENT	SAMPLE SIZE
Thapathali Informal Settlement	70
Jagritinagar Informal Settlement	50

Table 2 Respondents of Interview: Regarding resettlement of informal settlements

STAKEHOLDER	ORGANISATION	POSITION	INSTRUMENT
Government	DUDBC	Project Director	Semi Structured + Open ended questions through interview
	DUDBC	Engineer	
	HPCIDBC	Deputy Project Director, Information Officer	
	KMC	CPC, Member	

Intermediary	Lumanti	Program Manager	
Informal Settlement Organisation	NBBSS	Secretary	
Informal Settlement Committees	Jagritinagar Ekai Samiti	Chairman	
	Thapathali Samiti	Secretary	
	NLHDF	Immediate Past President	

Table 3 Respondents of Interview: Regarding home loan subsidies

ORGANIZATION TYPE	ORGANIZATION NAME	POSITION	INSTRUMENT
Government Bank	Rastriya Banijya Bank	Deputy Department Chief, Consumer Banking Department	Open ended questions through interview
Commercial Bank	Siddharth Bank	ENS Focal Person	
		Relationship Officer	
Micro Finance	Laxmi Laghubitta	Business Development Officer	
Cooperative	Gyan Jyoti Sahakari	Loan Officer	

2.3.3 Case study approach

The study employs a case study approach, focusing on Jagritinagar and Thapathali informal settlements. These sites have been selected due to their high flood risk and past interventions. Therefore, all the interviewed households were aware that their resettlement could happen at any moment. Jagritinagar offers insights into row housing configurations, while Thapathali provides lessons from forced evictions and community mobilization efforts. This approach ensures context-specific analysis, grounded in real-world examples.

Data analysis will involve both qualitative and quantitative methods. Qualitative data from interviews will be analyzed thematically to identify recurring patterns and insights, ensuring systematic interpretation. Quantitative data from surveys will be analyzed to reveal trends and correlations between socioeconomic conditions and resettlement preferences, with results presented through descriptive statistics, charts, and graphs for clarity. The sampling unit is the household, in total 120 households were interviewed.

Case Study Area

The selection of case study areas for this research is designed to ensure relevance, diversity, and practicality in addressing the research objectives. Priority is given to settlements located in flood-prone areas, as these communities face heightened risks during the monsoon season. The historical significance of the settlements is also a key factor, with a focus on locations that have undergone previous resettlement initiatives or eviction attempts. These areas offer valuable insights into the successes and challenges of past interventions.

To capture the diverse realities of informal communities, the study includes settlements with socioeconomic heterogeneity, reflecting variations in ethnicity, income levels, and occupations. Additionally, sites with active community mobilization, such as the presence of local organizations or federations advocating for squatters' rights, are included to explore the role of collective action in shaping resettlement outcomes.

The selected sites are

- Thapathali Informal Settlement
- Jagritinagar Informal Settlement

Thapathali informal settlement were evicted and the government attempted to resettle them to Ichangu housing. There have also been numerous eviction attempts here, the location of the settlement at the main link between Kathmandu and Lalitpur and lying in a major commercial area are some factors which differ from Jagritinagar informal settlement. To get insights these on these factors Thapathali and Jagritinagar informal settlement have been selected.

Table 4 Case study area

Case Study Area	Thapathali Informal Settlement	Jagritinagar Informal Settlement
Location	Thapathali, Kathmandu-11	Jagritinagar, Kathmandu-30
Established year	>15 years	>15 years
No. of HHs	142	116
Ethnic Groups	Mixed	Mixed

2.3.4 Statistical Analysis

Descriptive analysis has been adopted to assess how the socio economic factors each affect the resettlement preferences. To assess the preferences of informal settlers regarding features of resettlement models, a five-point Likert scale (ranging from 1 = not important to 5 = extremely important) was employed. The Relative Importance Index (RII) was used to rank these features in order of perceived significance. The RII is a statistical tool that helps prioritize factors based on respondents' ratings and is calculated using the following formula: Relative Importance Index has been used to analyse what facilities informal settlers consider important. The RII of the facilities will be compared to understand which facility is considered most important. The RII between the two settlements has also been compared to evaluate which facility is considered most important and why. RII of the informal settlements and the organizational stakeholders such as the government, Lumanti and NBBSS will be compared to see how different stakeholders see the situation, this can also be a basis on what negotiation must be done by the parties to come to a common ground.

Formula of Relative Importance Index (RII)

$$RII = \frac{\sum W}{(A \times N)}$$

Where

W = Weightage given by the respondent to each factor

A = Highest Weightage

N = Total number of respondents

The use of RII to prioritize resettlement features is supported by the Push and Pull Model and Utility Theory, which help explain settlers' relocation preferences. While the Push and Pull Model identifies factors driving people away (e.g., flood risk) and attracting them to new areas (e.g., services, jobs), Utility Theory suggests that people make choices to maximize benefit. RII quantifies these perceived benefits, helping rank what settlers value most in a resettlement model.

CHAPTER 3: LITERATURE REVIEW

3.1 Informal Settlements

Informal settlements are becoming an increasingly widespread urban issue in developing countries, driven by inefficient urban management and poor governance that fail to meet the rising demand for adequate housing in cities (Shrestha B. , 2010). The Organization for Economic Cooperation and Development defines informal settlements as “areas where groups of housing units have been constructed on land that the occupants have no legal claim to or occupy illegally”. Their lack of legal land titles renders them illegal, making government agencies either unable or unwilling to engage with these settlements. A 2013 study by the World Bank indicates that rapid urbanization is a key factor in the increase of Nepal's urban population living in squatter settlements, with an estimated growth of around 7 percent annually (WorldBank, 2013). The National Urban Development Strategy (NUDS) 2017, guides national urban development endeavours up to 2035, notes about 10% of the urban population resides in informal settlements and that the increasing trend of informal settlements is a major urban issue (MoUD, 2017). Although informal settlements may physically resemble slums, they differ legally, as they lack formal ownership rights. These types of settlements are referred to by various names across different countries—for instance, *Favelas* in Brazil, *Pueblo* in Peru, *Kampong* in Indonesia, *Barong-Barong* in the Philippines, *Setinggan* in Malaysia, *Chumchaon Bukruk* in Thailand, *Gecekondu* in Turkey (Suditu & Vâlceanu, 2013; Willis, 2009), and *Sukumbashi Basti* in Nepal. (Shrestha R. , 2016). Global estimates record that approximately one billion urban dwellers live in informal settlements and are identified primarily by their lack of legal rights to the land they occupy and poor-quality houses or shacks (UN-Habitat, 2006).

Tanaka (2009) highlighted that the term “Sukumbasi” tends to obscure the diverse nature of informal settlements and their inhabitants, leading to a lack of clear

representation of their varied characteristics. (Tanaka, 2009). According to the Land related act, 2020, “landless sukumbasi” indicates the people living in the land without formal tenure. To meet this criteria, the settlers and their family members must not own any land with formal tenure rights anywhere in the country. Additionally, due to their financial situation, neither the settler nor their family can afford to purchase land. Likewise, from the government's perspective, informal settlers are defined as individuals or groups who have occupied different types of land—such as government land, *Aillani*, *Parti*, or forest land converted for residential or agricultural use—for at least 10 years, either by building shelters or using the land for farming purposes (Shrestha, Joshi, Deuja, & Panday, 2021). Originally, the term was used in the rural context to denote a person without farmland, who would hence have difficulty supporting a family in this agrarian society. It is not a self-asserted identity, but an externally imposed and generally pejorative term.

3.1.1 EMERGENCE OF INFORMAL SETTLEMENTS IN KATHMANDU

Until the mid-1990s, rural-to-urban migration in Nepal was mainly driven by "push" factors like land scarcity, soil erosion, and lack of income opportunities, along with "pull" factors such as better healthcare, education, and jobs in cities like Kathmandu. This migration intensified during the decade-long Maoist conflict, as insecurity in rural areas forced many to flee to urban centers (Tanaka, 2009). Even after the 2006 peace agreement, migration continued. Squatter settlements in Kathmandu, once few in number, have grown significantly—from 17 in 1985 to 45 in 2008 (Shrestha, Nepali, Panday, & Shrestha, 2017). Most are located along riverbanks, exposing them to flood risks and pollution. The largest, Manohara, houses over 2,400 people, while 16 smaller settlements, some with fewer than 20 households, are found on public land farther from rivers.

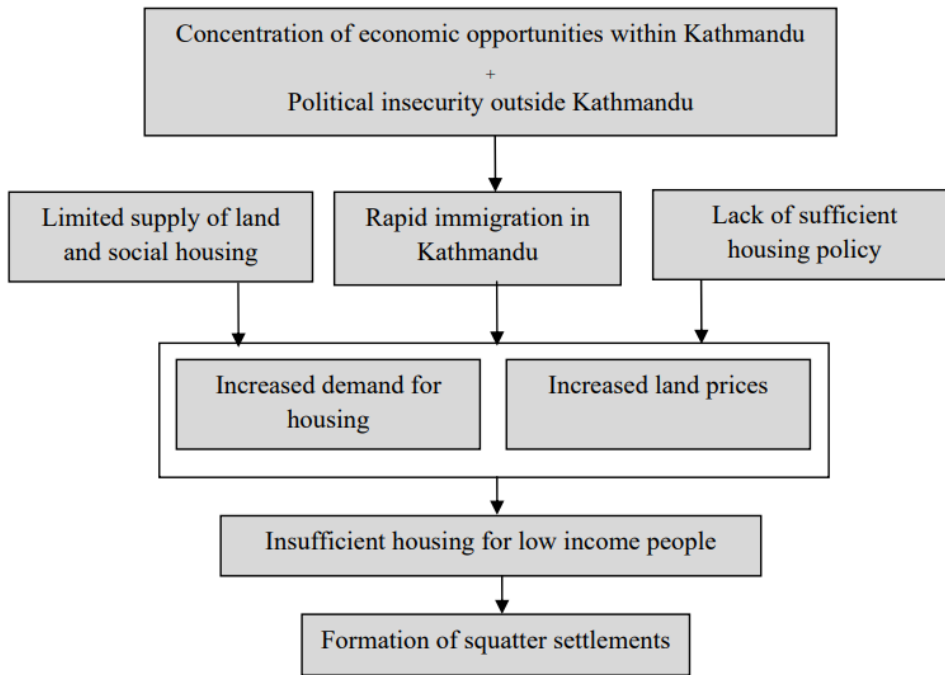


Figure 1 Process of Informal settlement formation in Kathmandu. Source: (Sharma & Rabe, 2010)

Nearby River	Squatter settlement
Bagmati River	Shanti Nagar, Bijaya Nagar, Jagriti Nagar, GairigaunTole, <i>Chadani Tole</i> , PragatiTole, Kalimati Dole, Bansighat, Kuriyagaun and Shankhamul, <i>PaurakhiBasti</i>
Bishnumati River	Squatter settlements- DhikureChouki, Kumaristhan Buddhajyoti Marg, BalajuJagriti Tole, SangamTole, Ranibari Indigenous settlements- Inyatole, Ramghat, Hyumat, Dhaukhel and Bhimmukteshwar
Hanumante River	Manohara Bhaktapur, Manohara Bhaktapur-2, Manohara-Bhaktapur-3 (Lokanthali)
Dhobikhola	Shanti Binayak, Devi Nagar, Bishal Nagar, Kalopul and Pathivara
Tukucha	Narayantole Maharajjung and Khadipakha Maharajgunj
Other Location	Palpakot, Anam Nagar, Maijubahal, Kumarigal, Radhakrishna Chowk, Mulpani, Kapan Dhungen, Subigaun, Ramhiti, Mahankal, Sokedhara and Mandikatar

Source: Adapted from Lumanti, 2008 and Phuyal et al., 2019

Figure 2 Squatter Settlements in Kathmandu Valley

Year	Status/ Number of squatter settlement	Population	No. of households
Early 1950s	Squatter settlement emerged	NA	NA
1985	17	2,134	
1988	24	3,665	348
1992	33	1,271	6,355
1996	47	1,783	8,927
1998	49	2,021	10,323
2000	61	11,851	2,031
2003	64	14,500	22,134
2008	40	12,726	2,735
2010	75 (65 in KMC)	NA	NA
2013	46	24,021	NA

(Source: compiled based on Lumanti, 2008; Tanaka, 2009; Toffin, 2010; Dangol and Day, 2017).

Figure 3 Demographic Status of Squatter Settlements in Kathmandu Valley

The informal land tenure system is neither officially recorded by the government nor recognised by the cadastral system of Nepal. Lack of reliable data on informal settlements has further constrained policies and programmes for purposes of upgrading and regularising the areas. Urban land management is complicated, particularly since the tenants have the right to stay on a piece of land even if it is sold. (Shrestha B. K., 2013)

Kathmandu's squatter settlements are heterogeneous not only in terms of the ethnicity or caste of their residents but also in terms of their places of origin, present occupation and income, family structure and reasons for squatting. (Tanaka, 1999) In the face of such diversity, organization can be difficult, but on the other hand it also contributes dynamism to their movement. For urban squatters, however, land is first and foremost a place to live and then a place for work – whether by building small workshops and shops or having space to breed and keep animals. Although land in the urban context these days is not heavily used for farming, it is certainly critical for livelihood. (Tanaka, 2009)

3.1.2 THE SQUATTER MOVEMENT IN NEPAL: HOW THE MOVEMENT WAS ORGANIZED

The squatter movement in Nepal began gaining structure in 1990 with the first national workshop on squatters organized by the Concerned Citizen Group in Kathmandu. This led to the establishment of Lumanti Support Group for Shelter in 1993, a key NGO committed to improving living conditions for squatter communities. Lumanti aligned with the Asian Coalition for Housing Rights (ACHR) and collaborated with UN–Habitat to engage local governments through the Urban Management Programme.

Lumanti facilitated grassroots organizing and advocacy, while also supporting essential services like microfinance, education, child development, shelter improvement, and water and sanitation through its specialized programmes. It played a founding role in the NGO Forum for Urban Water and Sanitation. The movement further strengthened through alliances with several community-based organizations, including:

- Nepal Basobas Basti Samrakchan Samaj (NBBSS)
- Nepal Mahila Ekata Samaj (NMES)
- Community Women’s Cooperative Network
- Jeegu Manka Samaj
- Child Development Youth Network (CDYN)

NBBSS and NMES, referred to as the “two wheels” of the movement, led efforts in household enumeration, mapping, and identity verification, empowering communities with data and visibility. Financial support was offered via microloans (NPR 3,000–50,000) and long-term land loans (up to NPR 250,000), enabling self-driven development (Tanaka, 1999).

The movement also embraced global learning through Slum Dwellers International (SDI), which promoted cross-country exchanges and inspired practices like community profiling and family ID cards. These tools helped assess community needs, inform government policy, and distinguish genuine squatters from others—though challenges in obtaining IDs remain (Brooks, 2016). Overall, the squatter movement in Nepal was organized through a combination of NGO leadership, grassroots alliances, financial empowerment, data-driven advocacy, and international collaboration.

3.1.3 THE RELATIONSHIP BETWEEN SQUATTERS AND NON-SQUATTERS

The dynamic between informal settlers and formal residents in Nepal has gradually improved through community-driven development and mutual cooperation. Squatters gained support from both ordinary citizens and civil servants by actively working to improve their living conditions—installing water and sanitation systems, paving streets, and managing waste—mostly funded through collective savings. For example, in Srijana Basti, non-squatter neighbors helped subsidize sewage connection costs after witnessing the squatters' dedication.

Squatter-led microfinance initiatives, especially by women, inspired neighboring lower-middle-class women to start their own savings groups, turning squatters into role models. Education has also played a transformative role: the first literate generation is now actively challenging social norms and helping bridge the divide with mainstream city dwellers. Youth initiatives further contribute to reshaping public perception (Tanaka, 2009).

3.1.4 Resettlement History in Nepal

Nepal's constitution guarantees housing as a fundamental right and mandates the state to rehabilitate informal settlers by ensuring housing and livelihood opportunities. The Kirtipur Housing Project (2005) was Nepal's first planned urban resettlement, initiated through advocacy by displaced settlers with support from Lumanti, ACHR, SDI, and Kathmandu Municipal Corporation (KMC). Despite identifying 62 eligible families displaced by the Bishnumati Link Road project, only 30 accepted resettlement in Kirtipur due to unsuitability of the site.

Other resettlement efforts include the Biratnagar Metropolitan Housing Project, where land is sold to informal settlers and the government provides basic housing. In Ichhangu Narayan, a multi-storey resettlement project launched in response to the 2012 Thapathali evictions was largely rejected by settlers due to high rents, poor access to jobs, schools, and services, leading to a major halt in government-led resettlement efforts.

Land ownership remains the top demand of informal settlers, who believe it empowers self-driven development. Community leaders argue they can build resilient housing and improve their lives independently if granted land certificates and are even willing to

pay negotiated taxes for ownership. Although relocation is accepted as inevitable in some cases, communities emphasize that resettlement must include guarantees for livelihood, education, healthcare, infrastructure, and access to employment. Skill development and income-generating activities (IGAs) are seen as essential in new settlements (Brooks, 2016).

Negotiation with the government is viewed as the most effective approach. A notable example is the Kumarigal settlement in Kathmandu, where after 54 rounds of negotiation, squatters agreed to give space for road expansion in return for cash compensation and the right to rebuild nearby—marking Nepal’s first government-funded compensation for squatters during resettlement. Informal settlements prioritize locations with proximity to livelihoods, social networks, services, and infrastructure. Urban upgrading and resettlement should be approached as a tool to resolve land tenure issues rather than just a strategy for mass affordable housing. Incremental housing remains a key method for low-income families to meet their evolving needs over time.

3.2 Plans and Policies

3.2.1 National Plan of Action (NPA) 1996

The 1996 National Plan of Action (NPA), developed for the UN-Habitat II Summit, marked Nepal’s first official plan for the housing sector. It recommended the upgrading of squatter settlements to promote a safer living environment.

3.2.2 National Shelter Policy 2012

The Shelter Policy 1996 was amended to include the sociopolitical transformation of Nepal after 2007 and focused on housing for the landless, deprived and those displaced due to development and disaster. For the first time, the new National Shelter Policy covered issues of squatter settlements and landless squatters. Working Policy 4.7.1 of the National Shelter Policy 2012, under the disaster mitigation strategy, recommends upgrading substandard settlements in their existing locations. If upgrading is not feasible, it proposes resettlement, with land to be held collectively in all cases. Additionally, family identification documents should be issued to those who migrated prior to a specified timeframe. Policy 4.7.2 seeks to provide small land plots for low cost housing construction along with basic physical infrastructure for the poor and underprivileged living in riverside settlements and encroached land.

3.2.3 Right to Housing Act, 2018

The Act empowers federal, provincial and local governments to coordinate, prioritize and provision housing to those citizens and their families who do not own land and housing anywhere in Nepal and also lack income and capacity to manage it. Households may also include those displaced by natural hazards without any assets left. The Act enables Federal, Provincial and the Local governments to undertake “integrated settlement development” or if needed, to relocate settlements-which are remote to provide amenities or which are unsafe- to provision housing.

However, based on critical review by Amnesty Group 2018, the scope of the Housing Act 2018 is found to have narrow focus in providing housing and financial facility to those in need of housing. Adequate housing involves not just homeownership but also secure tenure, yet the act appeared to focus solely on an ownership-based approach.

3.2.4 National Urban Policy 2007

The National Urban Policy 2007 of Nepal addresses informal settlements by emphasizing their recognition and improvement, advocating for affordable housing, and ensuring inclusive urban planning that involves local communities. It prioritizes upgrading living conditions by providing essential services such as clean water, sanitation, electricity, and transportation, while also securing land tenure to protect residents from forced evictions and enable investment in their homes. Additionally, the policy promotes environmentally sustainable practices to integrate informal settlements into broader urban development plans.

3.2.5 National Urban Policy 2024

The National Urban Policy 2024 states to ensure the satisfaction of the right to housing by arranging for squatter settlements and ensuring their proper settlement. Adequate and affordable housing facilities will be ensured for all through integrated housing, collective housing, social housing, rental housing, cooperative housing, investment-based sustainable housing construction and the reform of existing housing. In addition, the housing development plan will be comprehensively inclusive of low income groups. Access to basic services and infrastructure will be ensured to address the challenges of the homeless and urban poor.

3.2.6 Tenth Five Year Plan

Tenth Five Year Plan (2002– 2007), the “Poverty Reduction Strategic Paper”, included the improvement and resettling of squatter settlements of the Kathmandu Valley. It has been proposed to construct cost-effective shelters, provide basic services and facilities and even to offer grants for the provision of shelters.

3.2.7 National Adaptation Plan (NAP) 2018

The Plan has proposed objectives for the relocation/ resettlement of informal settlements located in risk-prone areas such as steep slopes and riverbanks to safer and serviced areas. The plan also proposes identification of options for diversification of livelihoods. However, the NAP does not adequately address the needs of the informal settlements (MoFE, 2018).

3.2.8 National Urban Development Strategy (NUDS) 2017

The National Urban Development Strategy (NUDS) 2017 addresses informal settlements in Nepal through a range of policy recommendations aimed at fostering inclusive and sustainable urban growth. It highlights the need to integrate informal settlements into formal urban planning, ensuring access to basic services such as water, sanitation, waste management, and infrastructure. The strategy emphasizes securing land tenure to protect residents from forced evictions and encouraging community participation in planning and implementation for context-sensitive and sustainable outcomes.

Table 5 NUDS strategies on housing for EWS and informal settlements (MoUD, 2017)

Strategies	Activities/ Inputs
Encourage private sector to provide housing to the EWS	Review and develop relevant incentive and facility package: land/infrastructure provisioning etc. to encourage private sectors
Regulate standards of group housings	Review, update and monitor group housing standards and regulations
Discourage informal settlements and encroachment on public land	Facilitate private sector for affordable rental housing through provision of incentives and facilities (Incentives: easier permit process, facilitation in land consolidation, taxation abatement Facilities:

	facilitating development and access to infrastructure provisions such as roads, utility lines, etc.
Encourage and facilitate co-operative mechanism for the production of housing for EWS.	Create institutional and legal basis and incentives for facilitating the cooperative sector. Link with livelihood activities
Encourage and facilitate production of serviced land through public-private/community partnership	Review existing policies, law and create institutional and legal basis to facilitate and encourage schemes such as land pooling through community/private sectors

3.2.9 National Building Code

National Building Code and the provision of seismic design in the structure of buildings while applying for a building permit has little meaning for those living in slums and squatter settlements, as such illegal settlements do not fall under the normal permit system and development control mechanism. The code also stipulates that the local government is responsible for land tenure regularization, helping slum dwellers gain security and access to credit and essential services.

3.2.10 Nepal's Land Use Policy 2015

The policy does not explicitly address the existing informal settlements or provide direct measures for their regularization or improvement. The focus remains on preventing the emergence of new informal settlements through systematic land-use planning and management.

3.2.11 Strategic Development Master Plan (2015 - 2035)

The plan addresses the informal settlements on vulnerable public lands, fostering a culture of institutional housing. It allocates 10% of urban core land for housing provisions and prioritizes restoring Kathmandu Valley's river systems to enhance urban sustainability and resilience. (KVDA, 2016)

3.2.12 Bagmati Action Plan 2009-2014

For Peri Urban Zone (Zone III) and Urban Zone (Zone IV), the main goal is to restore the river ecosystem through effective management of urban growth. The action focus

on improvement of river water quality, protection of river side land use, control and relocation of squatter and improvement of riparian landscape.

3.2.13 Bagmati Action Plan 2022 - 2042

BAP planned by High Powered Committee for Integrated Development of the Bagmati Civilization under its Strategy 1: River conservation and management, sub strategy states the management of public land along the River corridor. It states the relocation of verified squatters along the river banks.

3.2.14 Local Government Operation Act (LGOA) 2017

Local governments have the authority to develop and enforce local policies and laws related to social security and poverty reduction. They can also carry out relevant initiatives in partnership with institutions at the national, provincial, and local levels. Additionally, local governments are responsible for identifying squatter populations and ensuring the provision of housing and livelihood support for them (GoN, 2017).

3.2.15 The Land related (Eighth Amendment) Act 2020

Defines landless squatters as “those who and whose family do not own land in any part of the country and cannot afford it from his/her income, resource or efforts and the term includes the individual and the family members dependent on the individual”. It states that land with religious or cultural significance, public land, land in hazard-prone zones or along riverbanks, land deemed important by local, provincial, or federal authorities, and forested areas cannot be allocated to informal settlers. It also clarifies that managing urban informality does not always require distributing land and instead proposes communal housing services as an alternative solution for the “Bhumihin Sukumbasis” (landless squatters) (GoN, 2020).

3.2.16 The Land Related (Eighteenth Amendment) Rules, 2020

Local governments are responsible for verifying and evaluating the accuracy of collected data and preparing separate lists for Bhumihin Dalits, Bhumihin Sukumbasis, and Abyawasthit Basobasis. Based on this information, informal settlers will be categorized and may either receive land for free, at a subsidized rate, or be denied land altogether, depending on their classification, the size of the land, and the location they have been occupying.

3.2.17 The New Urban Agenda of Nepal, 2016

The plan for housing and sustainable urban development incorporates the upgrading and relocation of informal settlements, along with land-sharing approaches to provide low-cost housing and infrastructure for squatter communities. It also proposes the establishment of an "Organised Settlement Commission" to prevent public land encroachment and address issues related to unmanaged settlements and squatting. Nepal's "New Urban Agenda" is designed to support the achievement of SDG 11 through a comprehensive action plan focused on slum improvement, promotion of human rights, and sustainable urban mobility by offering decent employment, infrastructure, essential services, and affordable housing for all urban residents.

3.2.18 Poverty Alleviation Policy 2019

It emphasizes that increasing urban poverty and limited access to basic services for the urban poor are major obstacles to poverty reduction in Nepal. While it includes housing for the urban poor as part of its poverty alleviation efforts, it does not directly address the challenges related to urban

3.2.19 Working Procedure for Relocation and Rehabilitation of the Risk-prone Settlements, 2017

If residents of hazard-prone areas choose to relocate voluntarily near their current location, they may move within the same district or to a nearby earthquake-affected district. The Government of Nepal will provide a lump-sum grant to help these families purchase land, provided they submit proper documentation of the purchase. Once relocated, families are not allowed to return to their previous, risk-prone settlement. Additionally, they become eligible for a private housing grant in the new location. To support this process, beneficiaries will be encouraged to form user groups of at least 10 family representatives in each settlement, allowing the group to identify and select a safe site for developing an integrated settlement.

3.2.20 Ownership Of Joint Housing Act, 2054 B.S. (1997)

In Nepal, the Joint Housing Ownership Act of 1997 regulates the management and operation of apartment buildings, allowing both individuals and corporations to own apartment units. The Act specifies essential components such as the definition of an

apartment, the establishment of ownership and management committees, the roles and responsibilities of apartment owners, and the processes for selling and transferring units. It also outlines the duties of both management committees and individual owners regarding the maintenance, repair, and management of common areas and facilities. This legislation provided a foundation for the growth of apartment housing, especially in urban centers. Furthermore, the design and operation of apartment buildings are regulated by the National Building Code (NBC) and the 2007 Building Bylaws of the Kathmandu Valley, which set standards for seismic and fire safety, open spaces, setbacks, building heights, and access road dimensions (GoN, 1997).

3.3 Managing Informal Settlements

Managing informal settlements entails improving the quality of life of informal settlers by providing tenure security on land and housing, as well as providing access to basic services with an acceptable standard (Mason & Fraser, 1998). To manage informal settlements, Augustinus (2009) proposed two types of interventions: proactive and reactive. The proactive intervention involves providing low-income housing to disadvantaged groups, while the reactive intervention focuses on in-situ upgrading of settlements or relocating informal settlers by ensuring security of land and housing tenure (Augustinus, 2009). When a settlement is situated in an environmentally hazardous area, relocation is a more effective approach for managing informal settlements (Shrestha, Zevenbergen, Masum, & Banskota, 2018). Across different types of interventions, many scholars highlight that securing, allocating, and utilizing affordable land is a critical element in providing housing for low-income communities. A key shortcoming in urban land governance lies in the imbalance of roles and actions among the three main stakeholders—government, market forces, and civil society. The formal housing market fails to meet demand primarily because the cost of constructing a house that complies with all formal standards is much higher than what most households can afford (Collier, Glaeser, Venables, Blake, & Priya, 2019). What constitutes ‘affordable housing’ is highly dependent on the state of local mortgage markets, but a reasonable approximation is that an affordable house price should be approximately 3-5 times the buyer’s annual income.

3.3.1 Forced evictions

An early approach to addressing squatter settlements was the strategy of "getting-rid-of-them," which involved violent evictions and large-scale slum demolitions without

providing any alternatives or choices for the affected populations. This led to the forced displacement of individuals, families, and entire communities from their homes, land, and businesses, often temporarily, and deepened the cycle of poverty, discrimination, and social exclusion (Plessis, pp 123-134).

The CDESCR, signed by Nepal and over 150 countries, considers forced evictions illegal without prior consultation, compensation, or alternative housing. Even in exceptional cases, states must ensure protective measures and prevent abuse (CESCR, 1997).

3.3.2 Clearance and Relocation

Another approach to improving slum-occupied areas is their relocation. This process involves clearing the settlements, typically located in the city center, and moving the residents to new sites often situated far from their original locations. Once cleared, the areas are redeveloped for higher-value uses. “Resettlement practice requires more attention to transport and access dimensions in order to reduce accessibility problems for the poor” (UN-Habitat, 2003). The costs and resources incurred by governments in clearing slums, resettling inhabitants, and funding services such as public transportation to connect new locations with employment centers in the city are significant. However, there are certain situations where this approach may be justified. For example, when slums are situated in environmentally hazardous areas or along public rights of way such as roads, railways, or rivers, clearing these areas is considered to be in the broader social interest of the city.

3.3.3 Site and Services

Introduced in the 1980s, the site and services approach aimed to proactively address future housing challenges. It involved the government allocating surveyed plots with basic, affordable services—and sometimes building materials—to migrants, who would then construct their own homes. As community incomes increased, residents were able to gradually improve their housing and surroundings. Over time, they could progressively invest in both their homes and their communities (Mehta B., 2008). This method also allowed for cost-effective land registration.

While successful in some instances, the approach had notable limitations. The allocated sites were often far from job centers, making them functionally similar to relocations,

especially given the lack of affordable transport. In some cases, service standards were too high, rendering the plots unaffordable for low-income groups. Moreover, wealthier individuals often took over these sites, excluding the poor from the intended benefits.

3.3.4 Incremental Housing

‘Incremental housing’ acknowledges the existing practices of many informal settlers, who gradually improve their homes over time. It provides the essential components of a house, such as the foundation and roof structure, which owners are less likely to be able to construct on their own. This approach allows homeowners to complete their houses progressively, as they are able to invest more funds. For instance, in Chile, the private firm ‘Elemental’ has developed half-built houses for low-income residents, enabling them to expand and complete their homes incrementally (Collier, Glaeser, Venables, Blake, & Priya, 2019).

3.3.5 On - Site Upgradation

Slum upgrading programs focus on improving conditions within existing informal settlements (in situ) rather than resorting to eviction or redevelopment. As highlighted by UN-Habitat (2003), this approach can effectively address slum challenges by enhancing access to infrastructure, securing tenure, and supporting decent housing without displacing residents (UN-Habitat, 2003). Upgrading typically does not involve new construction but may include loan schemes for home improvement, tenure security, capacity building, environmental awareness, training for community organization, and basic health or education facilities.

A core element of upgrading is granting affordable tenure rights, which encourages residents to invest in their homes. In fact, studies (Bank, 2001) show that once tenure is secured, residents often invest more than double the public investment made in infrastructure upgrades.

3.3.6 Land Sharing

Land sharing is another emerging approach to providing secure housing for squatters, which has gained increasing support from policymakers in 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” . This approach, which originated in Bangkok, can be seen as a

blend of on-site upgrading and on-site redevelopment. The prospect of redevelopment appeals to landowners, while the promise of upgrading and regularization attracts squatters. As a result, land sharing has the potential to improve not only public lands but also private lands (Sharma & Rabe, 2010).

3.3.7 Clearance and on-site redevelopment

Clearance and on-site redevelopment involve temporarily relocating slum residents, clearing the land, and then constructing new housing for them on the same site (Thompson, 2020). In such projects, high-rise buildings are often proposed to accommodate more people. The construction of multi-storey housing is sometimes justified when commercial developments on the same site can subsidize the cost of residential space. However, in slum communities, the ground-level social networks play a crucial role in fostering community cohesion, self-organization, and emotional support systems. High-rise buildings, on the other hand, can result in the disintegration of these social ties and cause disorientation within the community (World Bank, 2001).

3.4 Resettlement

Resettlement is defined as a planned process that involves the physical restructuring of informal and unauthorized settlements into legally recognized and administratively managed land systems. This process includes two primary approaches: judicial or tenure regularization, and physical regularization, also referred to as upgrading (Lamba, 2005). Resettlement often involves compensation for loss of property, land, or livelihood, as well as support for adapting to the new environment. It may include social and economic rehabilitation measures to help affected individuals or communities reintegrate and thrive in their locations. Based on International Finance Corporation (IFC, 2012), resettlement should be able to increase the quality of life of the people by score living standards ahead of the pre project levels. Resettlement must be intended and carry out as a development project over a minimum of two generations and comprises not only protective measures, but also the provision of new rights, resources and strategies (Leopoldo, 2000). However, despite significant financial investment and policy provisions, many resettlement projects have produced limited outcomes in resettlement projects, which often overlook the long-term well-being of the affected communities (Shrestha, Uprety, & Pokharel, 2023).

Since households are long-term users, their perception largely shapes their satisfaction with the built environment and housing in the resettled community. The success of resettlement is not merely measured by the quantity of permanent houses built, but is largely shaped by the level of residential satisfaction among the occupants (Sridarran, Keraminiyage, & Amaratunga, 2018). Steinberg (2007) emphasized that fulfilling the psychological, social, and economic expectations of households is crucial in the context of newly developed living environments (Steinberg, 2007). Wijegunaratna et al. (Wijegunaratna, Wedawatta, Prasanna, & Ingirige, 2018) also highlighted that resettlement projects fail due to housing that does not respond to the needs of resettlers, such as the loss of livelihood and the disruption of daily routine. A successful resettlement strategy is one that is instigated by the resettlers themselves. Earlier research in developing countries revealed that the willingness to accept a resettlement program rises with the amount of compensation, previous negative experience of the population with natural disasters, the attractiveness of the resettlement destination, the level of participation of the affected population in the design of the resettlement program and the size of land offered to the households (Vlaeminck, et al., 2016).

Baniya in his study of the poor Majhi community of Nepal highlighted the dissatisfaction resulting from the lack of participation and neglect of socio-cultural aspects in the decision-making processes for resettlement. (Baniya, 2021)

3.4.1 Tadgell: Principles to assess the appropriateness and feasibility of resettlement as a climate change adaptation measure.

The first of those principles is proactivity, which refers to the removal of people from high-risk areas before a disaster occurs. The second principle emphasizes the importance of communication and participation, ensuring that resettlers and host communities are well-informed and have the chance to express their views and concerns throughout the resettlement process. The third principle is permanence; when resettlement is the only viable adaptation measure, special attention must be paid to “pull” factors, such as long-term adequate planning and site design, livelihood opportunities, and access to public services. Factors that push people away from risk areas, such as land-use restrictions, must be parsimoniously used. The fourth principle is compensation of resettlers, which can be done through a combination of ways (e.g. cash, land, materials, and professional training), but it should be adequate to prevent

resettlers from feeling unfairly treated or fearing they will be disadvantaged by the move (Tadgell, Doberstein, & Mortsch, 2017). The last principle is livelihood protection, which refers to the need to, as quickly as possible, restore income opportunities and community bonds in the new resettlement area. If the five principles are fulfilled, resettlement is more likely to become a durable solution with people enjoying their rights in similar ways as before resettlement (E., Shi, Zaman, & Garcia-Downing, 2021).

3.4.2 Resettlement Framework

The World Bank developed a resettlement policy framework to guide projects like the Community Infrastructure Upgrading Program (CIUP) under the Regional Communications Infrastructure Program (RCIP), recognizing the potential for land acquisition, displacement, and livelihood loss. The framework emphasizes that involuntary resettlement should be avoided or minimized, and if necessary, it must be sustainable and inclusive, enabling the displaced to benefit from the project.

Key Principles of the Resettlement Action Plan (RAP):

- Avoid or minimize resettlement through viable alternatives.
- Ensure meaningful consultation and participation of affected communities
- Support displaced people to restore or improve livelihoods and living standards.
- Aligns with justice and collaborative planning theories.

Essential Guidelines for Upgrading and Resettlement:

- **Protection from Eviction:** A rights-based approach demands security of tenure and protection against forced evictions. Evictions should be halted unless due process and consultation are ensured.
- **In Situ Upgrading and Limited Relocation:** Priority should be given to on-site upgrading to maintain community cohesion and livelihoods. Where relocation is unavoidable, it must be nearby and well-serviced.
- **Inclusion of Marginalized Groups:** Resettlement plans must address the unique needs of women, children, elderly, migrants, disabled persons, and other vulnerable populations to enhance their quality of life.
- **Economic Linkages:** Housing should integrate workspaces, acknowledging the link between housing and livelihoods, especially in low-income communities.

- **Monitoring and Grievance Mechanisms:** Strong systems are needed to monitor implementation and provide accessible grievance channels, ensuring accountability and trust.
- **Social Entrepreneurship:** Resettlement strategies should foster home-based enterprises and community-led governance. Successful examples like Mumbai and Kigochie show that enabling residents to participate in land use planning and financial management enhances outcomes and livelihood resilience.

This holistic, participatory, and inclusive approach to resettlement and upgrading not only protects rights but also creates opportunities for community empowerment and long-term sustainability.

3.4.3 Resettlement preferences from landslide prone areas in Cameroon: Willingness to move, reasons to stay

Previous studies in developing countries have shown that people's willingness to accept resettlement increases when factors such as adequate compensation, past negative experiences with natural disasters, the appeal of the relocation site, involvement in planning, and the amount of land provided are favorable. Satisfaction after relocation tends to depend more on how much input people had in the process and the range of choices they were given, rather than their income levels after resettlement.

Findings also highlight that resettlement preferences vary among different socioeconomic groups. Poorer and more isolated communities tend to prioritize maintaining their social networks, whereas wealthier and more connected households are more influenced by the availability of better road infrastructure. There are also differences in how much each group values the absence of landslide risk at the new site—this is linked to varying levels of exposure and differing abilities to manage risks.

Additionally, not all affected individuals relocated immediately after the landslide; some delayed their move by several years. For example, two widows postponed relocation due to financial difficulties, as they had to cover the costs themselves (Baert, et al., 2020).

3.4.4 Urban induced-displacement of informal settlement dwellers: A comparison of affected households' and planning officials' preferences for resettlement site attributes in Kigali, Rwanda

Experiences from various countries indicate that urban resettlement often leads to negative outcomes such as job loss, food insecurity, loss of shared resources, and social fragmentation. Active involvement of affected communities in selecting resettlement sites is crucial to understand their needs, inform them about the trade-offs of relocation, and enhance the legitimacy of the process. Without meaningful participation, feelings of exclusion and distrust can grow, often leading to local resistance and rejection of resettlement plans (Nikuze et al., 2020).

Research shows that the willingness to accept resettlement increases when people are included in the decision-making process (Vlaeminck et al., 2016). In contexts of informal settlement displacement, authorities often prefer in-kind compensation—providing homes—rather than cash, to avoid the reemergence of informal settlements.

For successful resettlement, proximity to essential services such as schools, health centers, and markets is vital, especially for families with children. Access to fair markets is also important to ensure food security. Being close to the city center and employment hubs is another key factor for low-income households, who prefer to remain near previous homes to maintain social ties and job access (van Vyvere et al., 1998; Axhausen et al., 2001; Correa et al., 2011).

The study compared the preferences of affected people and planning officials through three main analyses: within-group, between-group, and spatial multi-criteria analysis. Results showed strong consensus among affected households on the importance of proximity to health centers and primary schools—96% and 98% respectively rated these as highly important. Planning officials also prioritized these two criteria, though they placed slightly more emphasis on land affordability. While most criteria showed strong agreement, some (such as access to markets) were more debated. Additional community-suggested priorities included access to water, electricity, green spaces, and recreational facilities. A few respondents also emphasized the need to support small-scale agriculture and livestock activities.

The findings underline the importance of incorporating community preferences early in resettlement planning. Both groups largely agreed on key social infrastructure,

particularly schools and health services—likely due to the widespread presence of school-age children and the critical role of basic healthcare. Overlooking these needs risks undermining the success of resettlement initiatives (Nikuze, Flacke, Sliuzas, & Maarseveen, 2022).

3.4.5 World bank Resettlement Practices: MUTP Resettlement

Urban land acquisition and involuntary resettlement present complex challenges, including rising property values, limited land availability, informal settlements in strategic or vulnerable areas, lack of recognition for renters and informal occupants, urban crime, transportation issues, waste and water management problems, and marginalized populations. These challenges are further exacerbated by climate change and natural resource degradation. Additionally, resettlement often disrupts informal livelihoods that are highly location-dependent, particularly for the poorest, whose incomes rely on specific urban spaces (e.g., hawking near transit hubs or recycling at dumpsites), making them especially vulnerable to displacement. Relevant crosscutting themes addressed in the review of each of the selected case studies included the following:

- Management of social risks
- Gender aspects
- Vulnerable groups
- Consultation and participation
- Land tenure and security
- Grievance mechanisms
- Local capacity building
- Urban poverty

Mumbai Urban Transport Project (MUTP)

The case study highlights two innovative dimensions of this groundbreaking resettlement program:

- Participatory approaches to large-scale slum enumeration and resettlement planning with the assistance of local nongovernmental organizations (NGOs)
- Capacity building of the resettlement implementation agency.

The case study summarizes additional elements in the resettlement program that are of particular interest: gender inclusion approaches and transparency initiatives.

The Mumbai Urban Transport Project (MUTP) encountered significant challenges in resettling shopkeepers due to the lack of early identification, inadequate consultation, and the absence of a tailored resettlement package. These oversights led to project delays, higher infrastructure costs, and adverse economic impacts. Negotiations were prolonged, particularly because the Maharashtra government was initially resistant to adjusting the resettlement package to meet the shopkeepers' needs.

To address these issues, community-based NGOs played a crucial role by conducting socioeconomic surveys with a participatory, women-centered approach. They offered multiple relocation options, including in-situ redevelopment and private housing schemes. A Post-Resettlement Support Unit was also created to oversee activities such as registering housing cooperatives, providing essential services (e.g., water, sanitation, lighting, and schools), and offering management and vocational training, especially for women.

Although a separate gender action plan was not developed, gender and social inclusion were embedded throughout the project. Gender-disaggregated baseline data helped identify vulnerable and female-headed households, who were given priority in housing allocation. Women were also provided with leadership opportunities in housing cooperatives, vocational training, and roles in community policing.

Moreover, the state government incentivized private sector involvement by offering development benefits—such as additional floor space index and transferable development rights—to developers who resettled slum dwellers in modern buildings at their own expense. The integration of gender-inclusive and community-driven strategies contributed to the project's relative success (Vincent, Bornholdt, Sirker, & Lukic, 2017).

3.4.6 Risk Perception and mining-induced displacement and resettlement: a case study from Anhui Province, China

Perceived risk plays a key role in shaping how people weigh potential benefits against acceptable risks during resettlement decisions. Social risk, in particular, encompasses impacts such as land use changes, in-migration, displacement, loss of livelihoods, and dependency (Botin & Anderson, 2009). Key findings reveal that age is a significant

factor: older household heads are less willing to relocate, likely due to lower adaptability and a stronger preference for stability. In contrast, education positively influences willingness to move, as it enhances cognitive skills and job-readiness, increasing confidence in adapting to new environments.

Employment type also matters—families with jobs in urban areas or non-agricultural sectors show higher willingness to relocate. However, when a family has extensive social resources or a large household, relocation is less appealing due to higher opportunity costs and deeper community ties.

Social networks significantly influence risk perception. Larger networks heighten the sense of social loss, as individuals are more deeply connected to their communities, neighbors, and support systems. This emotional attachment makes resettlement more difficult.

From an institutional risk perspective, the location of the resettlement site and trust in government behavior are important. Proximity to towns increases the perceived value of housing and satisfaction with government efforts, thus encouraging relocation.

In the economic risk category, willingness to move is strongly influenced by employment types and land ownership. Families with urban-based jobs may benefit from converting idle land into capital through resettlement.

Under social and cultural risk, larger social networks and sentimental attachment to ancestral land reduce willingness to move. Land is not only an economic asset but also a vital social and emotional resource (Swyngedouw & Ward, 2020). To reduce perceived risks and improve relocation outcomes, the study recommends tailoring compensation and resettlement options to the needs of different groups. Providing a range of flexible, participatory choices allows affected people (APs) to make informed decisions based on their unique resources and circumstances. Ultimately, the perception of relocation risk is complex and shaped by a combination of personal, social, and institutional factors. (Wang, Shi, Zhang, Xu, & Shangguan, 2021)

3.4.7 Effects of Residential Push–Pull Factors on Tenants’ Intentions to Relocate from Megacities: Evidence from a Beijing, China Survey

The study examines the factors influencing tenants' decisions to move out of megacities, focusing on Beijing. The research employed a questionnaire-based survey

conducted in 2019, involving 2,187 tenants. The survey collected data on household registration status (hukou), homeownership status, residential dissatisfaction, and demographic characteristics. Statistical models were used to analyze the impact of these factors on tenants' relocation intentions.

The findings reveal that non-local hukou status significantly increases relocation intentions, particularly among female and unmarried tenants, as well as those under 35 years old. Additionally, non-local homeownership plays a notable role in relocation decisions, especially for male and married tenants and those without higher education. Residential dissatisfaction is strongly correlated with relocation intentions across all demographic groups and also moderates the effect of non-local homeownership on tenants' decisions to move. Furthermore, for tenants with explicit relocation intentions, having a non-local hukou status significantly shortens their intended duration of stay before moving. These findings underscore the complex interactions between institutional constraints, personal circumstances, and housing satisfaction in shaping mobility patterns in megacities like Beijing. (Song & Wu, 2022)

3.5 Decision Making

Decision-making often involves uncertainty, where outcomes can't be predicted with certainty but only estimated in terms of probability. Unlike early theories that emphasized purely rational choices, it is now understood that human decisions are influenced by both rational thinking and emotional or hedonic motivations. Decision-making is thus seen as a result of two motivational processes: one deliberate and goal-oriented, and the other instinctive and emotionally driven. (Savioni, Triberti, Durosini, & Pravettoni, 2022).

In this study we will refer primarily to the widespread theory by Kahneman & Tversky (1979, 2013), which describes the process of decision making in a context of uncertainty. The two authors suggest that under conditions of risk, decisions can be made probabilistically using empirical evidence, which challenges the traditional principles of economic rationality that have long underpinned the study of decision-making processes (Hansson, 2017).

Life decisions are shaped by various factors, including context, social relationships, and personal differences, and their impact can be long-lasting. Since priorities shift over time, there is rarely a single "correct" choice. Low-income groups are often criticized for decisions that appear to harm long-term outcomes; however, research shows these choices are often adaptive responses to poverty. In situations of scarcity and instability, individuals often prioritize immediate needs, making decisions that are rational in the short term but may undermine long-term objectives. Poverty reduction efforts must acknowledge how low socioeconomic status shapes decision-making and recognize the practical functions these decisions serve. Additionally, people in poverty often show stronger positive behavior toward close social ties and greater distrust toward strangers and institutions (Sheehy-Skerffington, 2020).

3.5.1 Life cycle theory

According to life cycle theory, people's resettlement preference might vary with the demographic and socioeconomic characteristics of age, gender, marital status, and educational experiences. A study by Liu and Wang used survey data to discover that the willingness of high-educated residents to convert hukou status (which determines access to public services) and settle down in larger cities was greater than the willingness of less-educated residents (Liu & Wang, 2020). A study using data from the China General Social Survey revealed that the type of workplace significantly influences individuals' intentions to settle (Yin, Huang, Li, Jin, & Chen, 2021). The true cost of resettlement includes various expenses, such as rebuilding social ties at the new location, finding new employment, and other unforeseen psychological costs (Song & Wu, 2022).

3.5.2 Lee's push-pull model

According to Lee's push-pull model (1966), costs induced by resettlement can act as obstacles. Moreover, the intention to resettle can be strongly influenced by the length of time individuals have lived in a particular place; as this duration increases, their attachment to the host city grows, and the financial and emotional costs of relocating become more significant barriers. Previous studies in developing countries have shown that the willingness to accept a resettlement program increases with factors such as higher compensation, the population's past negative experiences with natural disasters, the appeal of the resettlement location, the level of involvement of the affected

community in the program's design, and the amount of land provided to households (Vlaeminck, et al., 2016).

3.5.3 Risk Perception

It is argued that poorer households are more risk averse. Conversely, wealthier households are more likely to take the risk of resettlement, because they have better mechanisms to cope with the downside risks of resettlement (Dercon, 2002). This is particularly true for downside risks (i.e. loss aversion), since the livelihoods of poor people are severely affected by negative income shocks, like those caused by resettlement (Bell, Raiffa, & Tversky), it can be hypothesized that the poorer households consider the resettlement risk higher than the natural disaster risk.

3.5.4 Group inhibition or bystander effect

As long as there is no consensus within the community to resettle, the status quo remains. Consequently, a substantial proportion of the population might be willing to move, yet the group behavior supports the status quo. Family action refers to resettlement decisions influenced by neighboring friends and extended family, highlighting the impact such moves can have on social networks.

3.5.5 Residential Satisfaction

A study in Shenzhen, China residential satisfaction can be significantly affected by three categorical factors: household demographic attributes; housing physical characteristics, such as age and size; and neighborhood characteristics, such as housing location (Tao, Wong, & Hui, 2014). Residential dissatisfaction is seen as a push factor encouraging people to leave informal settlements. According to Lu (1998), factors like housing tenure, household type, gender, income, and length of stay influence residential satisfaction and mobility intentions, which in turn affect actual relocation behavior (Lu, 1998).

3.5.6 Socioemotional Selectivity Theory

Socioemotional Selectivity Theory is a life-span motivational theory that suggests as individuals perceive their remaining time as limited—often due to aging—they become more selective in how they allocate their resources, prioritizing emotionally meaningful goals and activities. The theory distinguishes between two types of goals: knowledge-

related goals, which focus on learning, career development, and building future-oriented social connections; and emotion-related goals, which prioritize emotional well-being and satisfying social interactions in the present. When people view their future as expansive, they tend to pursue knowledge-based, long-term goals. However, as their perception of time narrows, their focus shifts to immediate, emotionally fulfilling objectives (Carstensen, 1995).

3.5.7 Willful Choice Model

The Willful Choice Decision-Making Model emphasizes deliberate and intentional decision-making, where individuals or groups exercise their autonomy to choose among alternatives based on personal values, goals and beliefs, cultural norms and available information. Unlike purely rational models, the Willful Choice Model acknowledges the influence of subjective factors such as emotions, beliefs, and experiences, its reliance on individual capabilities and subjective preferences, which shape the decision-making process. While it assumes a level of rationality, it also incorporates practical feasibility and subjective judgment, reflecting the complexity of real-world decisions. It is particularly applicable in contexts requiring personal or organizational decision-making, public policy, and crisis management, where a balance of rationality and personal intent is crucial (Bell, Raiffa, & Tversky). According to the qualitative interviews, households in Magha, for example, received only 10% of the promised sum of 400 000 CFA franc during previous resettlement attempt. Because of this bad experience with the government, some villagers might have developed a distrust in promises of financial compensation and consider them vain, or they might consider the potential embezzlement and calculate an adapted, expected compensation. (Baert, et al., 2020).

3.5.8 Economic Decision Making

In economics, John B. D. highlights in *The Handbook of Economic Methodology* the importance of understanding the situations and factors influencing people's decisions. Economic decision-making involves selecting the best option to maximize profit, often requiring the consideration of individual or organizational preferences in complex situations (B.D., Hands, Maki, & Elgar, 1998).

There are three main approaches to decision-making: The descriptive approach concentrates on individual behavior, aiming to describe or predict how and why people

think and act in certain ways. The normative approach, on the other hand, focuses on how individuals would think and behave if they were free from cognitive limitations, reflecting ideal decision-making in a perfect world (Liu P. , 2023). The prescriptive approach is tied to an individual's uniqueness, encompassing their diverse psychological traits, emotions, abilities, and needs, highlighting the need for different approaches or designs (Bell, Raiffa, & Tversky).

A reasonable choice can be defined as meeting the following four criteria:

- The decisionmaker's current assets serve as the foundation. Assets can also be things like good health, intelligence, connections with others, and feelings.
- It is founded on pickable outcomes.
- If the outcomes are uncertain, evaluate their probability based on the basic principles of probability theory.
- Considering these probabilities and the value or satisfaction associated with each decision outcome, the choice can be adjusted (Hastie & Dawes, 2009).

3.5.9 Prospect Theory

Utility theory suggests that people make decisions based on maximizing their expected utility or satisfaction, whereas prospect theory suggests that people make decisions based on how they perceive potential outcomes, and the likelihood of those outcomes occurring. (Liu, 2023)

Prospect Theory explains how individuals perceive and respond to risks based on psychological factors rather than objective outcomes. Key concepts include loss aversion—where losses feel more significant than equivalent gains—and probability weighting, which causes people to overestimate rare events and underestimate likely ones. Risk perception is also influenced by how outcomes are framed and by reference points, with losses relative to these points seen as riskier. This theory highlights the emotional and subjective nature of risk evaluation (Hack & Bieberstein, 2015). Emotional factors like fear and regret can intensify biases, leading people to avoid risks or take extreme actions to reduce potential losses. Prospect Theory explains why individuals often respond to risks irrationally, offering insights for risk communication, policymaking, and behavioral interventions. It also highlights that the value of changes decreases as they move further from the reference point.

3.5.10 Theory of Interpersonal Behavior (Triandis)

Triandis acknowledged the influence of both social factors and emotions in shaping intentions (Triandis, 1977). Resettlement preferences among informal settlers can be understood through a framework of Enable, Engage, Exemplify, and Encourage, centered around a catalytic process that initiates change. Enabling involves removing barriers, providing viable housing alternatives, and offering skills training to facilitate resettlement. Engaging settlers through participatory planning, trusted networks, and media campaigns fosters a sense of ownership and reduces resistance (Ananga & Naiga, 2024). Exemplifying successful resettlement cases like Kirtipur Housing builds trust, while policy consistency reassures settlers. Encouraging resettlement through financial incentives, social recognition, and regulatory measures further influences decision-making. The effectiveness of resettlement efforts depends on whether these combined strategies are sufficient to break settlers' attachment to their current location and catalyze their acceptance of relocation.

Determinants of Resettlement Preferences

Table 6 Determinants of Resettlement Preferences

Social	Economic	Psychological
Household Type	Occupation	Previous experience
Age	Availability of services	Stay duration
Gender	Income Level	Residential dissatisfaction
Education level	Secondary income source	Group behavior
Health conditions	Type of House	Risk Perception
Place of Origin		
Years settled		
Reason for migration		

3.6 Methodology Review

Table 7 Methodology Review

Study	Methodology used
Resettlement preferences from	Semi Structured Interviews Focus Group Discussions

landslide prone areas in Cameroon: Willingness to move, reasons to stay (Baert, et al., 2020)	Structured Household Survey Discrete choice experiment
Housing needs fulfilment for low-income group (Mishra, 2019)	Questionnaire survey Key Informant Interviews Relative Importance Index Affordability Test (Rent)
Livelihoods of Squatter Settlements: Analysis from Tenure Perspective (Shrestha, Nepali, Panday, & Shrestha, 2017)	Questionnaire survey – Purposive Non random sampling method Focus Group Discussions Key Informant Interviews Case Study Method: Kirtipur Resettlement, Sankhamul Informal Settlement, Thapathali Informal Settlement
Planning for affordable housing during densification in Kathmandu: Lessons from four settlements (Bajracharya A. , et al., 2015)	Questionnaire survey (social + economic+ physical conditions) Random Sampling method (occupiers + renters) Field observation Cases: Naradevi, Sankhamul and Bansighat Informal Settlements, Khusibu Landpooling, Chabahil

3.7 Kirtipur Housing Project (KHP)

The Kirtipur Housing Project (KHP) is a resettlement initiative aimed at resettling informal settlers who were living along the banks of the Vishnumati River in the Kathmandu Valley. The eviction carried out along the Bagmati River was part of the “Integrated Development of the Bagmati Civilization (IDBC)” initiative. One of the related projects, the Vishnumati Link Road—originally proposed in 1969 to connect Sorakhutte and Kalimati along the Vishnumati River Corridor—faced multiple planning and funding setbacks. A major obstacle came in 1999–2000 when the Asian Development Bank (ADB) withdrew support due to the government’s refusal to provide compensation or resettlement for the squatters impacted by the project. Despite these issues, construction began in 1999, and by 2002, eviction notices were issued and demolitions carried out.

Affected families responded in different ways: some dismantled their homes in exchange for compensation and the promise of permanent housing, others relocated to nearby areas or returned to Kathmandu, while some remained in the same location due to lack of alternatives.

In 2001, a turning point came when the Kathmandu Metropolitan City's City Development Strategy (CDS) adopted a participatory approach by involving squatter communities in policy-making. This effort aimed to improve living conditions and ensure tenure security. While the Supreme Court upheld the government's right to evict, it also mandated that appropriate alternatives be provided to the displaced communities, emphasizing the need to balance infrastructure development with human rights.

A key meeting on March 23, 2002, resulted in verbal assurances from the KMC mayor: temporary rental housing, eventual access to government-constructed housing, and financial assistance. Families were promised Rs. 2,000 per month for three months for rent, with genuine squatters given the option to buy housing through monthly installments. The squatters' success in resisting demolition and advocating for fair treatment was due to a comprehensive strategy involving early advocacy, data collection, engagement with authorities, collaboration with other organizations, media outreach, public awareness campaigns, and a strong network built through shared

knowledge Community	and Year Settled	persistent Population	activism. Number household	of
Dhumakhel	1971	202	47	
Chagal	2000		11	
Khusibahil	1974	130	32	
Tankeswor	1952		19	
Dhaukhel	1993	206	33	

Source: Lumanti (2001)

Figure 4 Communities affected by the project

In January 2002, the government issued a notice for clearing the site for road construction, prompting resistance from informal settlers supported by Lumanti, squatter federations, and civic groups. These groups opposed the demolition due to the absence of an alternative resettlement plan. Lumanti’s advocacy led to a significant agreement, ensuring that “genuine settlers” would receive financial support for rental housing for three months, followed by permanent housing options.

The relocation process that began in April 2002 was disrupted by political instability in June 2002, following the dismissal of local authorities. After the mayor’s reinstatement in September 2003, Rs. 8 million was allocated for relocation, but the amount was inadequate. To address this, the Urban Community Support Fund (UCSF) was established—a collaborative fund involving multiple organizations and administered by Lumanti—eventually reaching Rs. 20 million. The UCSF aimed to:

- Provide secure home ownership through low-interest loans for land purchase and housing improvement.
- Offer financial capital for income-generating activities.
- Support basic social and physical needs.
- Improve land access for civil society to develop low-income housing.

KHP at the Strategy Level

A six-ropani plot of land was acquired in Paliphal, Kirtipur, at a rate of Rs. 3 million (US\$300,000) per ropani. The Urban Community Support Fund (UCSF) financed the entire land cost.

Allocation of Land and Housing from the Market

A total of 44 houses were built with active involvement from the beneficiaries, who played a key role in deciding the design, materials, and facilities based on their

repayment capacity. Residents paid approximately Rs 2,000 (US\$20) per month. The settlement was designed in a row-house layout with shared open space for recreational use. Two housing types were offered, differing mainly in toilet layout, priced at Rs 330,000 (US\$3,300) and Rs 350,000 (US\$3,500). The Urban Community Support Fund (UCSF) retained ownership of the houses until full loan repayment, offering the loans at 3% annual interest over a 15-year period. Astra Pvt. Ltd. served as the consulting developer for planning and design. Although the chosen location was somewhat socially isolated, it was selected based on community preferences and financial constraints. Efforts were made to reduce the impact of isolation, such as encouraging children's participation in nearby school activities (Shrestha M. , 2011).

House Design

The housing project consists of two rows of homes built in two types, each with four rooms spread over two floors, with built-up areas of 538 sq.ft. and 550 sq.ft. respectively—sizes considered above average for economically weaker sections. The use of reinforced cement columns, beams, and brick infill was deemed excessive for two-story units with tin roofing, resulting in higher construction costs. These could have been reduced by using more appropriate technologies and materials, and by optimizing unit size to accommodate more families.

Key sustainable features include rainwater harvesting systems with three underground tanks and two dug wells. Harvested rainwater is used not only for domestic purposes but also for groundwater recharge through strategically placed recharge pits and a central community courtyard. This design helps mitigate groundwater depletion, a growing issue in Kathmandu due to concrete urbanization. The project also includes systems for solid and liquid waste recycling, with wastewater treated and reused through a decentralized reed bed treatment system.



Figure 5 Kirtipur Housing Project

The Paliphal housing program involved beneficiaries in decisions about site selection and housing design, with affordability being a primary concern. A Housing Management Committee was formed in 2004, consisting of seven members: four from affected families, one from squatter federations, one from a women's federation, and one from the Lumanti organization. The committee's responsibilities included managing the housing project, overseeing money collection and repayment, and ensuring proper handover of houses to beneficiaries. The committee also ensured fair distribution of two types of houses with different costs.

To manage long-term community issues, the committee was tasked with overseeing basic services and maintaining harmony. It was registered with the municipality, opened a bank account to handle loan repayments, and required families to pay Rs 2,000 monthly with a Rs 10,000 down payment before receiving ownership. The houses remained under NGO ownership until loans were repaid (Shrestha M. , 2011).

Of the 142 families that were evicted, only 62 were identified as "genuine squatters." Among them, 30 opted to relocate to the Kirtipur Housing Project, while the remaining families declined the resettlement offer. The relocation not only improved living conditions but also reduced vulnerability to natural disasters, promoting environmental justice and providing insights for sustainable urban development, especially for marginalized communities (Singh & Singh, 2024).

Land Tenure and Ownership

The project aimed to formalize land tenure and ownership to secure residents' rights to their new homes. The initial design planned for individual house ownership while keeping the land under community control. However, complications arose regarding land tax payments, typically managed collectively by the community. These issues delayed the transfer of land ownership to individual residents, highlighting the need to address legal and financial matters promptly in housing projects with shared land ownership models. Economically, challenges related to distant workplaces were mitigated by improved bus transit services, which eased commuting and improved access to employment. The project prioritized environmental justice by relocating communities from flood-prone areas to safer locations, reducing their exposure to environmental risks. Institutional planning, coordination, and governance were crucial in managing the project and addressing residents' concerns. Despite some challenges, the project had a positive impact, fostering a united and cohesive community. Residents now take pride in their legal homeownership, a significant achievement.

Paliphal Kirtipur housing unit types

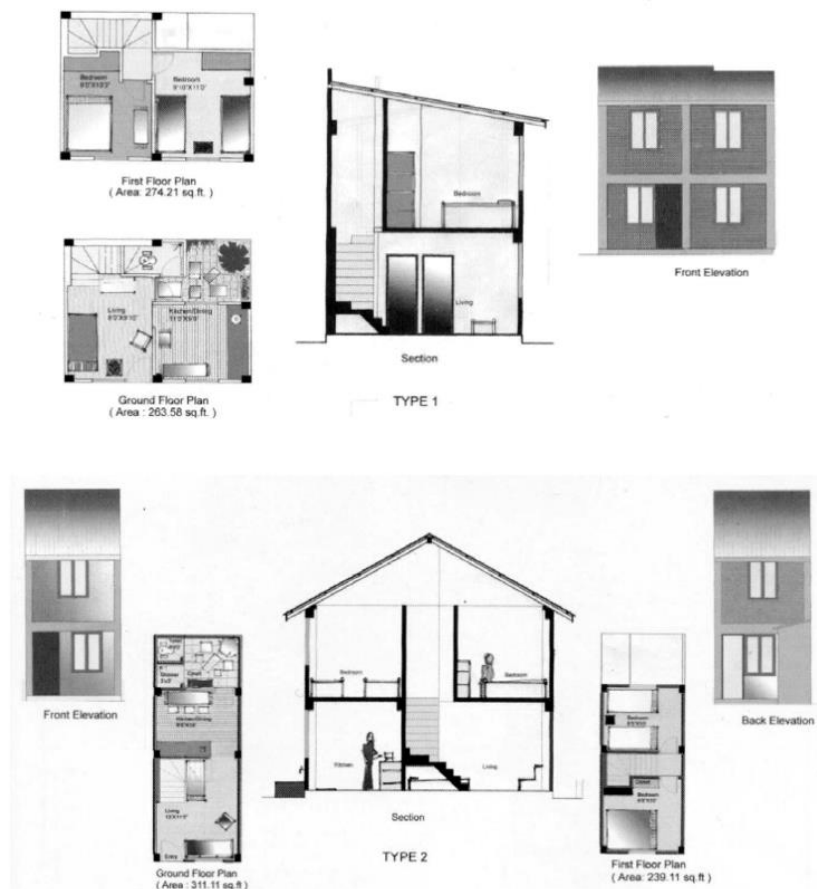


Figure 6 Paliphal housing unit types. Source: (Shrestha M. , 2011)

Challenges

Qualitative interviews were conducted with the residents regarding their problems and challenges faced in the Kirtipur Awas. The chairperson of the Kirtipur Nagar Awas Samiti was also present. The challenges shared by the community are as follows.

- While 42 of the 44 households have paid off their loan amount, they still have not received the legal ownership of their homes. The residents are urging for the ownership transfer of their individual homes as well as the land it is built upon. However, there have been some discussions whether the residents receive ownership of only the house whereas the ownership of land remains with the UCSF. A resident claimed this situation would be like “khana lai chiura diyota tara thaal diyena, thaal nai nabhaikana kasari khane”. The residents questioned the practicality of this situation and their ownership security if the land is purchased by another body in the future.
- Services such as electricity and drinking water was not provided when the residents moved into the houses, they were provided by the Kirtipur Awas Samiti years after moving in. The service fees of electricity, sanitation, water supply and solid waste management is divided up among the residents. This causes disputes among residents during the time of payment. Two houses have been left vacant as the households decided to leave to another place more suitable to their needs and workplaces. 2-3 households are yet to pay off their debt. The residents requested for monitoring of such households such that they pay off the loan immediately. With the increase in family members, the house cannot cater to the space requirements of the family. In this case, the residents have requested to increase a floor. However, the NBBSS Secretary, Mr. Raju Lama claims structural strength of the house might not be able to take on the additional load and they are still looking for solutions. A land tax of Rs.3000 has been paid annually by the residents, the tax was initially paid by the UCSF for a few years. There have been arguments regarding the tax of the total area of the house versus the total site area (including the 2 treatment plants and pathways), the residents perceive they have been paying more than they are using. The treatment plants are currently not functional. There are discussions regarding constructing more houses on the area covered by the treatment plants

as it could benefit more low income residents and the land tax could be more equitable after the ownership is transferred.

3.7 Ichangu Housing Project

In 2012, the government demolished 251 huts of landless squatters on the Bagmati banks in Thapathali, mobilizing more than 2,000 security personnel. Only 46 families received Rs 25,000 to relocate themselves. The eviction resulted in a violent clash between the settlement's residents and police as residents attempted to resist the eviction. The government's actions faced strong criticism from human rights organizations and civil society groups, including Human Rights Watch, which had earlier expressed concerns about the planned evictions. In response to the public outcry, the Prime Minister visited the affected families a week after the demolitions, provided immediate cash relief, and pledged to secure alternative housing. This led to the launch of the Ichangu Narayan Housing Project for Squatters and the Urban Poor. Between 2010 and 2012, the Department of Urban Development and Building Construction acquired over eight ropanis of land from the Ichangu Narayan Land Pooling Committee. Construction began in July 2012 and was completed by September 2014, resulting in 227 housing units built across two locations in Ichangu Narayan (Gurung & Ojha, 2019). However, aside from a ward office and a temporary police post on the ground floor, the buildings remain largely unoccupied, as the squatters evicted from Thapathali declined to relocate there. Each housing unit in Ichangu Narayan measured approximately 200 square feet and was priced at Rs. 1.2 million, intended to be offered to squatters either through low-interest loans or rental schemes. The squatters cited unaffordable costs, distance from the city center where most jobs are located, and the lack of public transportation and schools for their children as key reasons for rejecting the move (Shrestha, Poudel, & Khatri, 2020).



Figure 7 Ichangu Narayan Housing Project

Advocates for housing rights argue that the state-led resettlement plan was not "demand-driven" but rather imposed without consulting the representatives of informal settlers. TDD's vision for rehabilitation aimed to incorporate informal settlers into a government-supported land development initiative. However, the project lacked sufficient administrative, financial, and political backing, which ultimately hindered its ability to keep the land affordable for low-income communities (K. C., 2015). Furthermore, there was a significant absence of support from host communities, who feared that the arrival of informal settlers would compromise the safety and security of their neighborhoods. This concern prompted them to file a legal case opposing the relocation plan.

Challenges

Qualitative interviews were conducted with the residents from Thapathali settlement who had shifted and who resisted shifting to the Ichangu housing. Discussions with the Secretary of the Thapathali Settlement Committee, Mr. Gopal Poudel and NBBSS Secretary, Mr. Raju Lama was also conducted. The informal settlement was not included in the planning process of the housing built for them. The details of the housing such as the total pricing of the apartment, installment periods, loan term,

interest amount were also not shared with the community. The size of the dwelling was too small for most families with an average of 5 members. There were no employment opportunities and public transportation during the time of resettlement at 2015. The strong opposition from the local people of Ichangu was also a major precursor.

3.8 Housing for Economically Weaker Section (EWS), Madras

This initiative was introduced to offer affordable housing to individuals from low-income groups. Each residential unit covered an area of 28.00 square meters and was priced at IRs. 67,000.00. The Government of India subsidized the surrounding infrastructure development, while the Delhi Development Authority (DDA) contributed IRs. 20,000.00 per unit by securing a loan from Plan Funds at an interest rate of 9%. Beneficiaries were required to make an upfront payment of IRs. 27,000.00, with the remaining amount payable over a 15-year period through monthly installments of IRs. 399.00, also at a 9% interest rate. The allocation of plots followed a cross-subsidy approach: 70% were designated for economically weaker sections, 25% for low-income groups, 3% for middle-income groups, and 2% for high-income groups. Revenue generated from the sale of land or housing to higher-income groups (HIG and MIG) was used to subsidize EWS and LIG housing, making the project more financially viable (Pough, 1990).

3.9 Housing Need Fulfillment Practice In Pakistan: Orangi Pilot Project

During the urbanization of Pakistan in the 1980s and 1990s, informal slums known as *Katchi Abadis* emerged. To address these, the government implemented a structured plan focusing on tenure security, infrastructure, and community services. One notable project is *Fahad Square*, a developer-built apartment complex in suburban Karachi, designed by the Karachi Development Authority (KDA). Built on 1.5 acres within a larger 26,000-acre urban development, it consists of 248 apartments and 56 shops. Each unit spans 68.2 sq.m with modern amenities, accommodating an average of 5.72 people, resulting in a high density of 2,329 persons/ha. Unlike typical informal settlements, it reflects a developer-imposed lifestyle with features like balconies, attached bathrooms, and American-style kitchens (Shah & Mishra, 2018).

3.10 Baan Mankong in Nakhon Sawan, Thailand

The Baan Mankong program in Nakhon Sawan, Thailand, presents a successful model of community-driven housing solutions that address the challenges of informal

settlements. As a key transport and trading hub, Nakhon Sawan has long attracted poor migrants seeking employment but lacking access to affordable housing. With nearly 40% of the city's population living in informal settlements on public land controlled by central government agencies, evictions were frequent, and local governments had limited authority to intervene due to centralized land governance. In response to these challenges, informal settlements in Nakhon Sawan organized a network of savings groups in 1996, initially providing small loans and later addressing broader social and environmental issues. The persistent threat of eviction prompted the network to collaborate with the Baan Mankong Program, launched in 2003 by the Community Organizations Development Institute (CODI), which aimed to improve housing conditions by channeling government funds directly to communities (Boonyabanha & Kerr, 2018).

The Baan Mankong approach prioritized community-driven solutions by enabling settlements to upgrade housing and infrastructure themselves rather than relying on government-provided units. This included both in-situ upgrades and relocation to safer public land where tenure security could be guaranteed. The process was highly collaborative, involving local government, CODI, land-owning agencies, and universities to facilitate planning and implementation. By 2019, the program had successfully improved housing conditions for 60% of the city's urban poor, securing tenure and providing necessary infrastructure for 6,600 households across 30 informal settlements. The initiative also led to institutional changes, such as the formation of a City Development Committee chaired by the mayor, which played a key role in integrating informal settlements into municipal planning and negotiating land tenure with national agencies.

Beyond housing, the program had far-reaching impacts, expanding into areas such as welfare, savings, food security, and environmental quality. It also influenced policymaking by establishing a recognized role for community networks in shaping municipal and provincial housing strategies. By embedding participatory governance into the urban planning process, the Baan Mankong program demonstrated the importance of decentralizing land-use decisions and ensuring that the urban poor have a voice in development policies. The success of this initiative highlights the potential of community-led approaches in addressing urban inequality, reinforcing the social function of land, and promoting sustainable and inclusive urban development.

3.11 Credit Linked Interest Subsidy (CLSS) – PMAY (Pradhan Mantri Awaas Yojana)

Pradhan Mantri Awas Yojana (Urban) - Housing For All Mission, in order to expand institutional credit flow to the housing needs of urban poor is implementing credit linked subsidy component as a demand side intervention. Housing and Urban Development Corporation (HUDCO) and National Housing Bank (NHB) have been identified as Central Nodal Agencies (CNAs) to channelize this subsidy to the lending institutions and for monitoring the progress of this component (MoHUA, 2024).

Interest on housing loans up to INR 600,000 for the Economically Weaker Sections (EWS) and Low-Income Group (LIG) is subsidized at a rate of 6.5% for a period of 15 years or the loan tenure, whichever is shorter. The Net Present Value (NPV) of the subsidy is calculated using a discounted rate of 9%. This subsidy reduces the loan amount and Equated Monthly Installments (EMIs), making housing more affordable for the urban poor. Homes built or acquired with central assistance under the Mission must be registered in the name of the female head of the household or jointly with the male head and his wife. If there is no adult female member, the house can be in the name of a male household member. The scheme prioritizes beneficiaries from EWS/LIG segments, with special preference given to Manual Scavengers, women (especially widows), people from Scheduled Castes, Scheduled Tribes, Other Backward Classes, minorities, persons with disabilities, and transgender individuals (MoHUA, 2016).

3.12 The Low-Income Housing Finance from Commercial Banks in Nepal

This initiative, led by Lumanti, is built upon a savings cooperative model, particularly through the Community Women’s Forum. This model collaborates closely with municipalities to implement housing and community upgrading projects. Financing is provided through bank loans which support new housing construction, in-situ upgrading, and other improvements at the community level. The initiative emphasizes the use of low-cost and earthquake-resistant construction techniques, backed by technical support from municipal engineers and community architects.

This program has been implemented in several municipalities including Lekhnath, Pokhara, Sukhla Gandaki, Tansen, and Biratnagar. A total of US\$ 1.94 million has been loaned, financing the construction of 1,109 houses. In Lekhnath, for example, the Kamana Sewa Development Bank provided loans backed by an 80% guarantee fund,

resulting in the successful construction and timely repayment of 133 houses. In Pokhara, the municipality assisted in land purchase at subsidized rates, enabling people to buy land along with basic infrastructure. Laxmi Bank provided housing loans of up to NPR 400,000 at an annual interest rate of 8% with a 7-year repayment term, where 50% of the loan amount was covered by a guarantee fund (Kerr & Manandhar, 2022).

3.11 Real Estate Financing in Nepal

Housing finance contributes to social stability by enabling households to purchase the asset that is largest single investment. Personal residences account for 75 to 90 per cent of household wealth in emerging market countries. Furthermore, housing represents 15 to 40 per cent of the monthly expenditure of households worldwide. Worldwide, investment in the housing sector makes up 15-35 percent of total investment.

The real estate financing landscape in Nepal primarily serves middle- and high-income groups, leaving low-income households with limited access to mortgage markets. Government subsidies for affordable housing remain inadequate, while informal financing options, though widely used, are often expensive and unreliable. The private sector dominates housing finance, with individuals relying on personal savings, family loans, employer support, and financial institutions. Some institutional mechanisms, such as the Employees' Provident Fund (EPF) and savings and credit cooperatives, provide housing loans, but their reach is limited.

In Nepal's formal financial system, lending against land and building collateral is quite common, with loans based on the market value of the collateral. The real estate and housing sector has the highest weighted rank of 2.3 in financial institutions' business portfolios, becoming a primary lending sector in recent years. Survey results indicate that nearly 60% of loans and advances from banks and financial institutions are secured by real estate collateral. The response distribution among commercial banks, development banks, and finance companies is similar, with averages of 56.9%, 61.1%, and 55.2%, respectively. Personal residential home loans and real estate loans make up 26.2% and 73.8%, respectively, of the total real estate portfolio of these institutions.

The Nepal Rastra Bank (NRB) has implemented regulations to control excessive lending to the real estate sector, aiming to prevent financial instability. Meanwhile, government policies emphasize urban housing development, affordable housing

solutions, and enforcing the National Building Code. Despite these efforts, commercial banks allocate approximately 32.4% of their loans to real estate, but these funds are mainly directed toward higher-income borrowers who can provide collateral, making access difficult for informal settlers.

Table 8 Share of Real estate lending on total lending. Source: (NRB, Real Estate financing in Nepal: A Case Study of Kathmandu Valley, 2011)

S. No.	Institution	Average Percentage
1	Finance Companies	27.55
2	Development Banks	24.07
3	Commercial Banks	32.45

Table 9 Types of Customers. Source: (NRB, Real Estate financing in Nepal: A Case Study of Kathmandu Valley, 2011)

Types / Rank	1	2	3	4
Personal residents	29	7	4	0
Commercial complex builders	2	9	14	5
Professional land/housing developers	8	17	12	0
Other (specify): other sector business, personal use, renovation, o/d etc	1	5	4	8

These findings are particularly relevant to housing subsidy loans for informal settlements. The report highlights key barriers to affordable housing finance, such as the lack of targeted subsidies and reliance on informal lending mechanisms, which underscores the need for structured financial support programs. Potential financing models, including those based on the EPF and cooperative housing schemes, could be adapted to better serve low-income groups. Policymakers can leverage existing government priorities to advocate for more inclusive housing finance solutions that address the specific needs of informal settlers. Respondents identified the real estate and housing sector as the top lending area, with a weighted rank of 2.3. Survey findings revealed that nearly 60 percent of loans and advances provided by banks and financial institutions are secured by real estate as collateral. (NRB, 2011)

According to the Housing Finance Group of the International Finance Corporation (IFC), housing finance contributes to social stability by enabling households to

purchase an asset which represent their largest single investment. Personal residences account for 75 to 90 per cent of household wealth in emerging market countries, which amounts to 3 to 6 times their annual income. Furthermore, housing represents 15 to 40 per cent of the monthly expenditure of households worldwide. Globally, investment in the housing sector accounts for 15-35 per cent of aggregate investment (Housing Finance Group, 2006).

Family income compared to the price of land and house is quite low. It takes five to ten years, on an average, for low income families to save to buy a plot of land and then almost as many years more to build a house. It is common to build low- and middle-income housing incrementally (Mathema, 1999).

Co-operative housing societies are associations of people who share their resources to buy and own real estate. To buy land, build housing complexes, and share ownership of the properties, members combine their money. This choice offers a cost-effective approach to buying a property while taking advantage of the group's combined power.

3.12 NRB Unified Directives 2081

Deprived Sector Lending

It mandates that at least 5% of the total loans issued by financial institutions (banks and financial companies) must be allocated to deprived groups (विपन्न वर्ग). "Vulnerable groups" include individuals with low income, marginalized communities (e.g., women, indigenous groups, Dalits, backward caste groups, people with disabilities, border communities, laborers, and landless families). Financial institutions must ensure that these loans contribute to the economic and social upliftment of these communities. The loans given under this category should not exceed a certain threshold, ensuring they are accessible to individuals and small businesses. The interest rate on loans from this fund should not exceed 1.5% of the annual rate set by financial institutions. Flexible repayment plans, including grace periods, may be provided based on the nature of the business.

- Loans to small enterprise or business on collective guarantee (no collateral) will be provided at three Lakhs per member and five lakh rupees for those classified as "good borrowers."

- Renewable energy loan upto two lakhs and three lakh rupees for those classified as "good borrowers."
- Loans to small enterprise or business with acceptable collateral will be provided five Lakhs per member and seven lakh rupees for those classified as "good borrowers."
- Foreign employment loan upto one lakh fifty thousand with or without collateral.
- Microloans (लघु कर्जा) provided to low-income individuals and communities for various purposes, including small businesses, agriculture, and storage facilities. Key points include:
 - Loans of up to Rs. 3 lakh for low-income individuals or communities for essential production-related expenses, such as raising livestock or operating businesses, provided they meet financial institution criteria.
 - Rs. 4 lakh loans for individuals classified as "good borrowers" after two years of responsible borrowing.
 - Small farmers and marginalized communities can receive up to Rs. 3 lakh for agricultural storage, cold storage construction, irrigation wells, and tube wells.
 - Loans of Rs. 4 lakh for projects like greenhouse farming, fruit cultivation, poultry farming, fisheries, and agricultural storage.
- Microloans (लघु कर्जा) specifically for women-operated small enterprises. Key points include: Loans up to Rs. 4 lakh are provided by banks and financial institutions for small businesses operated by women. Project-based loans up to Rs. 7 lakh are available for structured business plans led by women.
- Marginalized population to be provided house construction loan upto Rs. 2 lakhs without collateral.
- Self employment auto loan upto Rs. 25 lakhs.
- Women entrepreneurs small enterprise and self employment business loan upto Rs 20 lakh with collateral. This loan must be insured.

- Low cost housing loan upto Rs 7 lakhs to individuals or to groups on the basis of collateral.

Table 10 Borrower Documents required to take loan. Source: (SiddharthaBank, n.d.)

Personal Identification	Collateral	Income Source
<ul style="list-style-type: none"> • 2 copies of photographs • Citizenship and/or Passport • Bank (deposit & loan) account statement of at least 6 months • PAN/VAT Certificate (if applicable) • PAN Certificate of the individual (for loan amount above NPR 5 million) • Location Map (Residence & Office) 	<ul style="list-style-type: none"> • Lalpurja/Land Ownership Certificate • Rajinama or Bakaspatra or Ansha-banda • Receipt from Malpot Office • Tax clearance certificate of building • Blueprint and trace map • Char Killa Pramanit • Approved house map • Nirman Sampanna Patra/Abhilekhikaran • Ghar Kayam in Lalpurja in case of existence of house 	<ul style="list-style-type: none"> • Salary Certificate • Rental Agreement along with tenant's identification • Audited financials of last 2 fiscal years (business income) • Pension Certificate • Copy of renewed/valid blue book of vehicle along with route permit (transport business income) • Salary Certificate, work permit, valid passport with visa, pay slip and bank account statement • Latest tax paid receipt or tax clearance certificate for all income

3.13 Monetary Policy

The revised Monetary Policies of Nepal for 2019/20 and 2024/25 reflect a more flexible and inclusive approach to housing and sectoral lending. In 2019/20, Nepal Rastra Bank

(NRB) increased the debt-to-income (DTI) ratio limit from 50% to 60% for first-time homebuyers, making it easier to access home loans. It also raised the loan limit for housing businesses in key urban areas from 40% to 50%. Additionally, NRB eased tax requirements by allowing first-time homebuyers and certain business borrowers (agriculture, tourism, SMEs) to submit tax payment receipts instead of full tax clearance certificates.

According to the 2024/25 Monetary Policy, as of mid-June 2024, commercial banks have allocated 5.79% of their total loans (Rs.263.07 billion) to the deprived sector. Development banks and finance companies have contributed 8.16% (Rs.40.31 billion) and 6.7% (Rs.6.58 billion), respectively. The government's concessional interest-subsidized loan program has reached 123,656 borrowers, with Rs.134.76 billion disbursed—Rs.92.6 billion for commercial agriculture and livestock, and Rs.40.92 billion to 73,385 women entrepreneurs. A cap of 2% above the base interest rate is maintained for loans up to Rs.20 million, now extended to more domestic production sectors. New provisions also include collateral-free loans for individuals with foreign employment permits based on remittance pledges. Furthermore, NRB plans to assist in resolving cooperative sector issues by facilitating refunds of up to Rs.500,000 to affected depositors, using collateral-backed loans from cooperative board members and their close relatives (NRB, 2024).

3.14 Earthquake subsidy Loan

The Earthquake Subsidy Loan offers an interest-free loan of Rs. 3 lakhs upto a tenure of 3-5years; loans upto Rs 25 lakhs in Kathmandu Valley and NPR 15 lakhs outside are provided at 2 percent interest with a tenure of 5-10years. For this purpose, BFIs may increase the loan-to-value ratio by 10 percent or more. Rastra Bank pays the interest, insurance, and security fee claims to the Banks and Financial Institutions (BFIs) on a quarterly basis.

The loan application process involves four steps. First, the applicant must verify their earthquake-affected status through the National Reconstruction Authority (NRA). Second, they need to approach a bank or financial institution (BFI) that is approved for concessional loans. Third, required documents, such as citizenship, land ownership papers, NRA verification, and an approved house design, must be submitted. Finally, upon approval, the loan is disbursed in installments based on reconstruction progress.

However, BFIs were hesitant in issuing loans due to concerns over repayment, as many victims faced economic vulnerability after the earthquake. Delays in loan disbursement were caused by victims' apathy, election disruptions, and long approval processes. Collateral requirements also posed challenges, as some victims lacked adequate security for loans. Initially, BFIs refrained from issuing loans due to confusion regarding the criteria and procedures set by Nepal Rastra Bank (NRB). Some provisions, such as issuing loans below the base rate while managing operational costs, were considered impractical. Additionally, the process of issuing NPR 300,000 interest-free loans lacked clarity, leading to delays in agreements between banks and authorities. The scheme did not specify penalties for late payments, causing uncertainty for banks regarding overdue interest collection. Furthermore, BFIs were restricted from charging extra fees, such as processing charges, making the loan program less profitable for them (Bhattarai, 2018).

3.15 Private Developer incentives for developing affordable housing

Developers are encouraged to invest in affordable housing through various financial, regulatory, and policy-driven incentives. One of the most significant incentives is tax benefits, including tax credits such as the Low-Income Housing Tax Credit (LIHTC), property tax abatements, and exemptions on construction materials, all of which help reduce development costs. Additionally, governments offer direct subsidies and grants, including low-interest or forgivable loans, as well as infrastructure subsidies to cover essential services like utilities and roads.

Zoning and land-use incentives also play a crucial role, with developers benefiting from density bonuses that allow for increased housing units, fast-tracked permitting to lower pre-construction costs, and reduced parking requirements to minimize land expenses. Public-private partnerships (PPPs) further enhance affordability initiatives by providing public land at discounted prices, co-investment opportunities, and access to government funding programs that mitigate financial risks. Regulatory flexibility, such as waiving impact fees, relaxing building codes, and reducing minimum lot size requirements, makes it easier for developers to meet affordability targets.

Beyond financial and regulatory support, developers also gain market stability and long-term benefits from affordable housing projects. Given the constant demand for affordable housing, developers can enjoy guaranteed occupancy rates and steady rental

income, often supported by government programs. Additionally, contributing to community development through affordable housing enhances a developer's reputation and corporate social responsibility profile. These combined incentives significantly reduce financial risk and make affordable housing a viable and attractive investment. (Soltas, 2023)

In India, private developers are encouraged to invest in affordable housing through a combination of fiscal incentives, regulatory relaxations, and financial support programs. The government has introduced various measures under schemes like Pradhan Mantri Awas Yojana (PMAY) to promote private sector participation. One of the key incentives is income tax benefits, where developers of affordable housing projects enjoy 100% tax exemption on profits under Section 80-IBA of the Income Tax Act. Additionally, the Goods and Services Tax (GST) on affordable housing projects has been reduced to 1% (without input tax credit), lowering construction costs. Developers also benefit from External Commercial Borrowings (ECB) relaxations, allowing access to cheaper foreign loans, while the Credit-Linked Subsidy Scheme (CLSS) boosts demand for affordable housing, making projects more attractive.

To further incentivize developers, the government granted infrastructure status to affordable housing in 2017, enabling developers to access priority lending at lower interest rates. Many states have implemented single-window clearance to expedite project approvals and reduce compliance costs. Additionally, developers are granted higher Floor Area Ratio (FAR) or Floor Space Index (FSI) at concessional rates to encourage the construction of more affordable units. Under Public-Private Partnership (PPP) models, developers can access government land at subsidized rates, along with Viability Gap Funding (VGF) to make projects financially feasible. Some states also allow cross-subsidization, permitting commercial development alongside affordable housing to enhance project viability.

Several states offer additional incentives tailored to their urban housing needs. Maharashtra, particularly Mumbai, provides extra FSI and Transferable Development Rights (TDR) for slum redevelopment and affordable housing. Karnataka offers stamp duty waivers and property tax incentives to developers focusing on low-income housing. In Tamil Nadu, the Chennai Metropolitan Development Authority (CMDA) provides density bonuses, encouraging higher-density affordable housing projects.

These incentives collectively reduce financial risks and enhance the profitability of affordable housing projects, ensuring greater private sector participation in bridging India's housing gap.

CHAPTER 4: STUDY CONTEXT

4.1 Case Area

4.1.1 Thapathali Informal Settlement

The Thapathali informal settlement also known as Paurakhi Basti lies adjacent to the Thapathali bridge connecting Kathmandu and Lalitpur. The settlement consists of 142 Households of diverse communities, primarily rural migrants and marginalized groups. The settlement was established in 2006, before this the area was dilapidated and was used as a dumping ground. The first settlers were part of a campaign called Mechi-Mahakali cycle rally, including people like Himal Lama and Debi Lama. The Maoist insurgency also played a major role in the increase of the residents in Thapathali informal settlement. Land plots are divided into sections measuring approximately 13' X 28'. The allocation of land plots is taken up by a committee called “विपन्न बस्ती संरक्षण पैरवी मञ्च नेपाल (Poor Settlement Conservation Advocacy Forum Nepal)”. There is no formal process or community or ward authorization required when a new household settles in the area.

The infrastructure has been provided by various local bodies and informal settlement committees. The house number is given by the ward. Water is supplied through SPOSH Nepal and नेपाल महिला एकता समाज (Nepal Women's Unity Society). NEA has provided electricity in the site. For sanitation, they have septic tanks, and the wastewater is directed to the government drainage system. Access to transport services is fair, with limited transport options that may not be easily accessible for all.

In average, an investment of 3 to 4 lakhs was made to build the house and related infrastructure. About 3% of households in the community are renting their space. The monthly rent paid by the households is given voluntarily and typically ranges from 200 to 400 rupees, the house owners also live in Thapathali. There is also a hotel for this purpose. All households currently have loans, as borrowing has become a common necessity due to expenses exceeding income. In fact, 100% of households are in debt.



Figure 8 Residence construction in Thapathali Informal Settlement

4.1.2 Jagritinagar Informal Settlement

The settlement consists of 116 households. The first settlers resided here in tents because the area was wide a open space back then. Majority of the households have been staying for more than 15 years, there are a few households who bought the houses and moved in. Some households also rent their houses, the original residents reside on the upper floors whereas 12HH renters stay on the lower floors, 2-3 residents have rented their houses in the settlement and reside outside. The renters pay Rs. 3000 – Rs. 4000 monthly. The households have invested 8-10 lakhs on their households till now, including the cost of annual maintenance. The residents usually have to take loans to repair their homes. The loans are taken through informal settlement cooperatives like GyanJyoti Sahakari who provide loans upto 5 lakhs at 2% interest for purposes such as paying school fees, repairing homes, hospital fees etc. Any savings is deposited to such cooperatives, the residents do not deposit money in commercial banks. Access to infrastructure and services has been gained directly through the electricity, water supply etc authorities, through ward sifarish. The services are provided individually to the majority of the houses. The children in the settlement study in nearby schools which are mostly semi government institutions.

The recent 2024 September floods rose to a height of 4.5feet in the settlement, the ground floors were flooded so most of the residents had to reside on the upper floors. The residents with one storey houses stayed on the roofs covered by tents.

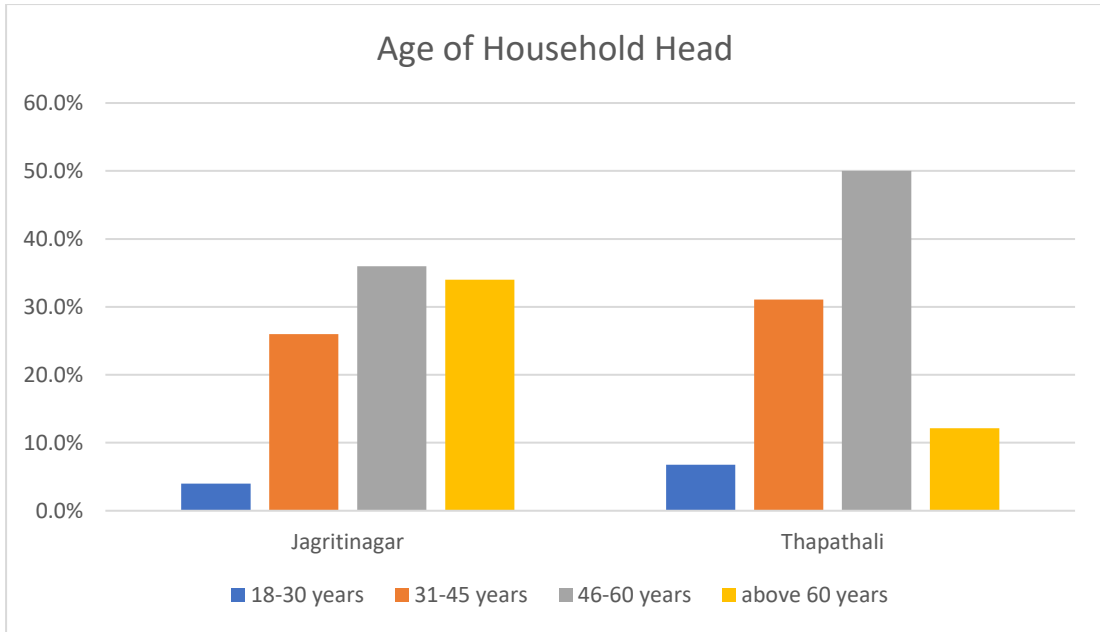


Figure 9 Residences in Jagritinagar Informal Settlement

4.2 Socio Economic Conditions

Age of Household Head

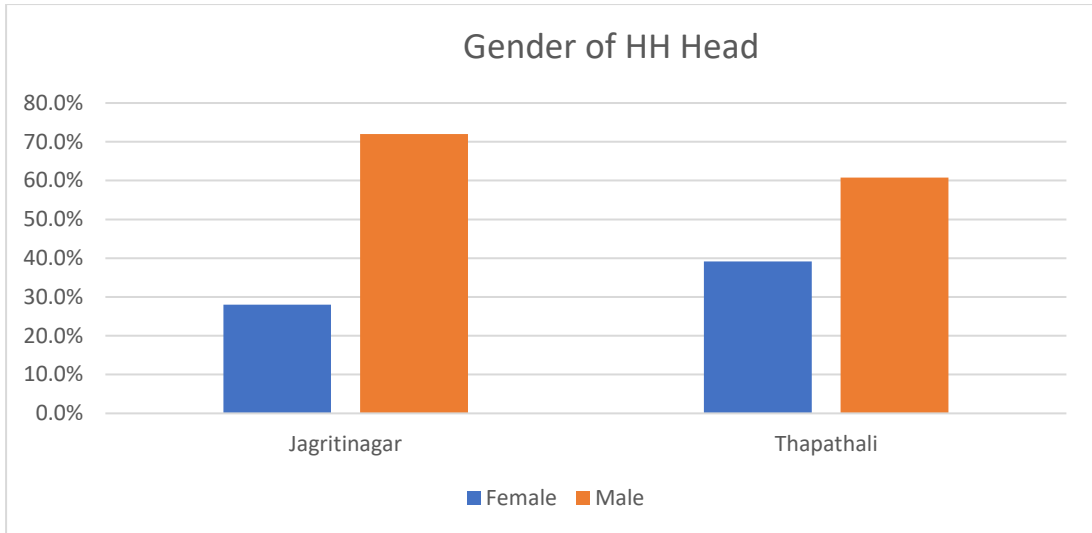
The age distribution of household heads in Jagritinagar and Thapathali shows notable differences. In Jagritinagar, only 4.0% of household heads are aged 18-30 years, while 26.0% fall within the 31-45 years category. The largest proportion, 36.0%, belongs to the 46-60 years age group, followed closely by 34.0% who are above 60 years. In contrast, Thapathali has a slightly higher percentage (6.8%) of household heads aged 18-30 years. The 31-45 years category accounts for 31.1%, while the 46-60 years group forms the majority at 50.0%. The proportion of household heads above 60 years is significantly lower in Thapathali at 12.2%. This indicates that Thapathali has a relatively older household head demographic in the middle-aged group, whereas Jagritinagar has a more balanced distribution between the 46-60 years and above 60 years categories.



Source: Uprety & Shakya (2024)

Gender of Household Head

The gender distribution of household heads in Jagritinagar and Thapathali varies significantly. In Jagritinagar, a larger proportion of household heads are male, accounting to 72%, while female-headed households make up 28%. In Thapathali, the proportion of female-headed households is higher, 39.2%, with male-headed households making up the remaining 60.8%. Female-headed households often face greater economic vulnerability due to limited access to stable employment, lower wages, and social barriers that restrict opportunities. Additionally, women in informal settlements may encounter difficulties in securing land tenure, accessing financial resources, and participating in decision-making processes. This can impact household resilience to external shocks, such as floods or evictions, and influence the overall well-being of the family. Therefore, gender dynamics must be considered in resettlement strategies to ensure that policies address the specific challenges faced by female-headed households in informal settlements.

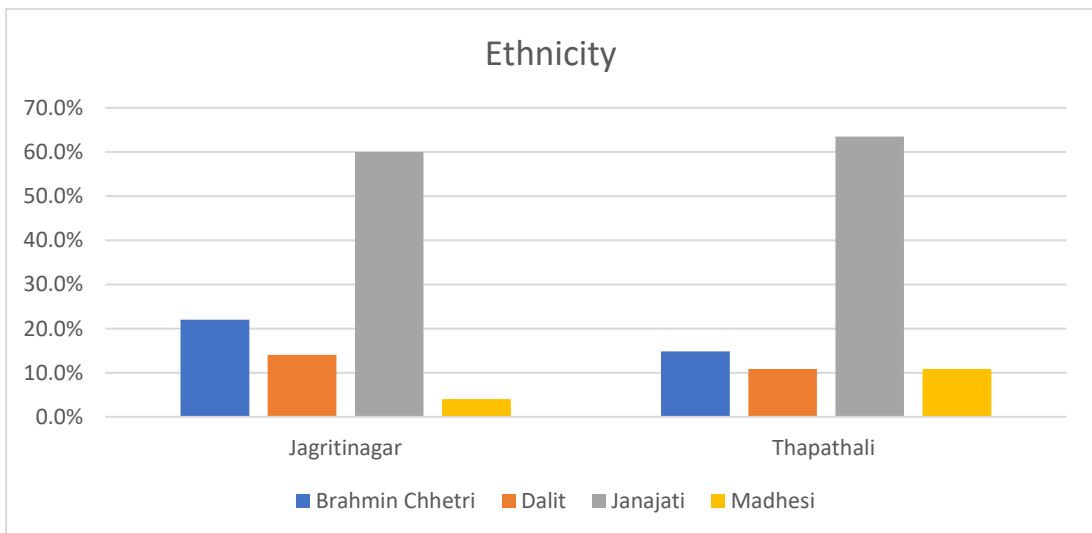


Source: Uprety & Shakya (2024)

Ethnicity of Household

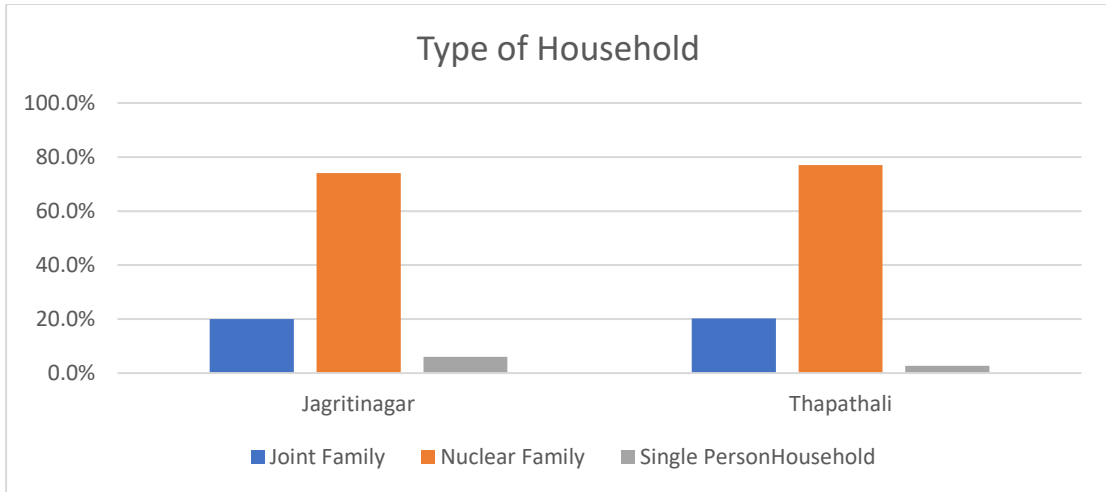
The households in Jagritinagar, 60% comprises of Janajati community, 22% from Brahmin, 14% from Dalit and 4% from Madhesi community.

In Thapathali, 63.5% of households are Janajati, 14.9% from Brahmin, 10.8% each from Dalit and Madhesi communities.



Source: Uprety & Shakya (2024)

Type of Households



Source: Uprety & Shakya (2024)

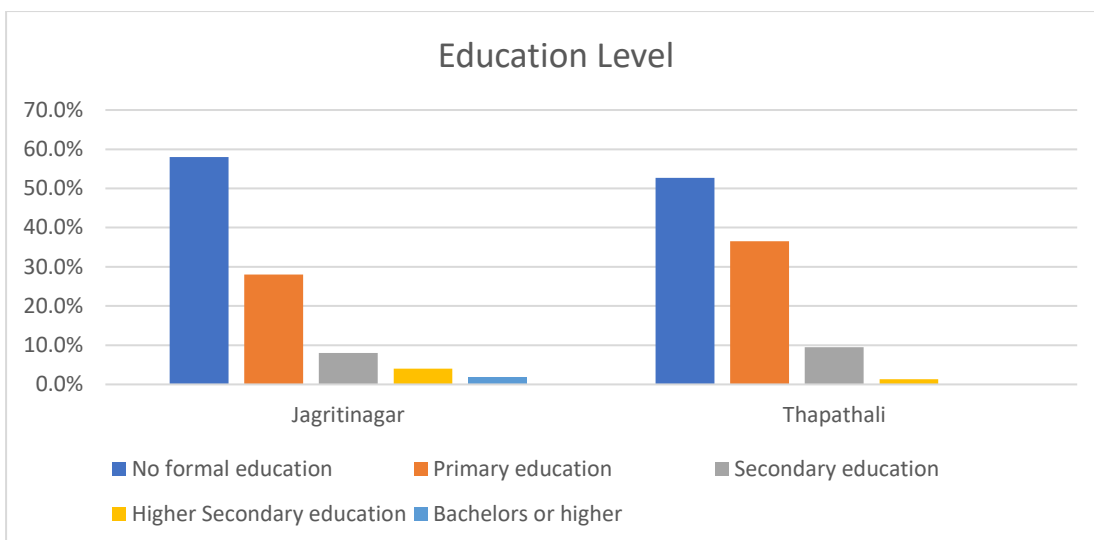
The type of household in Jagritinagar consists mostly of nuclear families which accounts to 74%, whereas joint families comprise of 20% and single person household takes up 6% of households. Thapathali consists of a similar dynamic with 77% of nuclear families, 20.3% of joint families and 2.7% of single person households.

Education Level of Household Head

The households that have not attained any formal education in Jagritinagar accounts to 58% whereas 28% have primary education, 8% secondary level education, 4% higher education and 2% have completed bachelors education.

In Thapathali, the households with no formal education comprises to 52.7%, primary education 36.5%, secondary education 9.5%, higher education 1.4% and 0% who have completed bachelors.

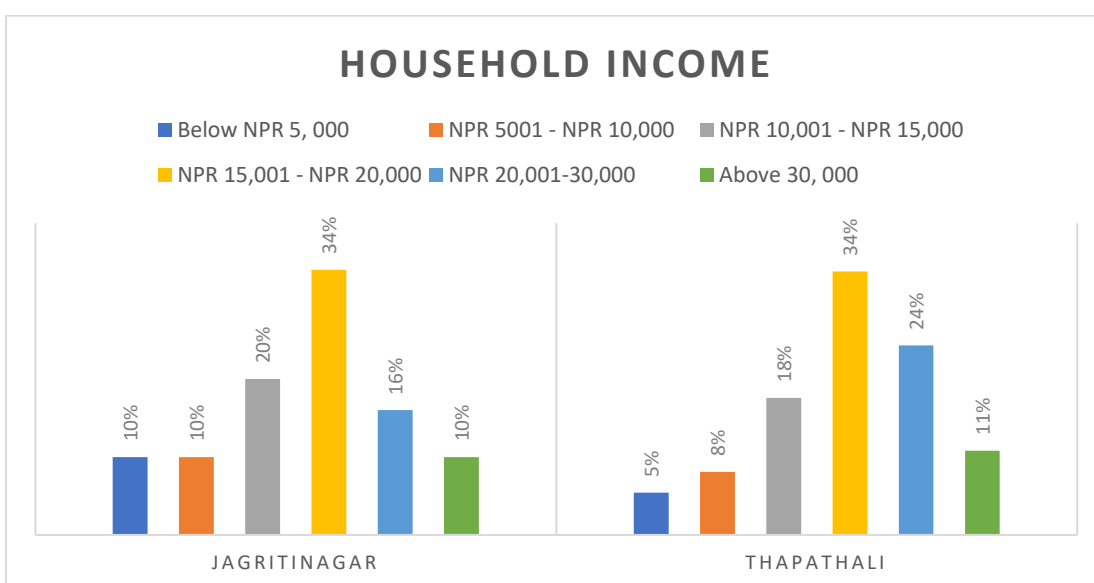
This significant difference in the education levels in Jagritinagar and Thapathali could be because a high percentage i.e. 34% of HH heads in Jagritinagar are above the age of 60 years thus the HH heads with no formal and primary education take up a high percentage.



Source: Uprety & Shakya (2024)

Household Income

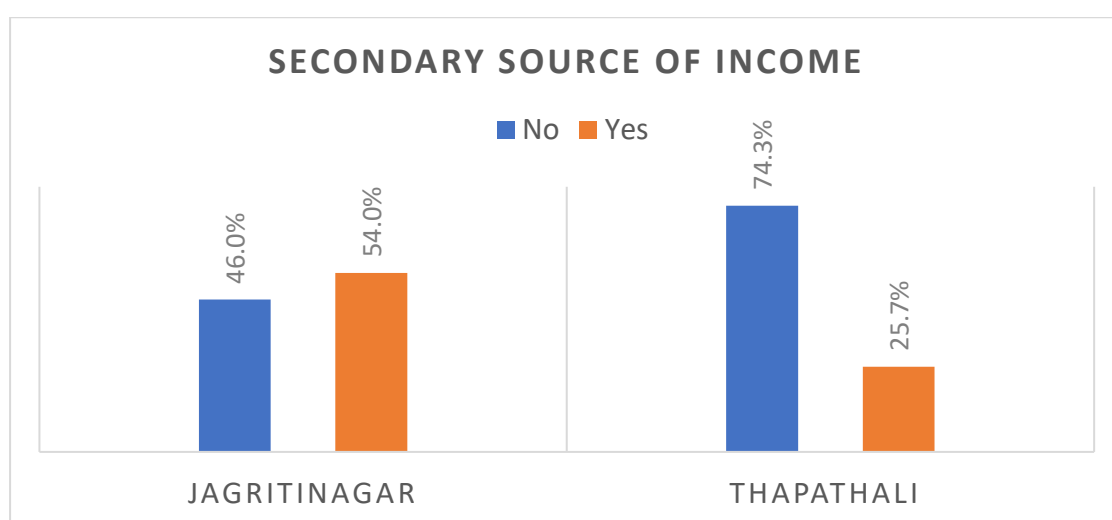
Jagritinagar comprises of 34% of HH earning between NPR 15,000 to NPR 20,000, 20% between NPR 10,000 to NPR 15,000, 16% earning 20,000 to NPR 30,000 and 10% each earning below NPR 5000, above NPR 30,000 and in the range NPR 5000 to NPR 10,000. Thapathali consists of higher percentage of HH earning above NPR 20,000 with 24% earning NPR 20,000 to NPR 30,000 and 11% earning more than NPR 30,000. The percentage earning less than 10,000 is also less in comparison to Jagritinagar with 5% earning below NPR 5,000 and 8% earning NPR 5000 to NPR 10,000. The mid income range is similar to Jagritinagar with 18% earning NPR 10,000 to NPR 15,000 and 34% earning NPR 15,000 to NPR 20,000.



Source: Uprety & Shakya (2024)

Secondary Source of Income

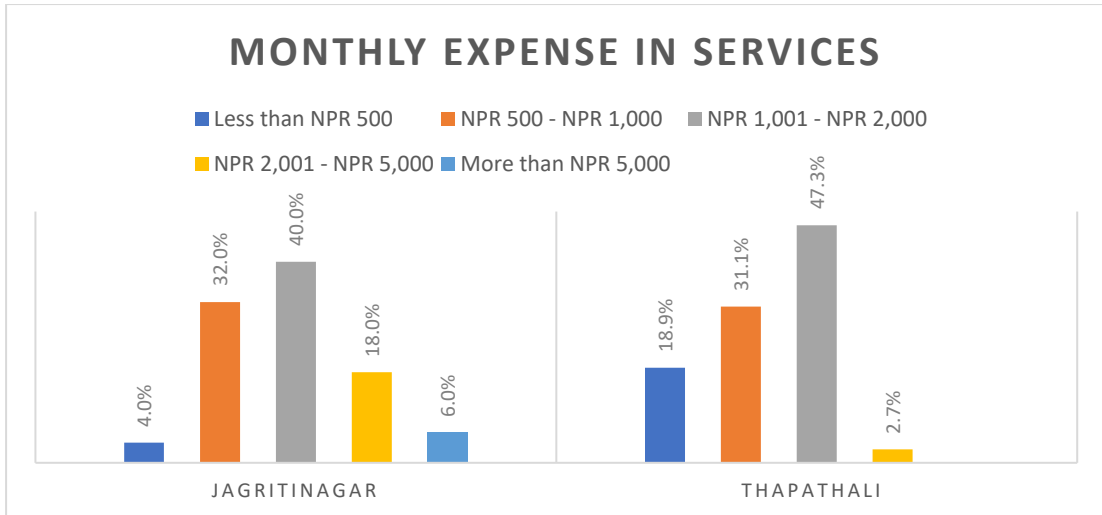
The higher number of secondary sources of income in Jagritinagar can also be attributed to the presence of a public road running across the settlement. This enables the settlers to put shops in their residences. Eateries, cold stores, workshops, tailoring shops can be seen in Jagritinagar which cater to the people living and working nearby in addition to the informal settlers. In Thapathali, a few shops can be observed inside the settlement such as cold stores and chat, peanut vendors which mostly cater to the informal settlers. While the road in Jagritinagar acts as



Source: Uprety & Shakya (2024)

Monthly Expense in Services

Services such as water supply, electricity and sanitation in Jagritinagar are provided to individual households except very few houses who use community water tap. The case for Thapathali is different, some service expense such as tanker water is divided among the settlers so they contribute a certain amount monthly to the services. In Jagritinagar, 40% pay in the range of NPR 1000 –2000, 32% pay NPR 500 –1000, 18% pay NPR 2000 – 5000 and 6% pay more than NPR 5000. The households in Thapathali, 47.3% contribute NPR 1000 – 2000, 31.1% contribute NPR 500 – 1000, 18.9% pay less than NPR 500 and 2.7% pay NPR 2000 – 5000.



Source: Uprety & Shakya (2024)



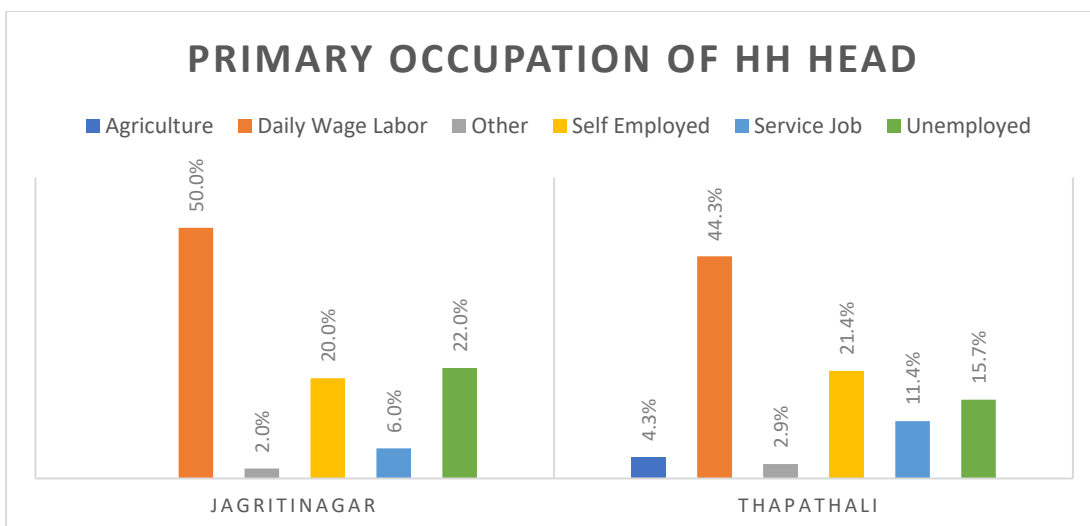
Figure 10 Jagritinagar Informal settlement: Presence of water taps in individual houses



Figure 11 Thapathali Informal settlement: Presence of only communal water taps and toilets

Primary Occupation of HH Head

The primary occupation of HH in Jagritinagar mostly comprises of daily wage labour which is 50%, unemployed 24%, self employed 18%, service job 6% and remaining 2% others such as temple rituals. The HH in Thapathali are also engaged in agriculture which accounts to 6.8%, daily wage labor 43.2%, self employed 20.3%, unemployed 16.2%, service job 10.8% and other jobs consisting of 2.7% of households.

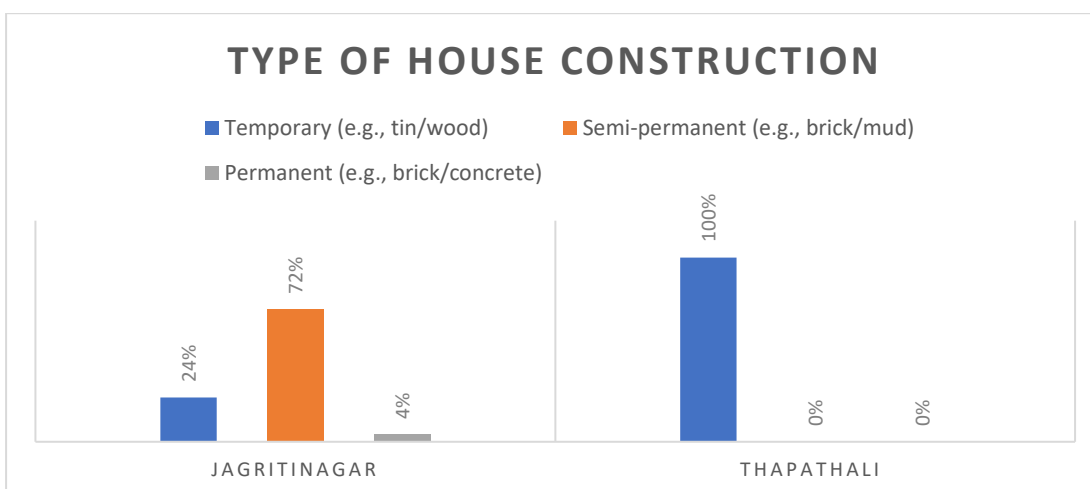


Source: Uprety & Shakya (2024)

Type of House Construction

The type of house construction is significantly different in Jagritinagar and Thapathali. Jagritinagar which has faced lesser attempts of eviction in comparison has 24% temporary, 72% semi permanent and 4% permanent houses whereas Thapathali has only temporary structures made of tin and bamboo. While the houses in Thapathali are only 1 floored, Jagritinagar consists of even 2.5 floored houses. The houses in Thapathali are of an approximate 13ft X 28ft size in average.

The higher income groups in Thapathali informal settlement i.e. income levels above rs. 15,000 are higher in number than in Jagritinagar. However, only temporary construction is found in Thapathali showcasing the inability of settlers to invest in their houses fearing forced eviction.



Source: Uprety & Shakya (2024)



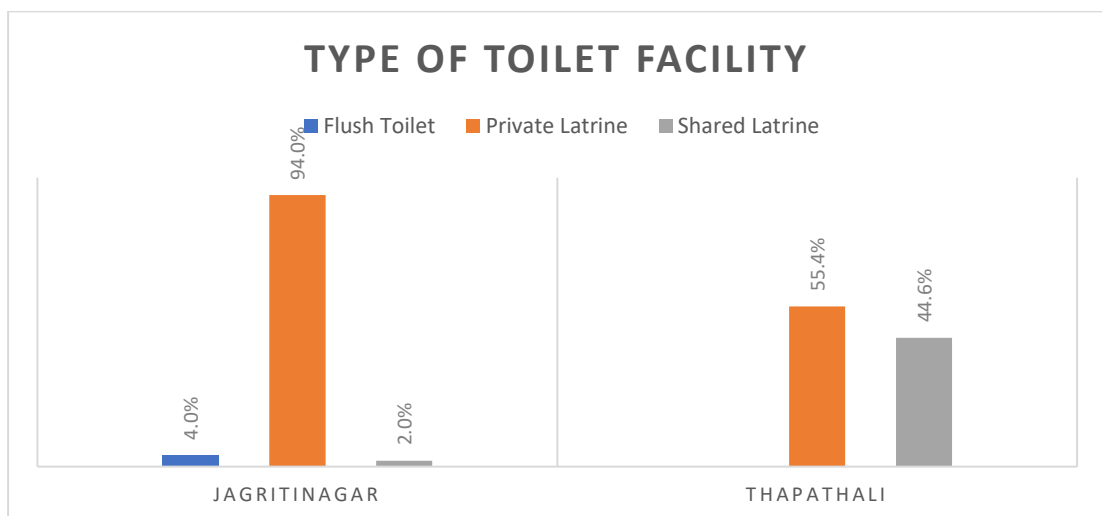
Figure 12 House construction in Jagritinagar informal settlement



Figure 13 House construction in Thapathali informal settlement

Type of Toilet Facility

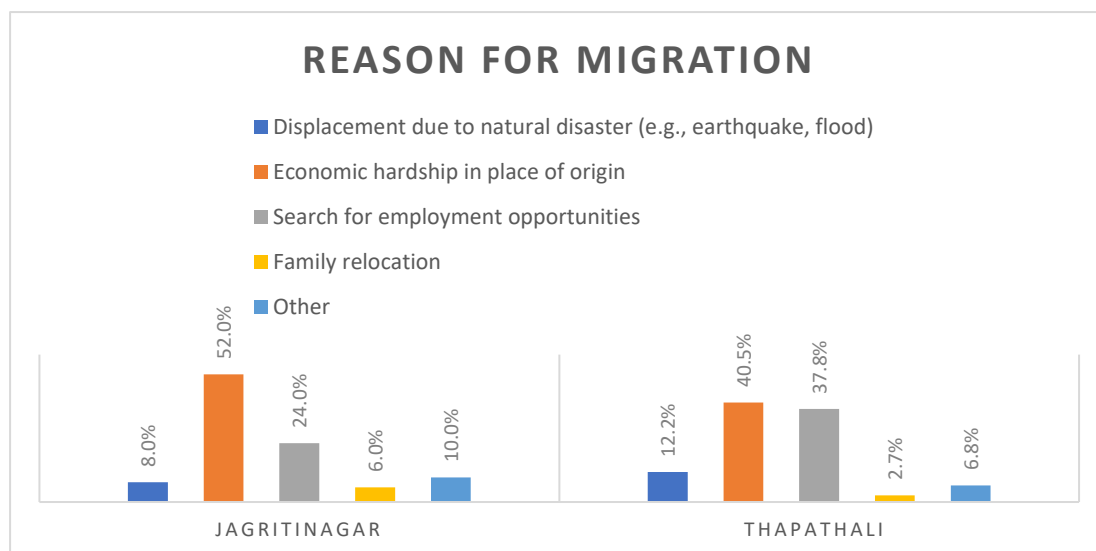
The majority of households in Jagritinagar have access to toilet facilities in their home itself. 94% have access to private latrine, 2% use shared latrine and 4% have flush toilet in their homes. The context of Thapathali is different with 55.4% having private latrine whereas 44.6% have access to shared latrine in the settlement.



Source: Uprety & Shakya (2024)

Reason for Migration

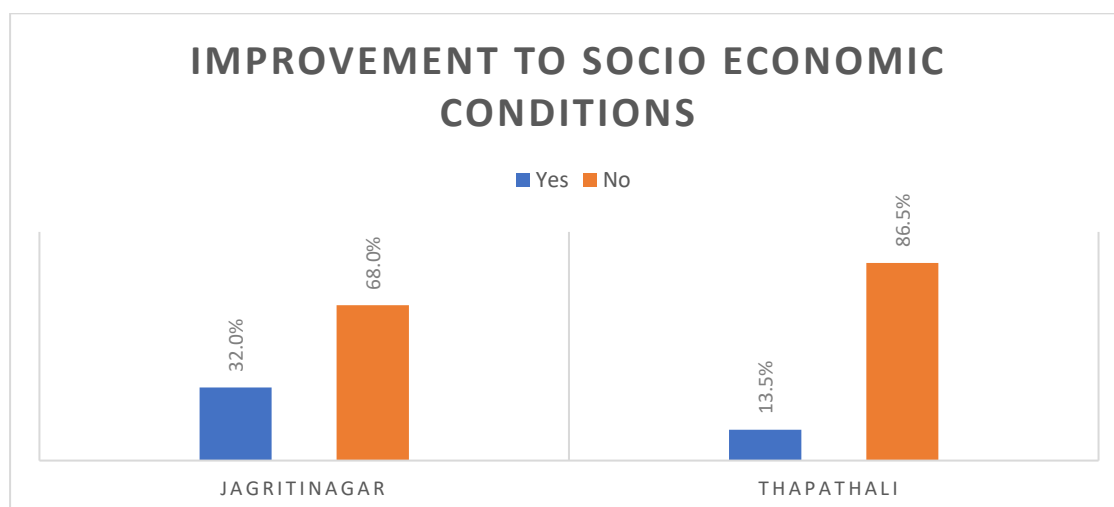
The Jagritinagar, 52% households claim their reason for migration is economic hardship in place of origin, 24% are here in search for employment opportunities, 6% due to family relocation and 10% for other reasons such as security concerns such as increase in theft and robberies, and some due to having no property by giving in to jamindar, paying off loan, taken by relatives etc.



Source: Uprety & Shakya (2024)

Improvement to Socio Economic Conditions

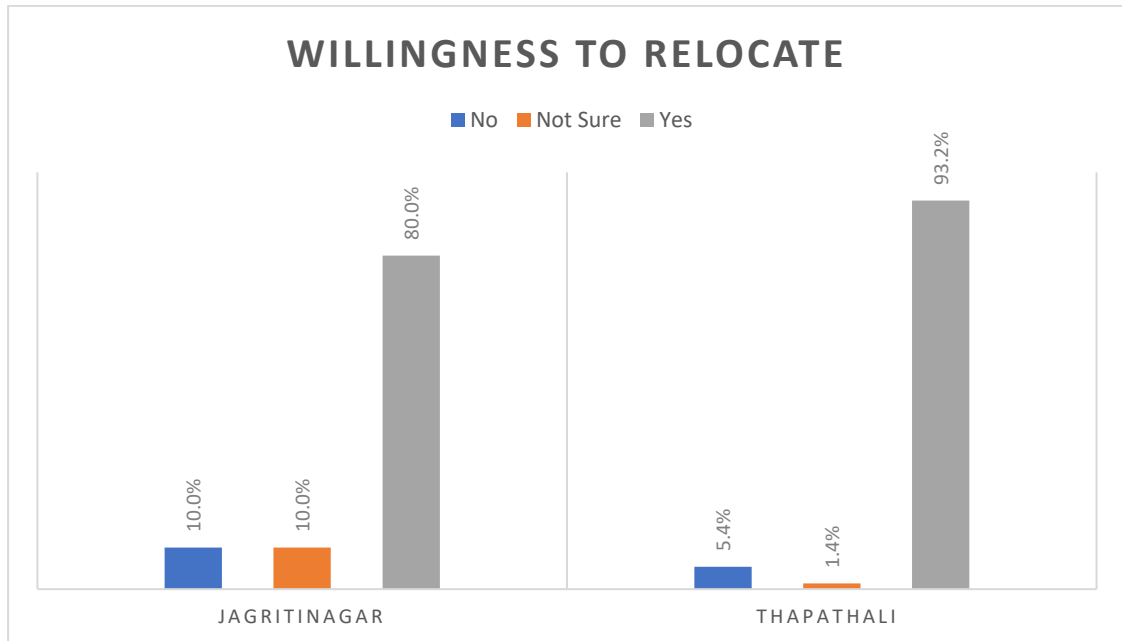
On asking about any improvements to the settlement's socio economic condition, 32% of the households Jagritinagar responded 'Yes' whereas only 13.5% respondents in Thapathali responded there was improvement to their situation.



Source: Uprety & Shakya (2024)

Willingness to Relocate

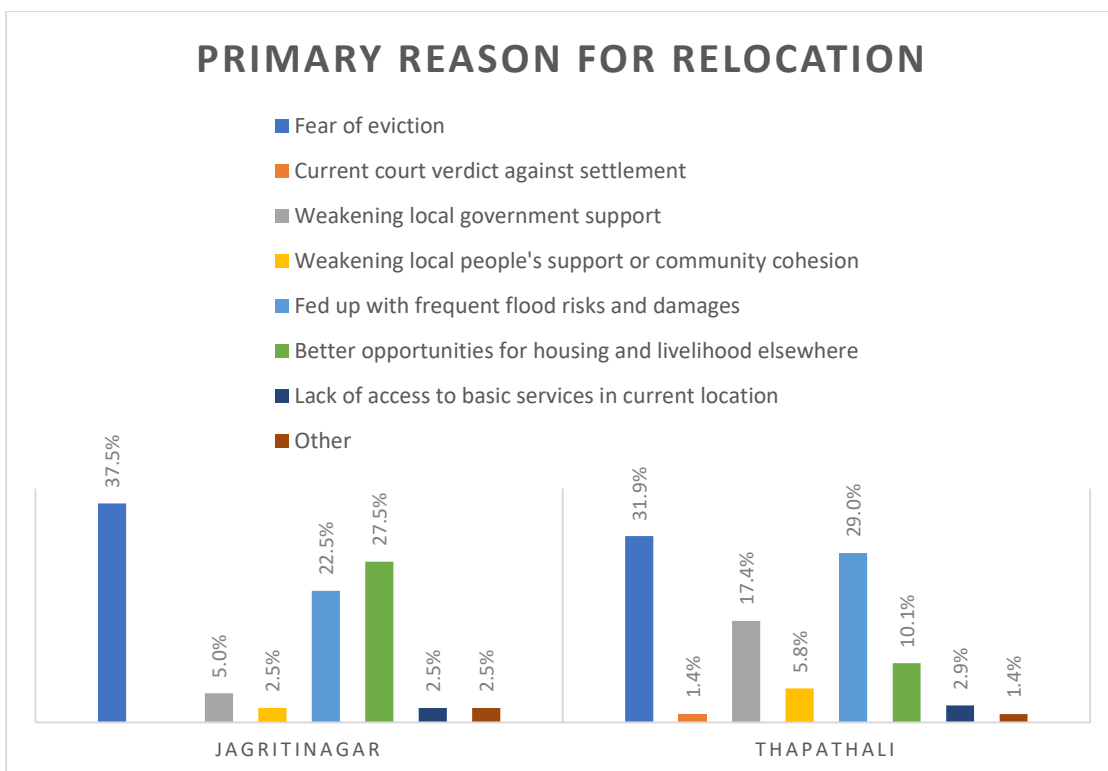
In Jagritinagar, 80% of the households are willing to relocate whereas 10% each are not sure and not willing to relocate. More respondents are willing to relocate in Thapathali which is 93.2% of households surveyed. 5.4% households are not willing to relocate whereas 1.4% are not sure.



Source: Uprety & Shakya (2024)

Primary Reason for relocation

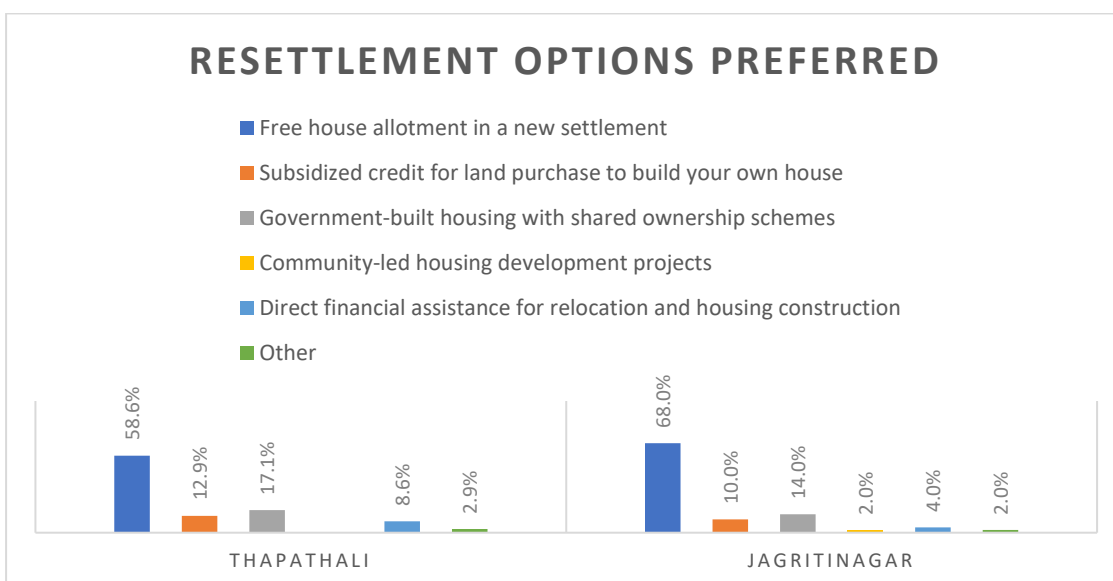
Fear of eviction and frequent flood risks are primary reasons for relocation for majority of the informal settlers. Current court verdict of additional 20m setback plays a primary reason for relocation in Thapathali whereas it does not have any effect in Jagritinagar informal settlement. This can be attributed to the numerous eviction attempts in Thapathali. Weakening local government support plays an important role as a reason for relocation in Thapathali. The local people's support and community cohesion has been cited as a reason by a higher percentage of respondents in Thapathali informal settlement than in Jagritinagar informal settlement. The need for the settlers to act as one during the time of eviction and the role of the local bodies and the nearby communities in providing support to the Thapathali settlement is a major precursor.



Source: Uprety & Shakya (2024)

Resettlement Options Preferred

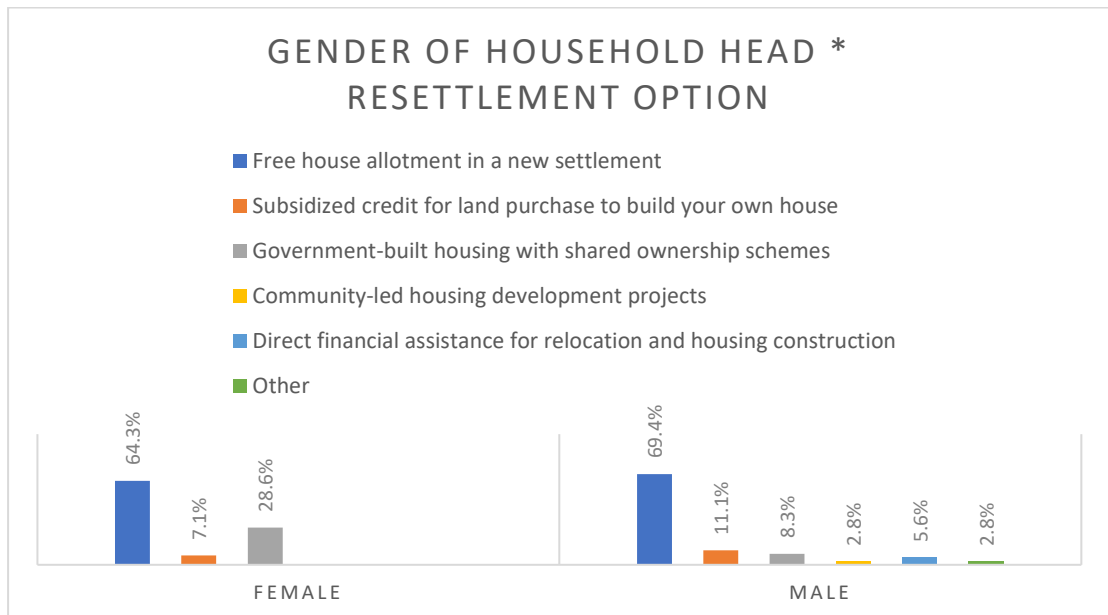
In Thapathali, 58.6% preferred free house allotment, 12.9% subsidized credit, 17.1% for government built housing, 8.6% direct financial assistance and 2.9% would prefer other options. In Jagritinagar, 68% prefer free house allotment, 10% subsidized credit, 14% community led housing, 2% direct financial assistance and 2% would prefer other options.



CHAPTER 5: FINDINGS AND ANALYSIS

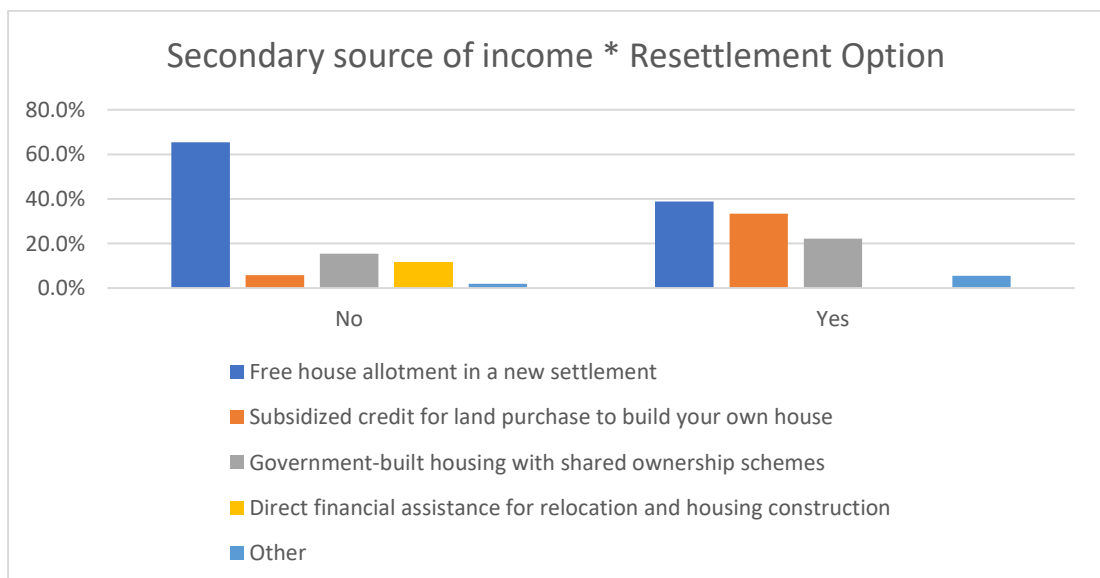
5.1 Findings and Analysis of Case Area: Jagritinagar Informal Settlement

Gender of Household



Male respondents were more accommodating to a variety of alternatives than the female respondents.

Secondary Source of Income



With the increase in income sources, the households gradually shift from preferring a house to preferring other options. 4.3% households with only one income source opted

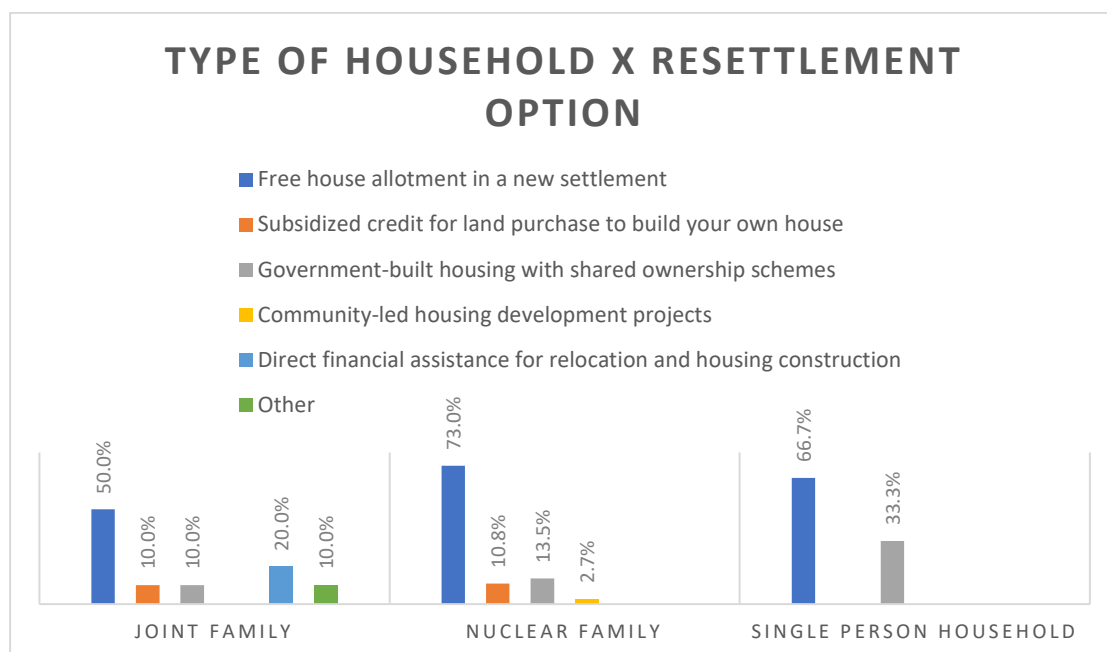
for subsidized credit for land whereas 14.8% of households with secondary income sources opted for the same.

A respondent shared that she only opted for a house because her income hardly sufficed for the fooding of their household, even if she was provided with land, she could not build a house on it. In households with situations as such, to repay the loan amount, some kind of employment could be provided by the state such that they could carry on their livelihood as well as repay the installments.

In households with income below Rs. 5000, most households opt for free housing or government built housing with shared ownership citing they do not have enough income to invest individually on a new home.

The data also shows that the 4.3% of the households with no secondary income prefer direct financial assistance. Whereas only 3.7% of households with secondary income prefer direct financial assistance.

Type of Household



The type of household plays a role in determining the resettlement preference where 50% Joint families, preferred Free house allotment, 10% each on Subsidized credit for land purchase and government built housing with shared ownership schemes and 20% on direct financial assistance whereas 10% on other options. Joint family is the only type of household who chose direct financial assistance which could be due to factors

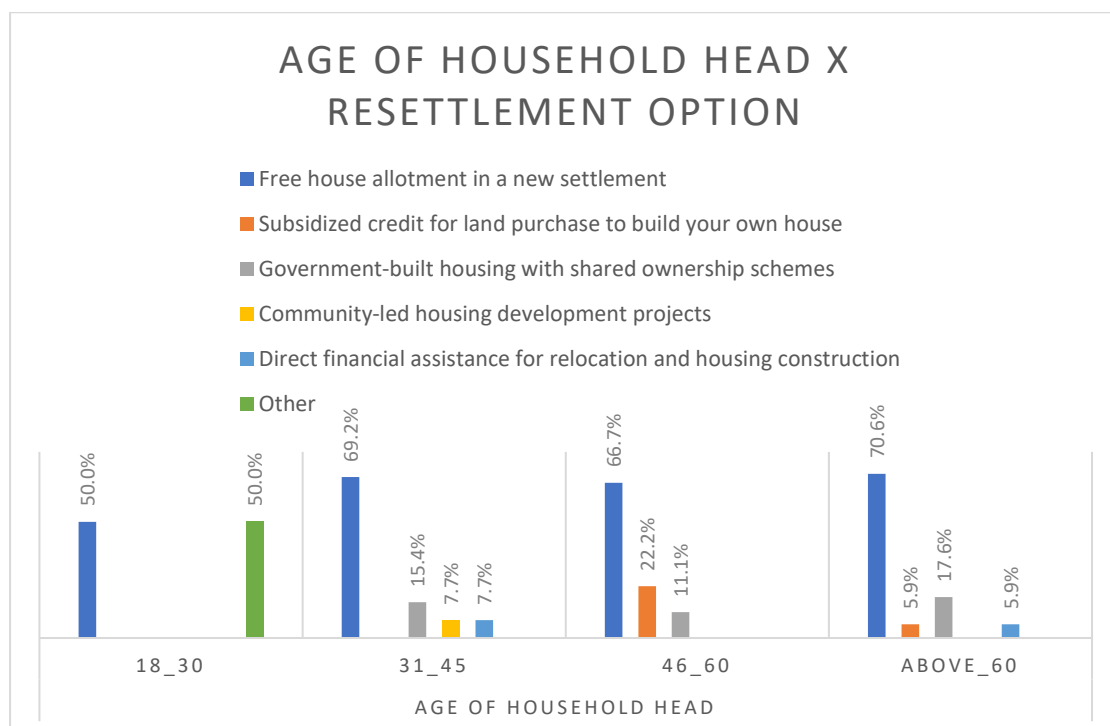
such as inadequate space for the family members in the free house allotment and government housing. A larger family size would consist of multiple sources of income, with direct financial assistance they could customize their house to their needs which may not be the case of nuclear and single person HH where in comparison, a large set of needs is not required to be met.

73% of nuclear families, preferred Free house allotment, 10.8% Subsidized credit for land, 13.5% on government built housing with shared ownership schemes and 2.7% on community lead developing projects.

Single person Households, which in Jagritinagar only consists of people above 60 years have preferred housing options, where 66.7% have chosen free house allotment whereas 33.3% have chosen government built housing with shared ownership schemes.

Secondary source of income has been achieved by 50% of joint families, 54.1% of nuclear families and 66.7% of single person households. The elderly are also provided with “Bridhma Bhatta” which constitutes to being a secondary income source alongside money sent by children.

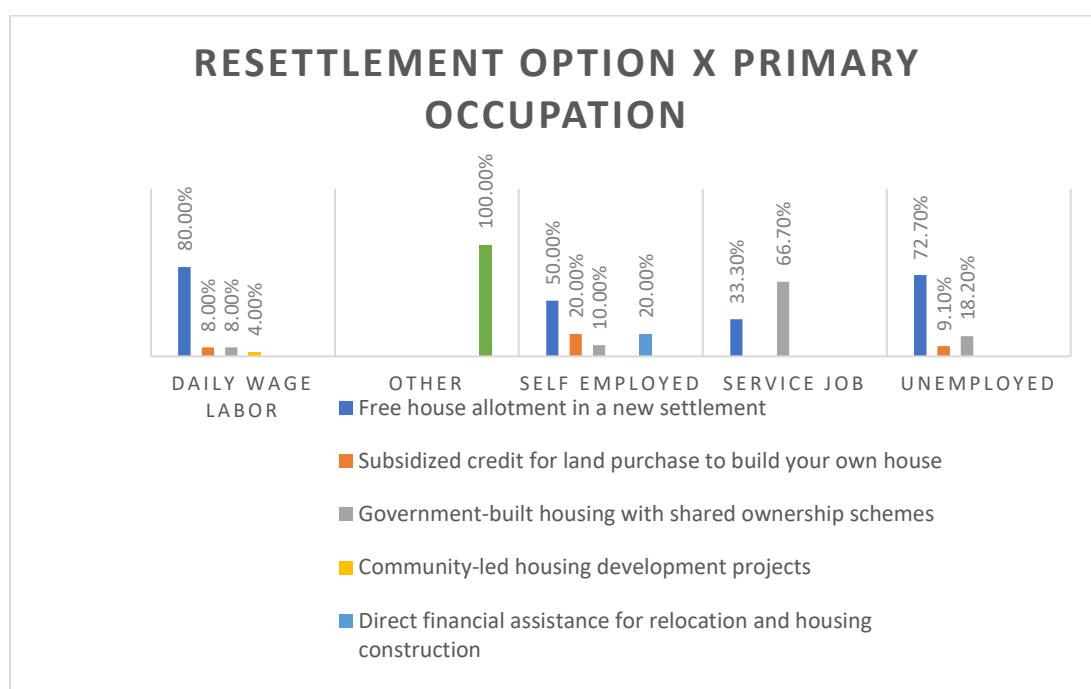
Age of Household Head



Free house allotment (68%) is the most preferred resettlement option, with government built housing with shared ownership scheme (14%) being the second most preferred

and subsidized credit in land (10%) is the third preference. The data also shows that the younger generation, 18-30 yrs and 31-45yrs prefer housing options rather than subsidized credit for land. This shows a significant change from the latter years where land was the first priority. Respondents from 31-45 age group also shared that if they were provided with direct financial assistance they would use it to go for foreign employment or start a new business instead of using it for relocation and housing construction.

Primary Occupation

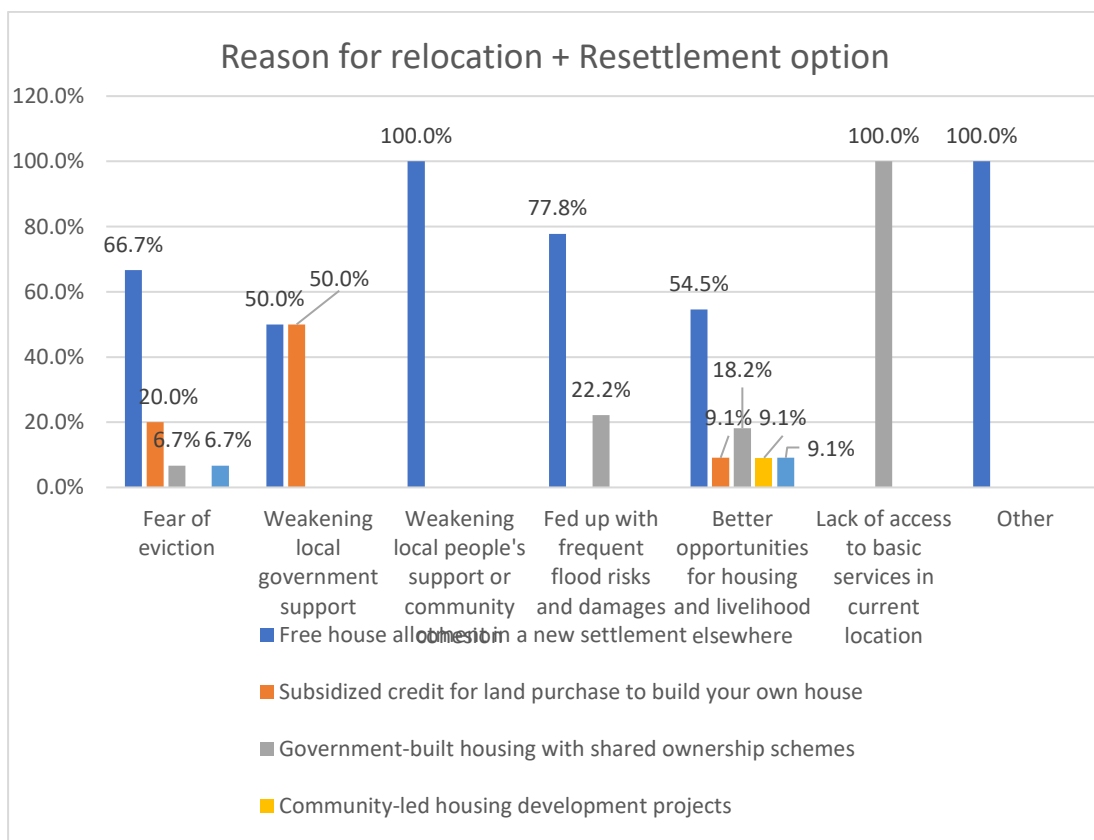


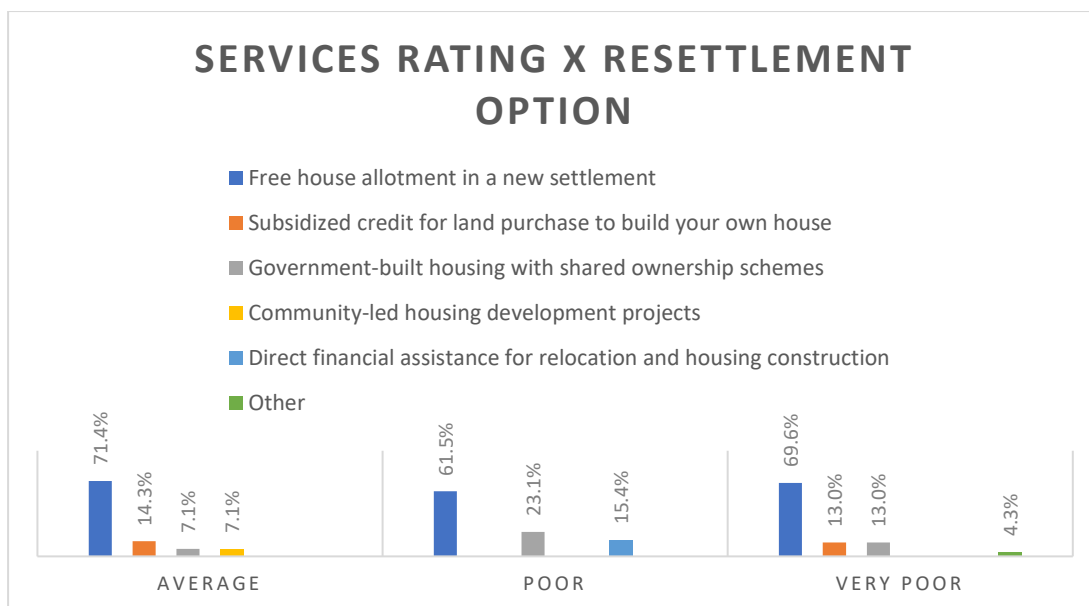
Majority of service job holders prefer government built housing with shared ownership schemes. Subsidized credit for land purchase has been preferred moderately by daily wage labor, self employed as well as unemployed in contrast to service job holders. Their inability to access loans directly from banking institutions at affordable rates could be a reason behind their preference.

Reason for relocation

Among the various reasons, the fear of eviction stands out as a dominant driver, with 66.7% of respondents favoring free house allotment in a new settlement, while very few opted for other options such as subsidized credit, government-built housing, or community-led development. Similarly, when local government support weakens, preferences are split evenly between free house allotment and subsidized credit, each

receiving 50%. Interestingly, when the reason for relocation is weakening community cohesion, 100% of respondents chose free house allotment, indicating a strong desire for immediate and secure housing solutions. In cases where people are fed up with frequent flood risks and related damages, 77.8% prefer free house allotment, while 22.2% favor government-built housing with shared ownership schemes. For those seeking better housing and livelihood opportunities elsewhere, the preference becomes more diverse, with 54.5% still leaning towards free house allotment, but others choosing subsidized credit (18.2%), government-built housing (9.1%), and community-led development (9.1%). A significant shift is observed when the reason is lack of access to basic services, where 100% prefer government-built housing with shared ownership, reflecting a need for improved infrastructure and service delivery. Lastly, for those who cited "other" reasons, free house allotment was again the unanimous choice. Overall, the findings highlight that free house allotment is overwhelmingly the most preferred resettlement option across most reasons, suggesting that informal settlers prioritize stability and security in their housing choices, especially in contexts of uncertainty or environmental risk.





The informal settlers have rated the services in their area as average, poor and very poor. The majority of the settlers who have rated average have preferred free house allotment and subsidized credit. Free house allotment, government built housing with shared ownership schemes and direct financial assistance have been chosen by the settlers who have rated the services as poor. The ones who have rated at very poor have preferred free house allotment, subsidized credit, government built shared ownership housing and other.

Influence of conditions for relocation on Resettlement Options

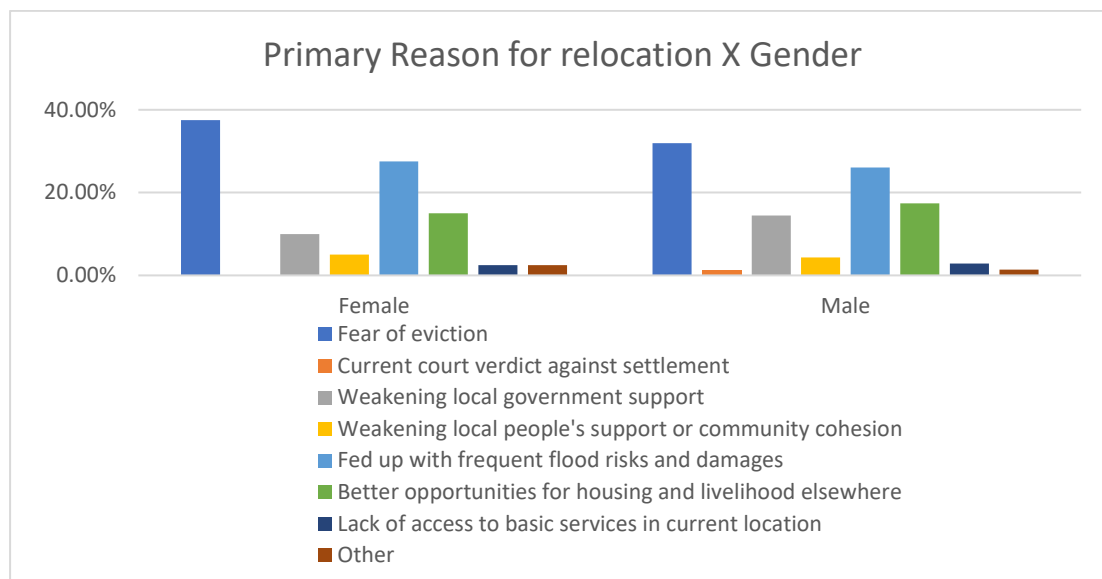
Among the available options, free house allotment in a new settlement was the most preferred, with 68% of respondents favoring it. This option was most influenced by the guarantee of land or housing ownership (73%), access to basic services (100%), and proximity to employment (66.7%).

Subsidized credit for land purchase to build one's own house was preferred by 10% of respondents. It was mostly influenced by the desire for a safe and secure environment (40%), along with other conditions (25%).

Government-built housing with shared ownership schemes was chosen by 14% of respondents. The key influencing factors for this option included the guarantee of ownership (16.2%) and the need for a secure environment (20%).

Community-led housing development projects and direct financial assistance for relocation and housing construction were each preferred by only a small portion—2%

and 4% respectively. These were mainly influenced by a minimal number of respondents valuing guaranteed ownership (2.7% each).

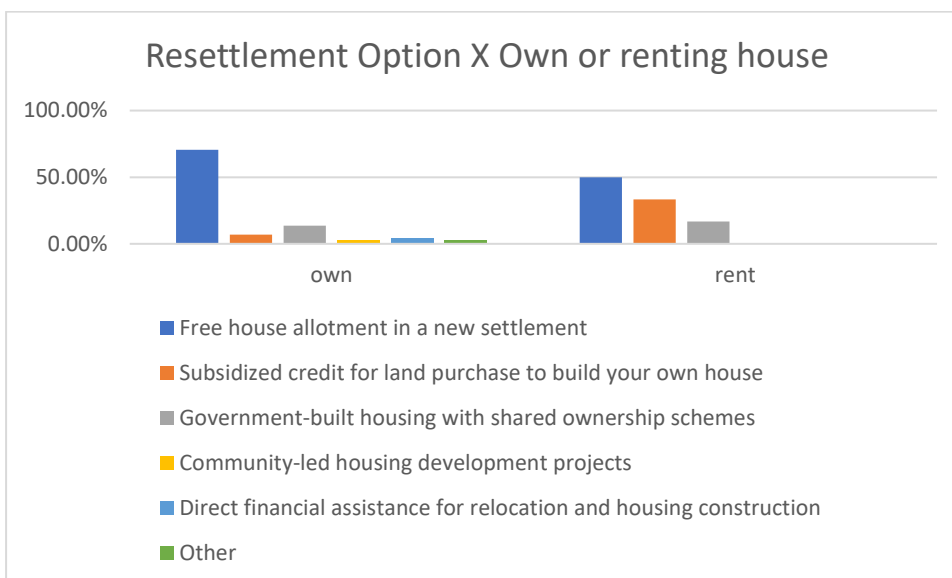
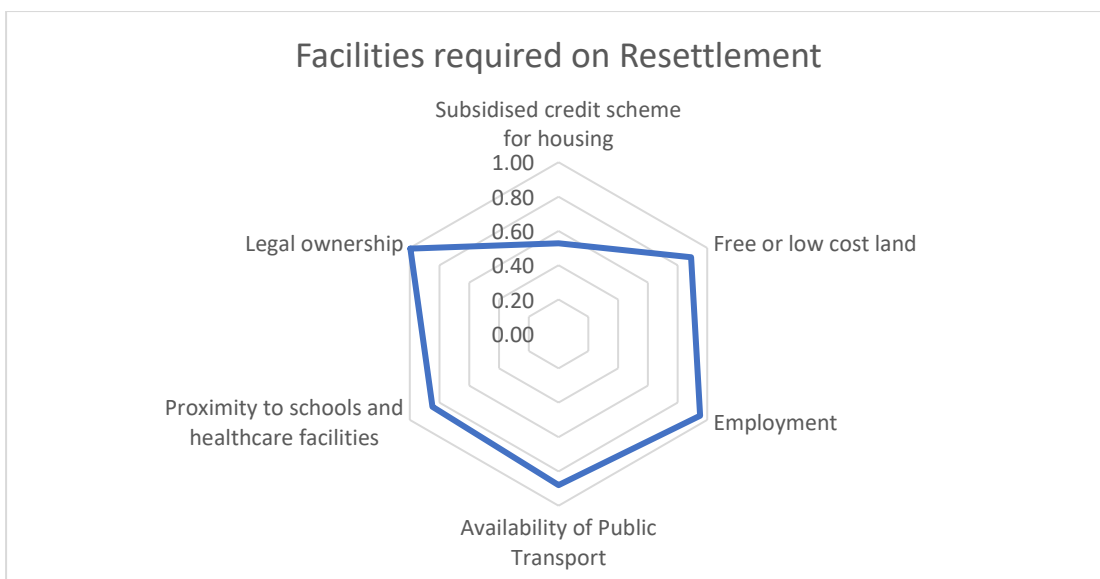


The primary reasons for relocation is observed to be similar among males and females. Majority have ranked fear of eviction as the primary reason, followed by frequent flood risks, better housing and livelihood opportunities elsewhere and weakening local government support.

On questioning about the facilities required on resettlement, the RII for the facilities are as such

Table 11 RII (Jagritinagar)

Facilities required	RII
Subsidised credit scheme for housing	0.528
Free or low cost land	0.892
Employment	0.952
Availability of Public Transport	0.88
Proximity to schools and healthcare facilities	0.848
Legal ownership	0.996



The chart presents the preferences of informal settlers for different resettlement options based on their current housing tenure—whether they own or rent. Overall, the most preferred option is free house allotment in a new settlement, chosen by 68% of respondents, with a stronger preference among owners (70.5%) than renters (50%). Renters, on the other hand, show a higher inclination (33.3%) towards subsidized credit for land purchase to build their own house, suggesting a desire to transition from renting to ownership. Government-built housing with shared ownership schemes is the second most favored option overall (14%), with a fairly even distribution between owners (13.6%) and renters (16.7%). Community-led housing development projects and direct financial assistance for relocation and construction are the least preferred, each

garnering very low percentages, especially among renters. The data indicates a clear preference for secure and immediate housing solutions, especially in the form of free allotment, while some renters also aspire to own homes through affordable credit options.

Secondary source of income shows a positive correlation of 0.425 with a significance value of 0.002 with direct financial assistance. There is a weak negative correlation (-0.217) between having a secondary source of income and preferring free house allotment. However, this relationship is not statistically significant ($p = 0.129$), meaning we cannot confidently say that having a secondary income makes a household less likely to prefer free house allotment. None of the resettlement preferences show a statistically significant correlation with income level (all p -values > 0.05).

This suggests that income level alone does not strongly influence housing preferences in this dataset. This may suggest that having multiple sources of income (economic stability) affects resettlement preferences more than total income level alone.

Households with a secondary income source might feel confident in handling cash-based resettlement solutions (direct financial assistance), while general income level does not significantly impact this preference. Both income level (-0.046, $p = 0.752$) and secondary income (-0.217, $p = 0.129$) have negative correlations with free house allotment.

This might suggest that economically stable households prefer self-determined housing solutions rather than free allotment.

Likelihood Ratio Tests

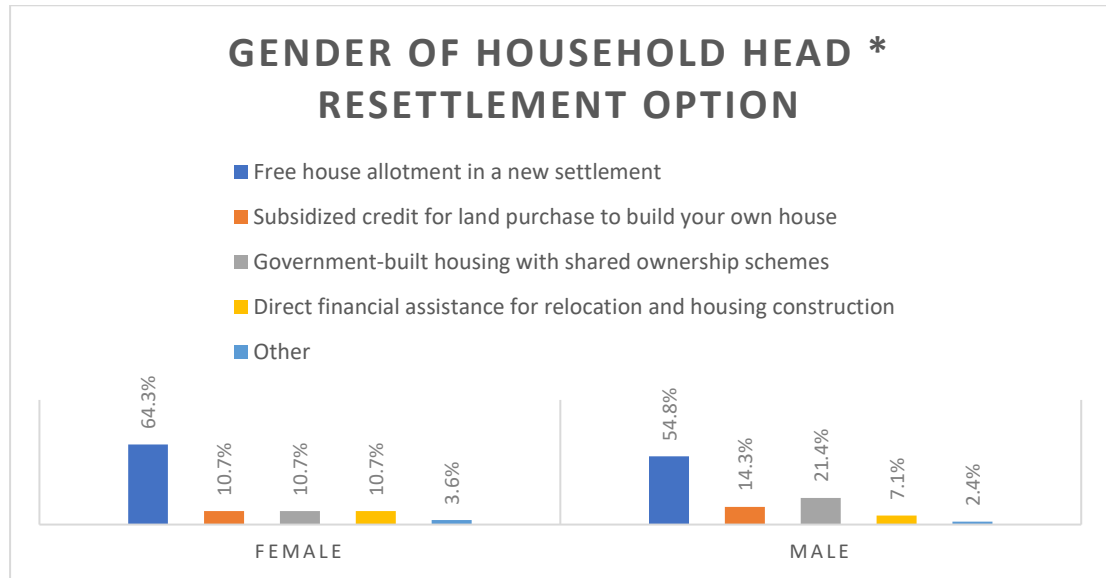
Type of Household (Chi-Square = 8.043, Sig. = 0.018). This predictor is statistically significant ($p < 0.05$), meaning household type significantly influences preference for free house allotment.

Under the conditions on which the informal settlements would accept resettlement, guaranteed ownership of land was found to have a correlation coefficient of 0.571 with significance 0.00 with free house allotment.

5.2 Findings and Analysis of Case Area: Thapathali Informal Settlement

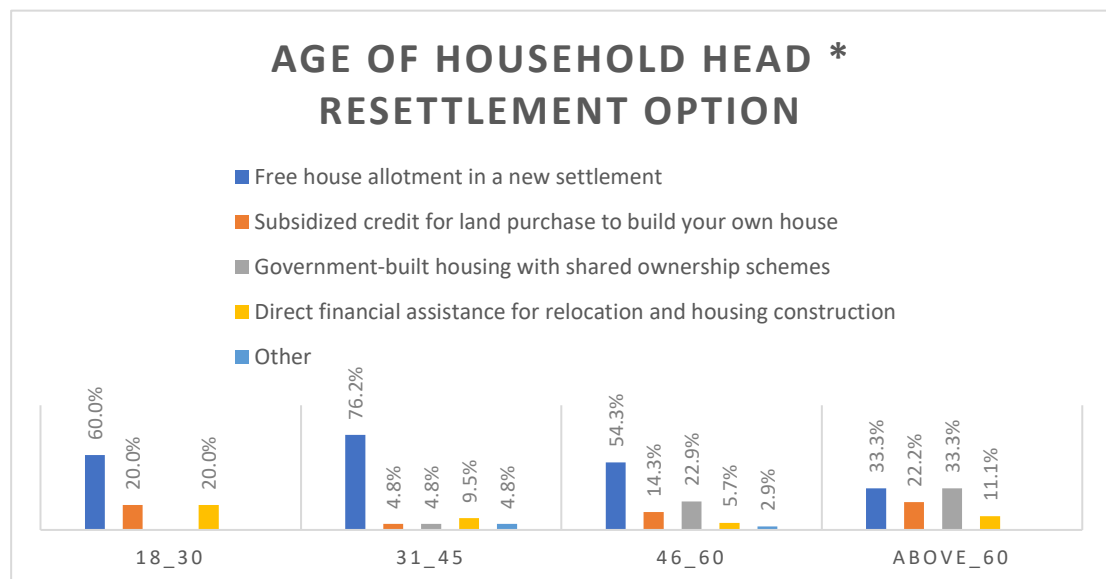
Gender of Household Head

Majority of female household heads preferred free house allotment. More male headed households were observed to prefer subsidized credit for land purchase and government built housing with shared ownership schemes than female headed households.



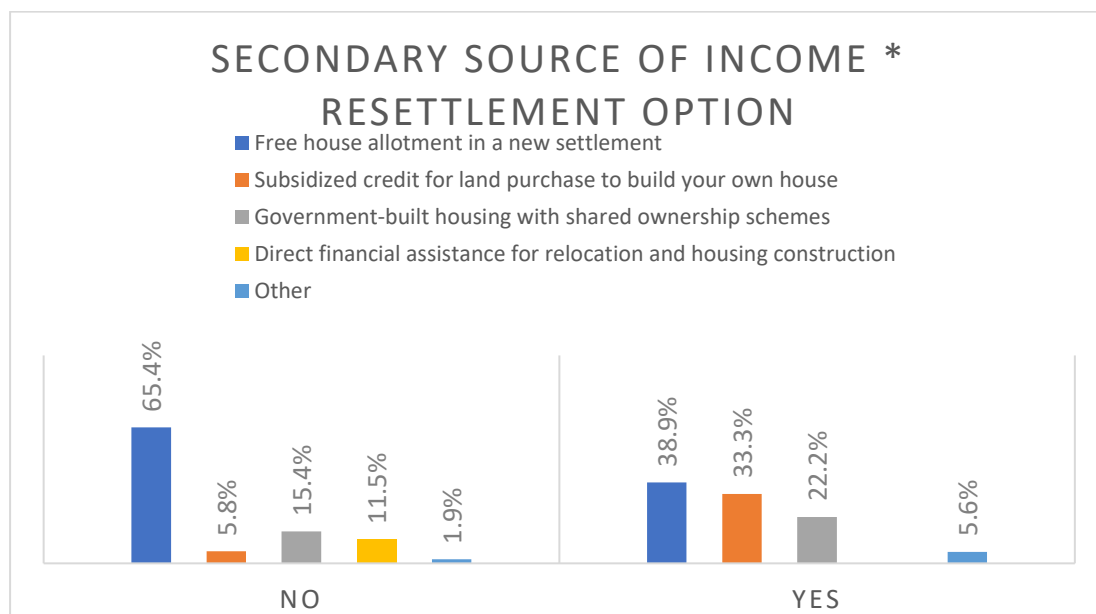
Age of Household head

Lesser number of younger households head were observed to prefer government built housing than the older age groups. Infact HH heads of age group 18-30 years did not prefer government built housing. They were seen to prefer direct financial assistance and subsidized credit for relocation and housing construction.



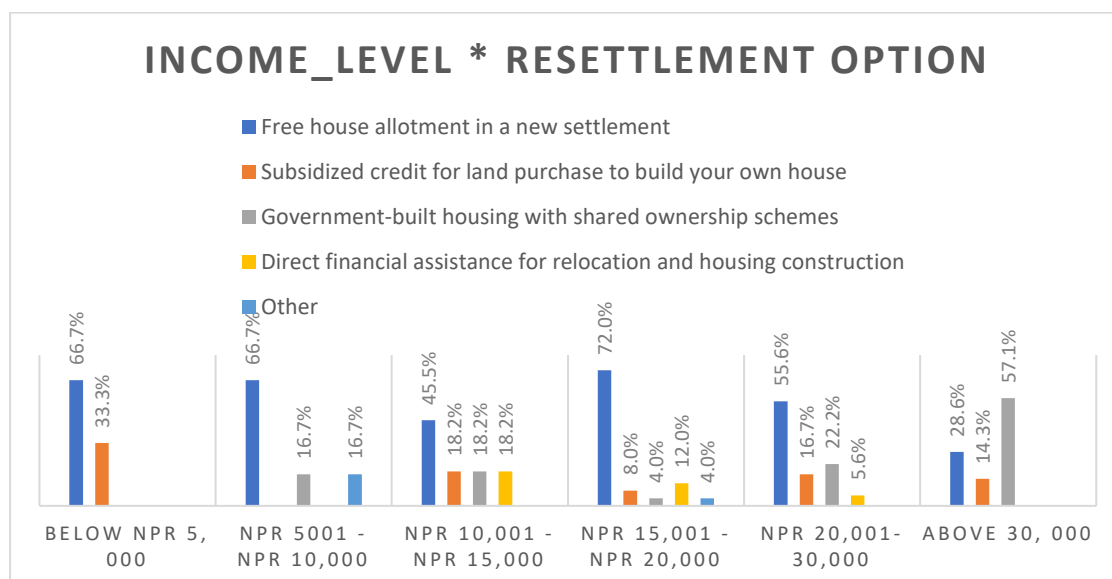
Secondary Source of Income

Secondary source of income is observed to be the major determinant for subsidized credit for land purchase. This can be attributed to the households preferring flexibility and their ability to pay loans due to the presence of multiple sources of income.



Income Level

The income ranges from Rs.10,000-Rs.15,000; Rs.15,000-Rs.20,000 and Rs.20,000-Rs.30,000 are observed to also prefer direct financial assistance for relocation and housing construction. The other income groups prefer a mix of free house allotment, subsidized credit, government built housing with shared ownership schemes and other schemes.



Influence of conditions for relocation on Resettlement Options

The most favored option is free house allotment in a new settlement (58.6%), primarily because it guarantees ownership of land or housing (66.7%) and offers better access to schools and healthcare (50%). A significant proportion also chose it for basic services (44.4%) and proximity to employment (28.6%). Subsidized credit for land purchase to build your own house was selected by 12.9% of respondents, with a focus on basic service access (33.3%) and employment proximity (28.6%). Government-built housing with shared ownership schemes was preferred by 17.1%, especially due to availability of services and schools (50%) and guaranteed ownership (19.6%). Direct financial assistance for relocation and housing construction was chosen by 8.6%, mainly because of proximity to employment (42.9%).

In summary, security of ownership, access to basic and social services, and livelihood opportunities are the most influential factors in shaping relocation preferences.

Distance willing to relocate

In TSS, most appropriate distance for all the income levels was 5-10km where 100% of respondents of income level below Rs. 5000 preferred this distance. In Jagritinagar, the responses were mixed with 32% opting for a distance within 5km, 36% 10-20km, 22% 5-10km and 10% beyond 20km.

Facilities required

The Relative Importance Index for the facilities required are

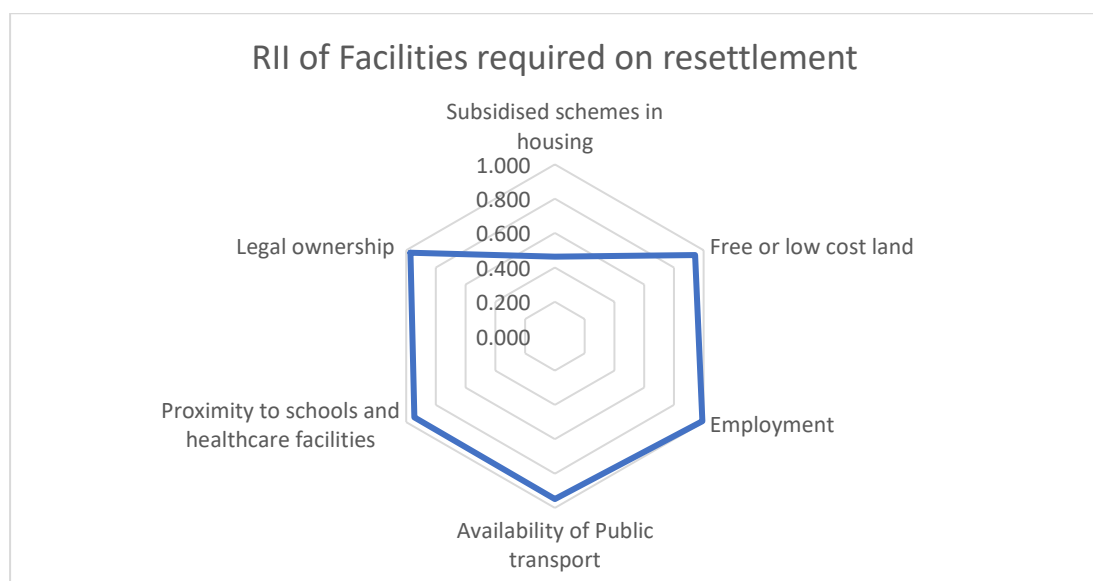
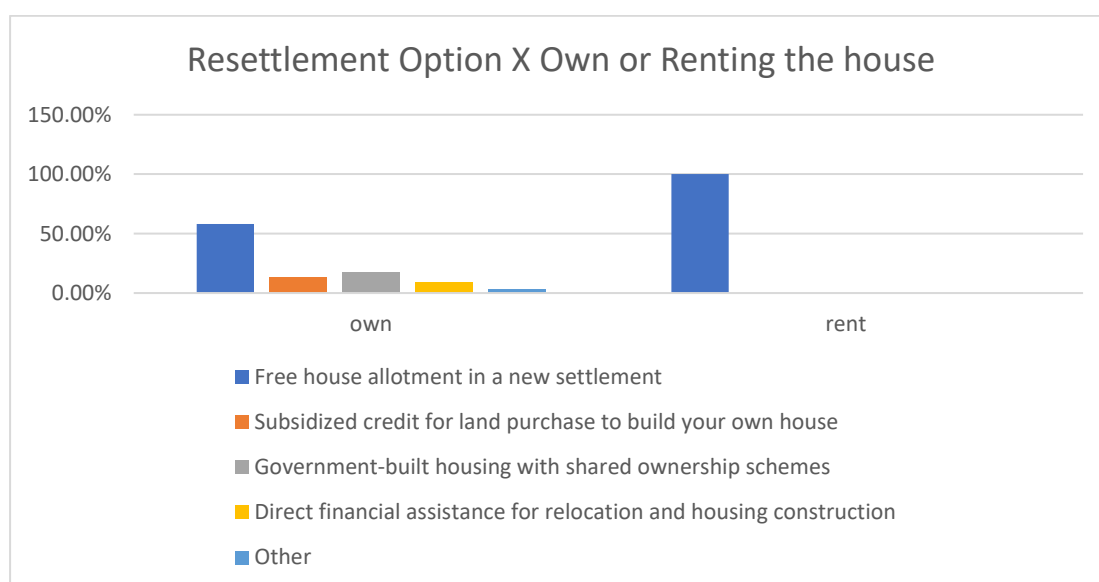


Table 12 RII of facility provisions (Thapathali informal settlement)

Facilities required	RII
Subsidised credit scheme for housing	0.463
Free or low cost land	0.943
Employment	0.991
Availability of Public Transport	0.949
Proximity to schools and healthcare facilities	0.946
Legal ownership	0.971



Free House Allotment vs. Subsidized Credit ($r = -0.245$, $p = 0.041$). Significant negative correlation ($p < 0.05$). Those who prefer free house allotment are less likely to prefer subsidized credit.

Secondary Income vs. Free House Allotment ($r = -0.040$, $p = .742$): Very weak negative correlation (not significant). Having a secondary income does not influence the preference for free house allotment.

Secondary Income vs. Subsidized Credit ($r = 0.200$, $p = .096$): Weak positive correlation (not significant). People with a secondary income are slightly more likely to prefer subsidized credit, but this is not statistically significant.

Secondary Income vs. Direct Financial Assistance ($r = -0.203$, $p = .092$): Weak negative correlation (not significant). Those with a secondary income tend to be less likely to prefer direct financial assistance.

On tabulating the primary reason for resettlement with the resettlement options, a moderate positive correlation was found with subsidized credit for land purchase and the current court verdict which is 0.365 with a significance of 0.003. Government built housing with shared ownership schemes was found to have a correlation coefficient of 0.34 with significance value of 0.005 with the current court verdict. Similarly direct financial assistance for relocation and housing was observed to have a correlation coefficient of -0.428 with significance of 0.00 with frequent flood risks, 0.53 with significance of 0.00 with better opportunities for housing and 0.449 with significance 0.00 with lack of access to basic services. Community led housing development proved a correlation of 0.459 with significance 0.00 with weakening local people's support and 0.372 with significance 0.002 with lack of access to basic services.

5.3 Findings and analysis from Key Informant Interview

5.3.1 Regarding resettlement of Informal Settlements

Jagritinagar Ekai Samiti – Mr. Ashok Kumar Rai - Chairman

Mr. Rai emphasized that land ownership is the most crucial factor for resettlement. He noted that squatters do not expect fully free land but are willing to contribute 1-2% of the land's value and build their homes on their own terms. As he stated, "The state does not have to bear the full financial burden; we can also contribute through our efforts". He highlighted the need for employment opportunities near the resettlement site to ensure sustainability. While the provided land could be in Kathmandu or the Terai region, it should not be in remote or uninhabitable areas. A land allocation of 2 aana 2 paisa per household would be sufficient. Additionally, there is *ailani/parti jagga* (public or unused land) near the current settlement, which could accommodate some households, while others could be relocated elsewhere. He suggested that relocation does not have to occur in a single site; instead, small clusters of 4-5 households could be relocated together. For vulnerable groups, such as single-woman-headed households, persons with disabilities, and elderly-only households, additional support in the form of loans, benefits, or employment opportunities should be provided to enable them to repay their obligations more easily.

Thapathali Samiti - Gopal Poudel – Secretary

The Sachib stressed that all households should be relocated to the same place to maintain a sense of community and security against potential conflicts with nearby locals. If sufficient land for individual houses is not available, he proposed that 2-3 households could share a walk up apartment, with the *lalpurja* (land ownership document) including the names of all household heads. He strongly emphasized the need for legal land ownership, suggesting a 2 aana 2 paisa floor area per household. While free housing is not necessary for most, residents are willing to contribute financially toward their homes or land. However, for vulnerable households—such as those headed by single women, persons with disabilities, or the elderly—free housing would be essential. Additionally, he expressed a strong aversion to being labeled as “sukumbasi” (squatter) in the relocated site, as it carries a derogatory connotation. He also suggested a cooperative housing model, where residents stay for around 10 years and then move out once they become financially stable, making space for others in need.

NBBSS - Raju Lama - Secretary

Mr. Lama emphasized the key factors for the success of a resettlement initiative would be the collaboration with the informal community and design of acts, policies and working procedures accordingly. He shared that land ownership would be the main criteria for any resettlement. If provided with houses, that would be even better. He also stressed the need of efficient coordination between KVDA, Bhumi Aayog, HPCIDBC, NGO, INGO etc. He also shared that, Ichangu Housing which is a past resettlement initiative has been criticized heavily by the informal settlers leading to the loss of trust in the government. However, if the government collaborates with the settlers and engages in negotiations, the settlers are willing to resettle.

He stressed the need of collective housing models where the land ownership remains in the name of the committee and the individual home ownership would go to the resident. 3-4 storey Walk up apartments could be inhabited by 3-4 households such that the ownership remains in the name of the households residing. He shared the difficulty in taking loans from commercial banks due to lack of ownership to keep collateral. There are finance cooperatives in informal settlements which could collaborate with commercial banks to provide larger loans to the settlers which are –

- Gyan Jyoti Sahakari (Sankhamul)
- Navadeep Jyoti Sahakati (Chabahil)
- Pragati Mahila Utthan (Balaju)

Lumanti Support Group for Shelter – Lumanti Joshi

In the long run, Lumanti envisions affordable housing and rental models as sustainable solutions. To support this, they recommend joint or collective ownership regulations and advocate for TDF (Town Development Fund) reforms, allowing committees and NGOs to access housing loans, which are currently restricted to municipalities. They also propose establishing a City-Level Fund managed by a committee comprising academicians, architects, engineers, NGOs, and city-wide networks to ensure fair beneficiary selection and fund allocation. Additionally, Lumanti suggests formulating cooperative housing guidelines to promote sustainable housing solutions.

Despite these recommendations, several challenges persist. The high cost of land in Kathmandu necessitates municipal involvement to make housing projects feasible. Government housing initiatives often lack a phase-wise approach, leading to incomplete projects due to budget uncertainties. A practical solution would be to allocate resources based on annual budgets, ensuring steady progress rather than halting projects mid-way. Another challenge is beneficiaries selling legally obtained properties, undermining long-term housing stability.

Lumanti emphasizes specific selection criteria for housing beneficiaries, including a household income threshold of NRs. 25,000, with the assumption that four members contribute to earnings and allocate 30% of their income toward housing. Other criteria include the ability to pay, active participation in savings groups, lack of alternative housing options, a strong sense of community, and employment in the informal sector. Lumanti suggests a community-led identification and selection process. In Thecho, for instance, the local government worked with donor agencies to identify the most affected communities. Due to limited funds, a committee comprising the community, ward office, and NGOs was formed to ensure transparency and fairness in beneficiary selection, with final verification conducted by the NGO. Key elements for successful resettlement include access to land, finance, and technical assistance, all of which require coordinated efforts from the government, civil society, and communities.

DUDBC – Ar. Yekraj Adhikari

Ar. Adhikari shared the important parameters of housing which are Land, Finance, Materials & Technology and Household services & infrastructures. Among these he mentioned that a systematic approach for the provision of Land and Finance has not been designed in Nepal. Similarly, the unclear and overlapping responsibilities of ministries and lack of coordination of government bodies are a reason for the shortcomings from the government's side on project management and delivery. He mentioned the need of an overarching identification criteria of genuine squatters and LIG such as in India through which ration cards and other facilities are distributed.

He also shared that the lack of housing solutions such as rental housing, social housing etc are the reasons for the short supply of affordable housing.

Kathmandu Metropolitan City, City Planning Commission: Er. Baburam Bhattarai

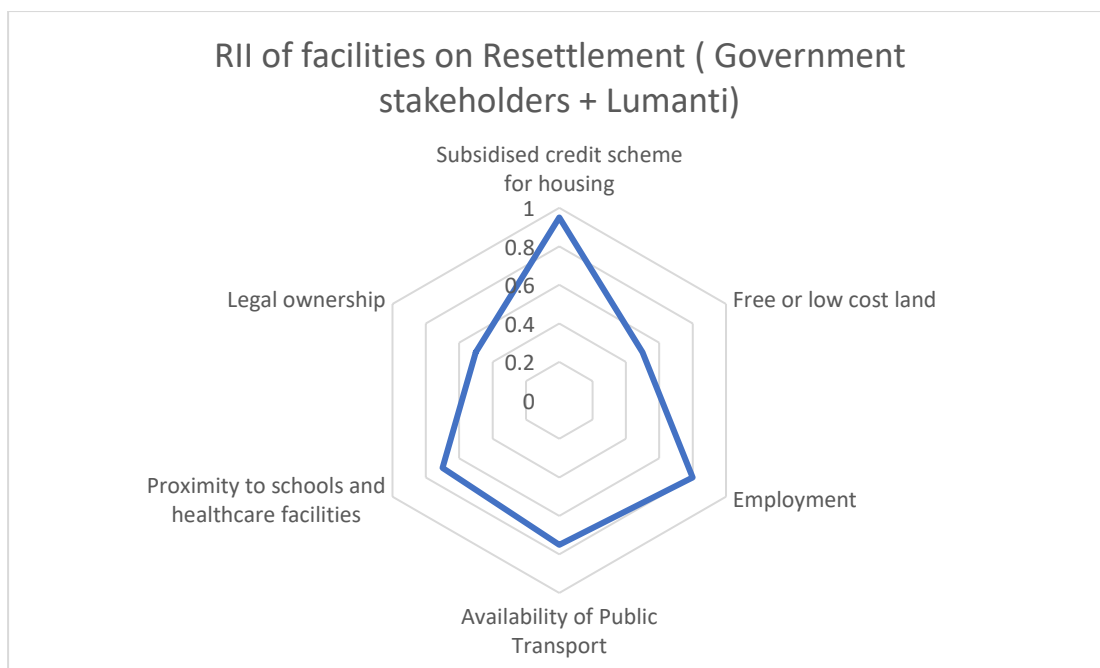
Er. Bhattarai shared that the issue of the informal settlements cannot be solved by the KMC alone, a collaboration with the federal government is required. He also stressed the challenges in the identification of the 'real squatters'. He further added that "Tax payer le tireko paisa, squat garne lai relocate garna kharcha garna sakidaina"

DUDBC, Urban Infrastructure Development Section, Er. Ashish KC

Er. KC proposed for different levels of the government such as federal government to provide one, province government another and local government another kind such that each government does not have to invest a high sum but the beneficiary could get access to an acceptable, sufficient subsidy.

HPCIDBC, Yojana Sakha, Er. Uddhab Nepal

Er. Nepal stressed the importance of participatory resettlement planning and the need of providing options to the settlers. He also shared the need of improvement to land banking initiatives, employment opportunities, incremental housing and cooperative housing.



A relative importance index was calculated to understand the provisions organizational stakeholders consider necessary for resettlement. Subsidized credit scheme for housing was considered the most important. Similarly, availability of public transportation, employment and proximity to schools and healthcare facilities are given importance.

5.3.2 Regarding Access to finance for Informal Settlements

Rastriya Banijya Bank, Dinesh Neupane, Deputy Department Chief, Consumer Banking Department

Mr. Neupane shared that long term government financial subsidies for informal settlers to purchase land or build homes would be feasible if the government or a public authority could take the guarantee of the loan repayment. The settlers willing to go back to their place of origin could be relocated, self employment or entrepreneurship training to be given to them such that they are able to self sustain, CSR of enterprises could be an option. He also shared that there would be an high increase in risk and defaults. He shared that for priority sector upto Rs.15 lakhs loan, the provision of relaxation of eligibility criteria by requiring the source of informal income (without tax) and the guarantee by the ward could lead to financial inclusion.

Subsidy loans have been withdrawn since Poush 2081 due to high defaults by the borrowers. The government not being able to provide subsidy to the banks was also a reason.

Siddhartha bank, Awrisha Rajbhandari, Relationship Officer

Home loans in Siddhartha bank, Gabahal branch constitute approximately 30% of the total loans disbursed. The loans have good repayment rate and the least amount of defaults. Ms. Rajbhandari shared that there is no benefit in providing subsidies in home loans as it is not a productive sector that would foster economic growth like entrepreneurship loans which were widely provided. Subsidy loans had a higher rate of default and misuse which led to them being withdrawn. She also shared She proposed insurance of such subsidy loans if the government brings up such interventions.

Siddhartha bank, Ira Pradhan, ENS Focal Person

Siddhartha bank disburses loans in the priority sector through micro finances only. Separate loans to the deprived sector such as low cost housing has not been provided through direct transitions with the bank. Currently the bank prioritizes larger transactions than smaller transactions.

Laxmi Laghubitta, Mr. Om Prakash, Business Development Officer

Loans are provided only on group basis, individual loans are not provided through the micro finance. They are allowed to give only 33% of collateral based loans and the rest should be non collateral based. The borrowers need to be members of the micro finance, present citizenship card, family information, approximate income sources, group guarantee and within the micro finance's working radius. The micro finance conducts financial literacy and saving training to the groups and a background check is done on the individual and only then is eligible for loan disbursement. The micro finance does not keep a check on the legal ownership of its members, so informal settlers could also be members and get access to loans as long as they can form a sincere group and fulfill the eligibility criteria. A maximum of Rs. 7 lakhs loan is provided to the members on the basis of NRB directive. The loan with collateral is provided a tenure of 8 years and without collateral, 5 year tenure is provided. There is a high percentage of women entrepreneurship and agriculture based loans, home improvement loans are very few and almost null. The working procedure of the micro finance only allows loans to home

owners or people with legal ownership of land to access loans in Kathmandu due to the past experience of borrowers fleeing away. The risk of borrowers fleeing to other districts and Nepal not having a strict mechanism to gather all data of citizenships is a major setback. A guarantee by the ward is also not sufficient as they could be deceived as well.

Gyan Jyoti Sahakari (also provides loans to informal settlers)

Gyan Jyoti Sahakari is based in Sankhamul and caters to 9 nearby wards. While it provides finance provision to all households in the wards, its focus is on providing access to finance to informal settlements. The cooperative provides loans for the provision of land purchase, house maintenance business loans and foreign education loans. The cooperative consists of 1634 members, majority of whom deposit a monthly regular saving of Rs 200 - Rs 1000 except a handful few. Gyan Jyoti provides loans on two basis, one on the basis of savings collateral with collective guarantee loans and the other is collateral based loans. Through collective guarantee, households can access upto Rs. 5 lakhs at 12.75% interest upto 5 years tenure whereas on the basis of collateral, upto Rs. 41 lakhs can be accessed at 11% interest upto 10 years.

For the purpose of disbursement of collective guarantee savings loans, the documents required are citizenship, credit history, ward identification such as voters card, business registration number, PAN, income source, self declaration and collective guarantee. An inquiry is done in the settlement regarding the household's backgrounds and only then is a loan sanctioned. The households are required to present their income source, while taxable income source is not compulsory, about 75% households are able to provide a taxable income source through the younger generation's earnings. The cooperative does not have any relaxation of eligibility criteria or a separate criteria for informal settlements. The cooperative shared that very few households in the informal settlements were able to access finance from banks and were able to purchase a house elsewhere. They also agreed that subsidised loans to the informal settlements could bring a positive impact and also shared that an acceptable tenure should be provided such that a larger population could be catered rather than a limited mass.

Table 13 Home Loan Details summary

	Commercial Bank	Government Bank	Subsidy	Micro Finance	Cooperative (catering to informal settlement)	Policy
	Siddharth Bank	Rastriya Banijya Bank	Earthquake subsidy loan	Laxmi Laghubitta	Gyan Jyoti Sahakari	Deprived Sector
Interest %	8.75% p.a. Fixed upto 7 yrs, 8.99% upto 5yrs, 9.49% upto 5-10yrs, 10% above 10yrs	(5.28+2) upto 20 years	2% upto 5 years	15% upto 8yrs (with collateral) & 5 yrs (without collateral)	11% upto 10yrs (with land collateral) 12.75% upto 5yrs (group guarantee)	Base rate + 2% for 5years
	Max 5 crore (for apartment complex)		25 lakhs			15 lakhs for entrepreneurship, 7 lakhs for low cost housing, 2 lakhs for marginalized housing construction
Lending to Deprived Sector	Microfinance	Microfinance + other sectors				

Eligibility: Taxable income	Compulsory	Compulsory	Compulsory	Not needed	Optional	Compulsory
Perception on Tenure	20-25 years agreeable	20 years agreeable			15-20 years agreeable	
Challenges	High chances of default, identification difficulties	High chances of default, fraud, no permanent address, identification difficulty		Identification difficulty, fraud, no permanent address, ward guarantee not sufficient	Reaching to all population	
Additional comments		Relaxation of eligibility criteria in deprived sector loan (taxable income optional) + ward guarantee			Good repayment by informal settlements + 75% have shown taxable income, HH based loan	

5.3.3 Housing provision through private developers

NLHDF - Er. Bhesh Raj Lohani – Immediate Past President

Mr. Lohani shared that providing 2-5% for LIG which would lead to social groups mixing in private housing would not be feasible citing challenges of social disparities due to differences in living standard of the residents. He also cited that there would be

difficulties in providing servant quarters in apartment housings. In case of Nepal, apartments or housings with upto 300 units are built, within these numbers providing a percentage for LIG would be difficult, however for apartment or housing complexes with atleast 1000 units, providing subsidized housing units would be possible. He shared that housing for LIG in the urban core would be difficult due to high prices of land that would not be affordable for the LIG. He cited that through TDR they could provide affordable housing to the urban poor if they got FAR incentives, concession in building permits and registration fees. He also mentioned the importance of multiple stakeholders participation in the initiative. He added that, with Government support, providing affordable housing would be possible but private sector alone would not be feasible.

CHAPTER 6: DISCUSSION

This study explores the resettlement options based on people's choices and the impact of their socio economic conditions on their decision making. The study shows that there are a significant number of informal settlers who want to relocate elsewhere in the Kathmandu valley and beyond to the hills and terai provided that they are provided with access to subsidized loans. This subsidized credit can be used to purchase land or invest in a house reflecting their needs and priorities.

The informal settlers' willingness to move has been affected by various factors pushing them to move from the current flood prone settlement. A primary reason is the constant flood risk and additional annual expenditure on renovation and property damage it causes. The fear of eviction has further been intensified by the actions of the mayor of KMC through forced eviction and forcefully raiding their houses. The other reason is the reducing support from the host community such as the newar community in Thapathali informal settlement in whose homes they took shelter during the 2024 floods. The decreased political support as in the Maosit insurgency and government is a major factor. These factors have been culminated to push them towards the decision of moving elsewhere.

The main research objective of this study was to understand how socioeconomic factors shape the resettlement preferences of informal settlements. The secondary research objectives are to identify and assess the socio economic conditions of the informal settlements, To investigate the features informal settlements consider essential in

resettlement models and to assess the past resettlement experiences of informal settlers in Kathmandu.

6.1 Socio Economic conditions of the informal settlements

A higher percentage of Female HH heads (14.3% & 7.1%) had income ranges Below Rs. 10,000 than Male HH Heads (8.3% & 11.1%) in Jagritinagar. The single person households in Jagritinagar constitutes 6% of the HH and all of them are above the age of 60yrs. Majority of them have cited that subsidized rates for land or house purchase would not be feasible for them as they are not capable of incrementally constructing a house on it and paying the installments. All the respondents, the informal settlements and the KII agreed that they would require additional subsidies which is in line with the the gender aspects and vulnerable groups discussed by World Bank in the case of Maharashtra (World Bank and Government of Maharashtra, 2009).

A higher percentage of Joint Families are attracted towards subsidized credit for land purchase, which can also be attributed to the presence of secondary sources of income and the need to accommodate more members in the same house which might not be the case for housing provided by the government. HH with secondary income in the same income level were more accommodating to subsidized rates for land purchase than the group without secondary income, this can be attributed to the multiple wage earner theory.

The age group below 45yrs in both the informal settlements were more open towards the various types of resettlement options such as community developed projects and financial assistance. The age group above 45 years were more accommodating towards subsidized credit for land purchase than the younger age groups. The study by Song & Wu (2022) yield similar results where younger age groups were more sensitive to personal opportunities and modern solutions (Song & Wu, 2022). This also aligns with the Socioemotional selectivity theory which discusses that elderlies are more attracted towards emotional decisions whereas the younger generation are more interested towards fulfilling their opportunities and goals, where the elders were referring to phrases such as *“Afnai Swamitwa ma bhayeko, afnai matribhumi ma marna chahanchu”*.

Many informal settlers rely on unstable employment, such as daily wage or informal jobs, making their ability to afford housing more dependent on secondary sources of

income rather than primary earnings. Households in joint family structures, where multiple earners contribute to household expenses, tend to favor flexible housing arrangements that accommodate extended family members and allow for income diversification. Furthermore, employment security plays a crucial role in the success of resettlement programs. A large proportion of Nepal's low-income population is engaged in daily wage labor, which is inherently unreliable. Ensuring access to employment and creating flexible housing models that cater to the needs of low-income groups will be key to the success of any resettlement strategy.

6.2 Past resettlement experiences of informal settlers in Kathmandu

The Kirtipur resettlement project has been highlighted for successfully relocating both informal settlers from the Bishnumati Link Road and low-income groups residing in Kirtipur. Although legal ownership documents are still in process, the project is widely regarded as a model resettlement initiative in Nepal and is celebrated by other informal communities. When discussing resettlement, many informal settlements refer to Kirtipur as an ideal example, viewing it as a positive move that encourages them to consider relocation.

Initially, the project faced skepticism due to its distance from the city center and limited access to employment opportunities. However, over time, with urban expansion, Kirtipur has become integrated into the urban fabric, easing earlier concerns. In contrast, Ichangu Housing also located on the outskirts did not have the same timeframe to demonstrate its potential integration with the city, although it now benefits from increased connectivity and urban growth. This comparison suggests that distance alone was not the key factor in Ichangu's relative lack of success. Other elements, such as community involvement in the planning and design process, played a critical role. Kirtipur's success can be largely attributed to its inclusive approach from the beginning engaging the target community in decisions ranging from site selection to monthly payment structures in close collaboration with supporting organizations. Another attribute is the design typology, in Kirtipur the beneficiaries got individual row houses for each household whereas in Ichangu, apartments were provided. The reasoning that individual row houses would enable ownership of the house and land whereas apartment ownership would not be secure as the ownership is unclear is also a factor. The participation of the informal settlement discussing their needs and priorities was

lacking in Ichangu Housing. Various studies have revealed that the number of consultations during the design phase and the participation of the target community to be a major factor for residential satisfaction and ultimately the success of a resettlement. The opposition of host communities in Ichangu is also a major factor.

Both settlements have experienced instances of forced eviction, but the Thapathali Informal Settlement (TIS) has faced a greater frequency and intensity of such events. In 2012, TIS residents were offered relocation to Ichangu Housing following an eviction, but the proposal was widely criticized by the informal community for not addressing their actual needs. Government authorities did not consult with the community or involve the NGOs and INGOs working with them. Additionally, the model of ownership for Ichangu Housing was unclear, leading to uncertainty and distrust among potential residents.

Local opposition in Ichangu further complicated the situation, with residents expressing concerns that the presence of informal settlers would reduce their land value. As a result, TIS residents still hold reservations about the Ichangu project and remain emotionally affected when the topic is brought up.

The repeated experiences of eviction have strengthened the unity within the TIS community, fostering strong social bonds and a collective identity. This has translated into a preference for group resettlement, where they emphasize the importance of being relocated together as a community. In contrast, the residents of the Jagritinagar Informal Settlement (JIS) maintain friendly relations but do not place the same level of importance on being resettled as a group.

Additionally, informal settlers view the term “Sukumbasi” as derogatory and aspire for a future where their children are no longer associated with the label or subjected to eviction, discrimination, or inequality.

6.3 Facilities informal settlements consider essential in resettlement models

Respondents in Jagritinagar Informal settlement have given the highest importance to legal ownership (RII = 0.996) whereas Thapathali Informal Settlement have attributed it to employment (0.991). While Thapathali respondents have given availability of transport (0.949) and proximity of schools and healthcare (0.946) high importance, Jagritinagar settlers have given 0.88 and 0.848 respectively. Availability of transport, schools and healthcare and free or low cost land although valued have received slightly

lower RII scores. This indicates that legal considerations and employment opportunities outweigh other factors for many respondents, highlighting the importance of integrating livelihood accessibility in future resettlement plans. Ensuring that resettled individuals, particularly families with children, have adequate access to public transportation, healthcare services, and educational institutions plays a key role in the success of a resettlement project. The organizational stakeholders including Lumanti and government bodies have given the highest importance to subsidized credit scheme for housing (0.95), employment opportunities, availability of transport and proximity of schools and healthcare have also been given importance. This is in line with the findings by Song & Wu (2022). While the informal settlements give high priority to legal ownership, the organizational stakeholders advocate for security of tenure than legal ownership. In the long run, organizational stakeholders stress for affordable housing initiatives such as rental housing and collective housing schemes such that the urban poor can access housing. The difference in the importance in factors attributed by the groups shows the need of negotiation and collaboration when the project is commenced.

The integration of RII findings with the Push and Pull Model reveals that while environmental vulnerabilities like flood exposure act as strong push factors, they alone do not motivate relocation unless counterbalanced by equally strong pull factors. The data shows that settlers' decisions are guided by the utility of relocation — aligned with Utility Theory — which is heavily influenced by proximity to work, availability of schools, and healthcare access. Therefore, even when push factors like eviction or flooding exist, if the resettlement site lacks strong pull incentives, resistance to relocation persists. This insight emphasizes the importance of designing resettlement models that maximize perceived utility for the target communities.

6.4 Need of affordable housing initiatives

The increasing prevalence of informal settlements along the Bagmati River is closely tied to the broader housing affordability crisis in Nepal. According to the statistics office, the poverty rate was calculated based on a revised poverty line of Rs72,908 per person per year in 2022-23 which has increased since the Rs. 42,845 per person per year in 2010-11. The Fourth Nepal Living Standards Survey 2022-23 revealed that 20.27 percent of the population lived below the poverty line in 2023 compared to 25.16 percent in 2011. According to NLSS data, the percentage of households residing in their

own housing units has declined from 89.37% in 2010/11 to 81.4% in 2022/23. Simultaneously, the proportion of households occupying rental housing has increased from 7.8% to 15.1% in the same period. This trend suggests that homeownership is becoming less accessible for many Nepalese, likely due to rising land prices, increased urbanization, and limited financial resources for home acquisition.

Economic inequality plays a crucial role in the housing crisis. The nominal average household income increased from Rs. 43,732 in 1995/96 to Rs. 551,148 in 2022/23, while the average per capita income rose from Rs. 7,690 to Rs. 136,707 in the same period. The poorest 20% of the population saw their average per capita income rise from Rs. 2,020 to Rs. 61,335, whereas the richest 20% experienced a much higher increase, from Rs. 19,325 to Rs. 259,867. These growing income gaps indicate that the urban poor, including informal settlers, face increasing difficulties in accessing affordable housing as rental costs rise and land remains unaffordable.

The NLSS reports that annual spending on consumption increased by 66% in the past 12 years, reaching Rs. 126,172 in 2023 from Rs. 75,902 in 2011. With such an increase in living expenses, low-income households struggle to allocate resources for secure housing. The absence of affordable housing options forces many low-income groups into overcrowded and substandard housing conditions. By addressing affordability barriers and integrating sustainable housing models, policymakers can foster resilient, inclusive urban environments that support both human and environmental well-being. Expanding affordable housing initiatives for low-income groups will be key to ensuring equitable and long-term solutions for housing security in Nepal.

6.5 Access to Affordable Housing Finance

Low-income housing finance in Nepal has been implemented in several municipalities through collaborative efforts between commercial banks and international organizations such as ACHR, CLIFF, and others, with Lumanti playing a key coordinating role. By 2022, a total of US\$ 1.94 million had been disbursed to support the construction of 1,109 houses across municipalities including Lekhnath, Pokhara, Shuklagandaki, Tansen, Biratnagar, and Lalitpur (Kerr & Manandhar, 2022). India's PMAY-Urban scheme has been offering credit-linked subsidies since 2015, targeting

EWS, LIG, MIG I, and MIG II categories. Out of 2.4 million total beneficiaries, 1.8 million fall under the EWS and LIG categories (MoHUA, 2016).

In Nepal, however, government-supported housing programs are largely limited to rural areas, with urban regions lacking similar initiatives. Moreover, home loan rates provided by banks remain unaffordable for EWS and LIG populations, and the stringent eligibility criteria exclude many from accessing formal financial services. This highlights a pressing need for inclusive and affordable financing solutions specifically designed for low-income groups in urban areas.

Low Cost Housing sizes

Table 14 Low Cost Housing Sizes

Program	Sq. m.	Remarks
Janta Awas (MPID, 2018)	30	Total built up
Kirtipur Awas	50	Total built up (3.5 lakhs)
Kirtipur Awas new house (Source: KII)	50	Total built up (18-20 lakhs)
India Cluster housing (NBC, 2016)	30	Plot size (GC 100%, FAR 2) Metropolitan cities
	40	Plot size (GC 75%) Municipalities

Low Cost Housing Price

Based on the above cases, this analysis calculates an affordable house price based on a housing unit of 400 sq. ft and cost per sq. ft. of the low cost house as Rs. 3000/ sq. ft.

Total built up	400 sq. ft.
Cost	Rs. 3000/ sq. ft.
Total cost of low cost house	400 sq. ft. X Rs. 3000/ sq. ft. Rs. 12,00,000

For an affordable subsidized loan scheme, a loan tenure of 40 years has been proposed, with a discount rate of 9% applied for Net Present Value (NPV) calculations. An interest subsidy of 5% is provided by the government. Using these parameters, the Equated Monthly Installment (EMI) for loan repayment has been determined using the following formula:

$$EMI = \frac{P \times R \times (1 + R)^N}{(1 + R)^N - 1}$$

Table 15 Calculation of Subsidy Loan

ITEM	VALUE
Total Loan Amount	Rs.12,00,000
Interest Subsidy Rate	5%
Loan Tenure	40 years
Discount Rate for NPV	9%
Annual Subsidy Amount	Rs.60,000
NPV of Interest Subsidy	Rs.6,45,441.61
Effective Loan After Subsidy	Rs.5,54,558.39
Monthly EMI Comparison (at 8% Interest)	
Without Subsidy	Rs.8,343.74
With Full Subsidy Applied	Rs.3,855.91

Following the calculation, an EMI of Rs. 8,343 without subsidy can be substituted with an EMI of Rs. 3,855 through full subsidy applied. The amount of Rs. 3,855 lies within the 30% of monthly income set aside for housing as revealed by NLSS (2024) for the poorest and second consumption quintiles. This could be a possible affordable option for the majority of the population close to and below the poverty line.

Table 16 NLSS 2024 Household Income

Consumption Quintiles	Household Income (Rs.)		
	Household Income Mean	Income per month	30% of Income for Housing (Monthly)
Poorest	298860	24905	7472
Second	392485	32707	9812
Third	497159	41430	12429

Fourth	600913	50076	15023
Richest	853533	71128	21338

6.6 Subsidized Loan Schemes

This research proposes a subsidized loan scheme environment. In the Loan Financing Environment, Nepal Rastra Bank (NRB) regulates various financial entities including government, commercial, and development banks, as well as finance institutions. Home loans are mostly accessed by high- and middle-income groups (HIG and MIG), as these loans do not fall under the priority sector, and thus, receive limited policy incentives. Stringent eligibility criteria and high interest rates make home loans unaffordable for LIG and EWS. Deprived sector has been developed to cater to these groups which also provide low income housing upto Rs. 7 lakhs and marginalized house construction loan upto Rs. 2 lakhs, the latter at no collateral. Banks channel 5% of their loans as directed by NRB through the deprived sector majorly to cooperatives and microfinance institutions and limited amounts to individual borrowers. These institutions direct majority of their lending to the agriculture and enterprise sectors, limiting its services to home improvement loans which are almost null now. Only a small fraction of the deprived sector, the individual borrowers access the low cost housing fund and marginalized house construction fund. This creates the need to allot Affordable housing into the priority sector which would allow subsidized loans to various stakeholders of the housing sector.

The challenges faced by LIG and EWS in accessing formal finance such as high interest rates can be mitigated by providing government interest subsidies. Collateral issues can be solved by providing a municipal guarantee fund or a ward/ municipality guarantee to the financial institutions. Community savings group and cooperatives could be formed to encourage savings which could solve collateral and down payment issues. Additionally, a relaxation of the eligibility criteria by allowing borrowers to access finances by presenting their informal income source and group/ward guarantee instead of the verified income source should be allowed.

The **Institutional Framework** outlines the actors and mechanisms involved in the resettlement of informal settlements through subsidized loans. This framework supports access to housing, land, and services through various models such as rent-to-own,

institutional housing, collective/community models, and rental housing. These are implemented through a wide network of stakeholders including government departments (DUDBC, municipalities), private developers, cooperatives, and NGOs/INGOs. Resettlement models also include individual title with incremental housing and site upgradation strategies, often coordinated with community saving groups and the Kathmandu Valley Development Authority (KVDA). The framework underscores the importance of multi-stakeholder collaboration and flexible, community-based approaches to ensure long-term sustainability and inclusivity in housing solutions for informal settlers and other LIG and EWS could also benefit from it.

Subsidized loan schemes should be expanded beyond individual beneficiaries to include private developers, cooperatives, and NGOs/INGOs involved in the delivery of affordable housing. By making concessional financing available to these institutional stakeholders, the state can stimulate greater investment in the construction, facilitation, and management of affordable housing options tailored to the needs of informal settlers and EWS. This approach enhances the housing landscape with a wider variety of resettlement models—such as rental, rent-to-own, collective housing, or incremental development—giving beneficiaries the freedom to choose housing solutions that align with their lived realities, preferences, and socioeconomic conditions.

From the perspective of utility theory, this diversification of housing choices allows individuals and families to select options that maximize their perceived value and long-term utility. Moreover, when people are empowered to make informed choices about their resettlement, it resonates with the capability approach, which emphasizes the importance of expanding people's freedoms and opportunities to live lives they value. Subsidizing housing providers in this way does not merely improve access to housing—it enhances agency and dignity among marginalized communities. In doing so, it transforms housing from a basic service to a realizable right, ensuring that the processes of relocation and resettlement are grounded in principles of inclusivity.

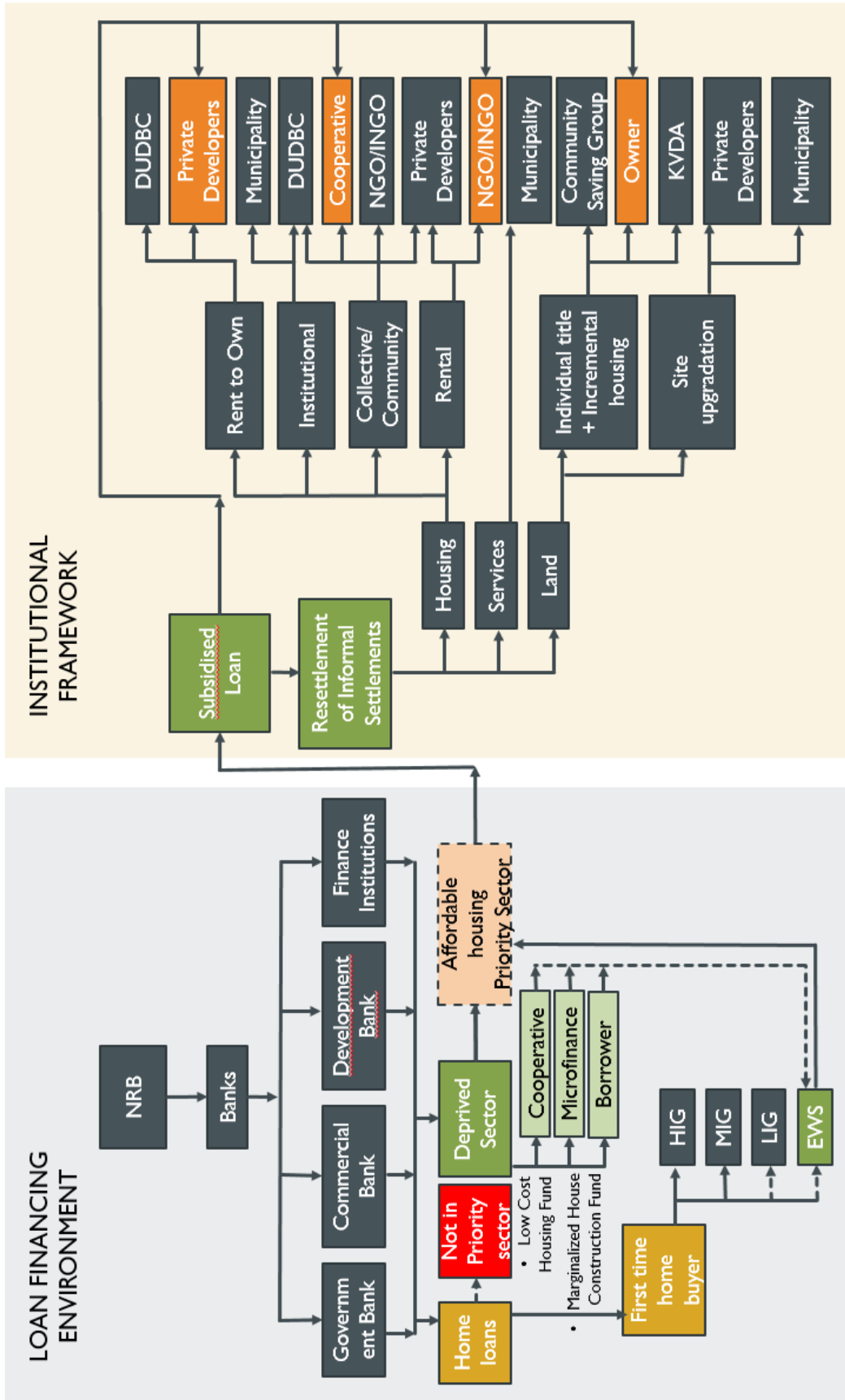


Figure 14 Framework for Subsidised Loan Provision

CHAPTER7: CONCLUSION

Informal settlements are a global phenomenon, rapidly expanding in urban areas and creating a growing demand for resettlement initiatives. Various studies have revealed that resettlement initiatives require the participation of the informal settlers and the understanding of their needs. This research has dived into the socio economic realities of the informal settlements and how it affects their resettlement preference. The findings reveal that while land ownership remains a primary concern, resettlement choices vary based on factors such as age, income stability, household structure, and employment opportunities. Joint family structures were found to prefer more flexible solutions to cater to their larger needs whereas a majority of nuclear and single person households preferred housing solutions such as government built housing and community developed housing. A key finding is that households were more influenced by the presence of secondary source of income rather than their income levels. The frequent flood risk and damages was the primary reason for a majority of informal settlers in both settlements on preferring to resettle.

The failure of past resettlement projects, such as Ichangu Housing, underscores the need for participatory planning that aligns with community needs rather than imposing top-down solutions. A significant difference between the informal settlements in Thapathali for whom Ichangu housing was built and Jagritinagar informal settlement is that the resettlement option of community developed housing project was preferred only by the settlers in Thapathali and they urged for everyone to resettle in the same location opposed to informal settlements in Jagritinagar who were indifferent towards this. The court verdict on the additional 20m setback for rivers in Kathmandu affected some of the households' in Thapathali informal settlement on their decision regarding resettlement whereas this had no effect in Jagritinagar informal settlement. These point at the effect of numerous eviction attempts on Thapathali informal settlement and the settlers becoming more organized on facing forced eviction.

Key informant interviews further emphasize that successful resettlement requires a multi-faceted approach, integrating financial accessibility, livelihood security, and social cohesion. The government stakeholders also emphasized the need of an identification criteria and its importance in carrying out resettlement in a legal and justified process. The key informants also emphasized the challenge of providing

housing or land to the large numbers of informal settlers citing the high prices of land in Kathmandu which would bring financial and acquisition difficulties. The study further recommends policy interventions such as flexible financing mechanisms to individual beneficiaries, private developers, cooperatives, NGO/INGOs to facilitate sustainable resettlement and allocation of affordable housing for low income groups. This research underscores the importance of adaptive resettlement models that align with the socioeconomic realities of informal settlers. By fostering collaboration between the government, civil society, and informal communities, a more equitable and sustainable resettlement strategy can be achieved—one that ensures security, dignity, and long-term resilience for vulnerable populations.

CHAPTER 8: RECOMMENDATION

8.1 Subsidised Loan

The research proposes that affordable home loans with subsidized interest rates and flexible tenure periods be included in the priority sector. The government should provide subsidies to the banking sector such that their operational costs are covered. Through this, the informal settlements and other low income groups can gain access to formal finance which is affordable to them which would assist them in resettlement. The informal settlers who prefer housing options can access affordable loans to buy or invest in housing solutions which could be incremental as well. Majority of the middle aged settlers who prefer land can use the subsidized credit scheme to buy land. Several of the informal settlers who would prefer to stay in the current location outside the risk zone could access the loan to build their house and upgrade the services in the area.

The bank eligibility criteria of requiring to present taxable income can be relaxed for the housing loans in the priority sector to those who cannot provide the verified income. Details on their income source through other informal sectors should be presented instead. Government guarantee and community savings group can be used to solve collateral issues and loan can be disbursed in tranches.

Subsidized loans should also be provided to stakeholders who play a part in providing affordable housing. Stakeholders such as private developers, Beneficiary Cooperatives and NGO/ INGO should also be able to access these subsidized loans to expedite the provision of affordable housing solutions.

8.2 Housing Provision through private housing developers

To attract private developers to invest in affordable housing for informal settlement resettlement, a range of incentives can be used. These include financial benefits like tax breaks, subsidies, and reduced interest loans; regulatory incentives such as relaxed zoning, faster permits, and flexible building codes; and partnerships like PPPs offering discounted land and co-investment. Cross-subsidization and infrastructure status can further enhance project viability. Additionally, state-specific tools like extra FAR or TDR can address regional needs. Together, these measures lower costs and risks, making affordable housing development more appealing and feasible for private developers.

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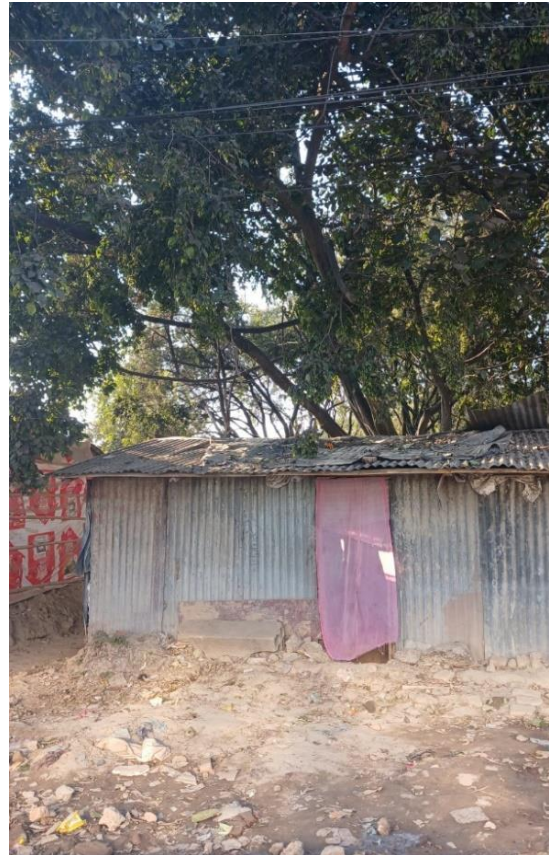
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APPENDIX A: SITE AND KII PHOTOGRAPHS

Jagritinagar Informal Settlement



Thapathali Informal Settlement



Key Informant Interviews



Figure 15 KII at HPCIDBC

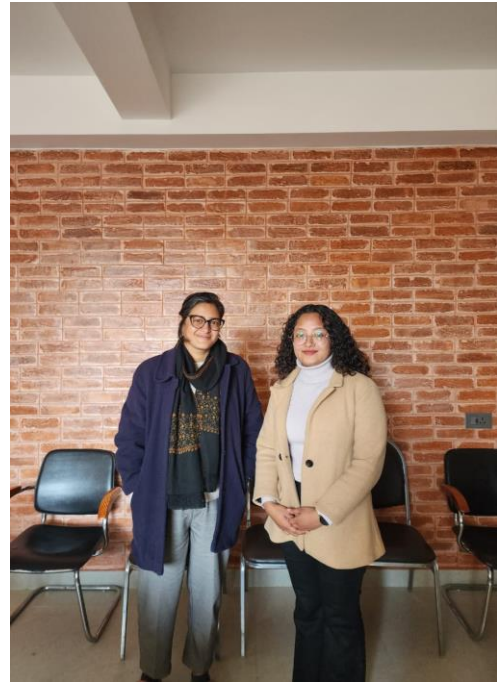


Figure 16 KII at Lumanti



Figure 17 KII at DUDBC



Figure 18 KII at DUDBC

APPENDIX B: QUESTIONNAIRE

Survey Questions: Socio-Economic Conditions and Resettlement Willingness of Squatter Settlements

Section 1: Demographic Information

1. What is the age of the household head?
 - a. Below 18
 - b. 18-30
 - c. 31-45
 - d. 46-60
 - e. Above 60

2. What is the gender of the household head?
 - a. Male
 - b. Female
 - c. Other

3. What is your religion?
 - a. Hindu
 - b. Buddhist
 - c. Muslim
 - d. Christian
 - e. Other (specify): _____

4. What is your ethnicity or caste?
 - a. Brahmin/Chhetri
 - b. Janajati
 - c. Dalit
 - d. Madhesi
 - e. Other (specify): _____

5. What is the primary language spoken at home?
 - a. Nepali
 - b. Maithili
 - c. Newar
 - d. Bhojpuri
 - e. Other (specify): _____

6. Where is your place of origin?
 - a. Kathmandu Valley
 - b. Other hill districts (specify): _____
 - c. Terai region (specify): _____
 - d. Other (specify): _____

7. How long have you lived in the current settlement?
 - a. Less than 1 year
 - b. 1-5 years
 - c. 6-10 years
 - d. More than 10 years

8. Why did you migrate to this settlement? (Choose all that apply)
 - a. Displacement due to natural disaster (e.g., earthquake, flood)
 - b. Economic hardship in place of origin
 - c. Search for employment opportunities

- d. Family relocation
- e. Other (specify): _____

Section 2: Educational Background

- 9. What is the highest level of education completed by the household head?
 - a. No formal education
 - b. Primary education
 - c. Secondary education
 - d. Higher secondary education
 - e. Bachelor's degree or above
- 10. Are your children attending school?
 - a. Yes
 - b. No
 - c. Not applicable

Section 3: Employment and Income

- 11. What is the primary occupation of the household head?
 - a. Unemployed
 - b. Daily wage labor
 - c. Self-employed
 - d. Service/job
 - e. Agriculture
 - f. Other (specify): _____
- 12. What is your approximate monthly household income?
 - a. Below NPR 5, 000
 - b. NPR 5001 - NPR 10,000
 - c. NPR 10,001 - NPR 15,000
 - d. NPR 15,001 - NPR 20,000
 - e. NPR 20,001-30,000
 - f. Above 30, 000
- 13. How much does your household spend monthly to acquire basic services such as water supply, electricity, and sanitation?
 - a. Less than NPR 500
 - b. NPR 500 - NPR 1,000
 - c. NPR 1,001 - NPR 2,000
 - d. NPR 2,001 - NPR 5,000
 - e. More than NPR 5,000
- 14. Do you have any secondary sources of income?
 - a. Yes
 - b. No
 - If yes, specify: _____

Section 4: Housing and Infrastructure

15. What type of house do you live in?
 - a. Temporary (e.g., tin/wood)
 - b. Semi-permanent (e.g., brick/mud)
 - c. Permanent (e.g., brick/concrete)

16. Does your house have access to basic utilities?
 - a. Electricity: Yes / No
 - b. Water supply: Yes / No
 - c. Sanitation facilities: Yes / No

17. What type of toilet facility do you use?
 - a. Open defecation
 - b. Shared latrine
 - c. Private latrine
 - d. Flush toilet

Section 5: Willingness to Resettle

18. Are you willing to relocate to a new location if offered resettlement?
 - a. Yes
 - b. No
 - c. Not sure

19. If yes, what are your primary reasons for willingness to resettle? (Choose all that apply)
 - a. Fear of eviction
 - b. Current court verdict against settlement
 - c. Weakening local government support
 - d. Weakening local people's support or community cohesion
 - e. Fed up with frequent flood risks and damages
 - f. Better opportunities for housing and livelihood elsewhere
 - g. Lack of access to basic services in the current location
 - h. Other (specify): _____

20. Under what conditions would you agree to resettle? (Choose all that apply)
 - a. Guaranteed ownership of land or housing in the new location
 - b. Access to basic services (electricity, water, sanitation)
 - c. Proximity to employment opportunities
 - d. Availability of schools and healthcare facilities
 - e. Safe and secure environment
 - f. Other (specify): _____

21. Which of the following resettlement options would you consider most favorable?
 - a. Free house allotment in a new settlement
 - b. Subsidized credit for land purchase to build your own house
 - c. Long-term rental housing with an option to purchase later
 - d. Government-built housing with shared ownership schemes
 - e. Community-led housing development projects
 - f. Direct financial assistance for relocation and housing construction
 - g. Other (specify): _____

22. Would access to the following influence your willingness to resettle? (Rate each from 1 - Not Important to 5 - Very Important)

- a. Subsidized credit or loan schemes for housing
- b. Free or low-cost land allotment
- c. Employment or livelihood opportunities in the new location
- d. Availability of public transportation
- e. Proximity to schools and healthcare facilities
- f. Legal ownership and security of housing

23. How far are you willing to move from your current location?

- a. Within 5 km
- b. 5-10 km
- c. 10-20 km
- d. Beyond 20 km

24. What is your biggest concern or expectation regarding resettlement?

[Open-ended]

QUESTIONS ON ICHANGU HOUSING TO THAPATHALI INFORMAL SETTLEMENTS

1. Name (optional):

2. Gender:

- Male
- Female
- Other

3. Age Group:

- Under 18
- 18–30
- 31–50
- Above 50

4. Household Composition:

- Adults: _____
- Children: _____

5. Primary Occupation at the Time of Eviction:

- Daily wage laborer
- Small business owner
- Unemployed

- Other: _____

6. Did you feel socially accepted in the Ichangu Housing community?

- Yes
- No (please specify): _____

7. Did you experience a loss of cultural or community ties after moving to Ichangu?

- Yes (please elaborate): _____
- No

8. Did you incur additional expenses after moving to Ichangu (e.g., transportation, housing maintenance)?

- Yes (please specify): _____
- No

9. Did the relocation impact your household's income generation?

- Improved
- Declined
- No change

Section B: Relocation Experience

10. Did You Move to the Ichangu Housing Project After the 2012 Eviction?

- Yes
- No (If no, skip to Section D)

11. If Yes, How Long Did You Stay in Ichangu Housing?

- Less than 6 months
- 6 months–1 year
- 1–2 years
- More than 2 years

12. What Were Your Initial Impressions of the Ichangu Housing Project?

- Positive (please specify reasons): _____
- Negative (please specify reasons): _____

Section C: Challenges in Ichangu Housing

13. What Challenges Did You Face While Living in Ichangu Housing? (Select all that apply)

- Lack of employment opportunities nearby
- Distance from original livelihood or workplaces
- Poor infrastructure (e.g., water, electricity, sanitation)
- Social isolation or lack of community cohesion
- High cost of living or rent
- Inadequate space
- Other: _____

14. Were the Housing Units Adequate for Your Needs?

- Yes
- No (please explain): _____

15. Did You Feel Safe and Secure in the New Location?

- Yes
- No (please explain): _____

16. Was the Support Provided During Relocation Sufficient?

- Yes
- No (please specify what was lacking): _____

17. What Ultimately Led You to Leave Ichangu Housing?

Section D: Reflections on the Resettlement Process

18. If You Did Not Move to Ichangu Housing, Why?

- Lack of information about the relocation
- Location was too far from livelihood opportunities
- Concerns about housing conditions
- Other: _____

19. Do You Feel the Relocation Process Was Fair and Inclusive?

- Yes
- No (please explain): _____
- 20. Were You Consulted During the Planning or Implementation of the Resettlement?
- Yes
- No

Section E: Current Situation and Recommendations

21. How Does Your Current Housing Compare to the Ichangu Housing Project?

- Better

- Worse
- Similar
- Other: _____

22. What Could Have Been Done Differently to Make Ichangu Housing More Suitable for You?

23. Do You Have Suggestions for Improving Future Resettlement Programs?

(Open-ended response)

24. What kind of support or incentive would have motivated you to stay in Ichangu Housing?

- Lower costs
- Employment opportunities nearby
- Better housing design
- Community-building programs
- Other (please specify): _____

25. What improvements in the infrastructure or services at Ichangu could have influenced you to stay?

- Access to water
- Improved transportation
- Better electricity or sanitation facilities
- Other (please specify): _____

26. Did the relocation impact your household's income generation?

- Improved
- Declined
- No change

27. Were there any specific issues with the housing units (e.g., size, quality, maintenance)?

- Yes (please specify): _____
- No

28. Has your perception on safety in the current settlement changed since the 2024 floods?

Key Informant Interview (KII) : LUMANTI

1. What strategies or models have been used for resettling informal settlements along the Bagmati River? Which of these strategies have been successful and why?
2. In your opinion, what are the key factors that influence the success or failure of
 - a. resettlement initiatives?
3. How important do you consider the assessment of needs of the informal communities in resettlement planning?
4. How are the preferences and needs of squatter communities catered to in resettlement planning? Steps to be followed for understanding their priorities. Workflow and negotiation Examples. How to interpret what is actually needed?
5. How could these processes be improved to make them more inclusive?
6. In your experience what socio- economic condition effects their preference the most? (age, income, gender, HH size, education etc). Explain with examples
7. How do you perceive the government's approach to informal settlements in terms of resettlement policies or eviction practices?
8. What role do NGOs and community-based organizations play in this process?
9. What are the main gaps in policies related to resettlement of informal settlements in Kathmandu? What specific policy changes would you recommend?
10. How can collaboration between the government, NGOs, and local communities be improved for sustainable resettlement?
11. What were the major challenges faced during the planning and implementation of these projects?
12. Low-income housing finance from commercial banks in Nepal. Asian Coalition for Housing Rights (ACHR)
 - a. How much was the Loan for land only?
 - b. Was it an agriculture society?
 - c. Can it be replicated in an urban area where the land and housing costs are more expensive?

KIRTIPUR RESETTLEMENT

1. Urban community support fund (UCSF). Please explain on UCSF. Is it still running today in Kirtipur? Role of revolving funds in Kirtipur (is it just for the housing loans or are other loans considered). Will the contributors collaborate in new resettlement initiatives?
2. How many households have repaid the loan? What might be the reasons for their inability to repay the loans?
3. Have any of the households moved out? If yes, what are the reasons? Are these houses occupied by new households or are they empty? How can these be provided to needy households and at what pricing?
4. Houses were under the ownership of the individual but land ownership was collective, there seem to be some problems recently, how can this be resolved?
5. Would it be better for upcoming resettlement projects to incorporate individual ownership of both house and land? What could be a viable option?
6. In the future, will there be any provisions of incremental housing or addition of floors in Kirtipur in regard to the increase in family members?

7. The prices of houses in Kirtipur will not increase according to the market prices. Are there any questions arising on this by the residents? What will be the way forward?
8. How important is to provide financial assistance/ subsidy in addition to the free house allotment?
9. How important is it for special groups such as single women, elderly only and disabled person households to be given extra benefits in comparison to general households?
10. What other categorizations would be required and how can such planning be implemented?
11. Please explain on your collaboration with Reall regarding the revolving funds. What is the process? How successful have they been? Application in informal settlements?
12. Any views regarding the Ichangu housing in 2012? What were the reasons for its failure? What should have been done?

KATHMANDU METROPOLITAN CITY

1. Are there any upcoming resettlement projects for the informal settlements in Kathmandu?
2. Does KMC currently have any financial assistance programs for informal settlements/ LIG? (Yes/No) If yes, please specify the programs and their objectives.
3. Has KMC ever collaborated with financial institutions to provide loans or financial support to LIG? (Yes/No) If yes, please describe the nature of the collaboration.
4. Would KMC be willing to establish a loan guarantee fund to encourage banks to provide loans to informal settlements without collateral?
5. What are the main challenges KMC foresees in implementing a loan guarantee fund for informal settlements?
6. What factors should be considered when designing such a fund? (Select all that apply)
7. What mechanisms should be in place to ensure transparency and accountability in the management of loan guarantee funds?
8. Would KMC be willing to pilot a small-scale loan guarantee program before full implementation? If yes, what level of government interest rate subsidy would be possible for the municipality?
 - 3% subsidy
 - 6% subsidy
 - 9% subsidy
 - More than 9%

HIGH POWERED COMMITTEE FOR THE INTEGRATED DEVELOPMENT OF BAGMATI CIVILISATION

1. What are the main objectives of HPCIDBC in managing informal settlements along the Bagmati River?
2. What policies and frameworks guide HPCIDBC's approach to resettlement of informal settlers? No policies. Views on the type of policies required for resettlement initiatives
3. How does HPCIDBC coordinate with other government bodies and stakeholders in resettlement planning? Any collaborations with Bhumi Aayog?
4. What resettlement initiatives has HPCIDBC undertaken for informal settlements along the Bagmati River?
5. What are the selection criteria for identifying informal settlements that need resettlement?
6. How does HPCIDBC ensure that resettlement projects align with the socio-economic needs of affected communities? Community consultations?
7. What types of housing and infrastructure support are provided to resettled communities?
8. What livelihood support mechanisms (e.g., employment, skills training) are included in resettlement programs?
9. How are environmental factors (e.g., flood risks, pollution, sustainability) incorporated into resettlement site selection and planning?
10. Has HPCIDBC conducted impact assessments of past resettlement initiatives? If so, what have been the key findings?
11. What challenges have been faced in implementing resettlement programs, and how has HPCIDBC addressed them?
12. How does HPCIDBC address resistance from communities that prefer to remain in informal settlements despite flood risks?
13. Are there any upcoming resettlement plans for informal settlers along the Bagmati River? If so, what are their key features?
14. What recommendations does HPCIDBC have for improving resettlement strategies for informal settlements along the Bagmati River?
15. Is there any additional information or insight that HPCIDBC would like to share regarding the challenges and opportunities in resettlement planning?

BANKING POLICY

Section 1: Accessibility of Housing Finance for Informal Settlements

1. How does the banking sector define and categorize “informal settlements” or low-income communities in housing finance policies?
2. Are individuals from informal settlements able to access housing loans? If not, what are the key barriers?
3. Is there any special provision or relaxation of eligibility criteria for those residing in informal settlements under the government’s housing programs?
4. Do microfinance institutions or cooperative banks have different criteria for housing loans for low-income or informal sector workers?

Section 2: Possibility of Financial Subsidies for Resettlement

5. From a banking perspective, what is the feasibility of long-term government financial subsidies for informal settlers to purchase land or build homes?
6. Would banks be willing to provide loans to informal settlers if the government guarantees repayment or provides financial backing?
7. What are the key financial risks associated with granting housing loans to informal settlers? How can these risks be mitigated?

Section 3: Regulatory and Policy Barriers

8. What are the regulatory challenges in providing housing loans to informal settlers under Nepal Rastra Bank (NRB) guidelines?
9. Are there any policy gaps that prevent commercial banks from supporting subsidized
10. Deprived sector with collateral providing Rs 7 lakhs. Is taxable income also required?
11. How do current land tenure policies affect housing finance accessibility for informal settlers?

Section 4: Possible Solutions & Innovations in Housing Finance

12. What alternative financing models (e.g., community mortgage programs, micro-loans, housing cooperatives) could be introduced to support informal settlers?
13. Would banks be open to piloting new financing mechanisms if the government or international agencies provided a risk-sharing mechanism?
14. What are the major risks your bank foresees in lending to deprived sector? (Select all that apply)
 - Lack of land ownership and collateral.
 - High risk of default due to low-income levels.
 - Difficulties in verifying borrower identity and income.
 - Lack of legal frameworks for informal housing.

- Difficulty in loan recovery and enforcement.
- Other (please specify): _____

15. Would your bank be willing to offer loans without land titles as collateral if alternative security measures were in place?

- Yes
- No
- Maybe (depending on guarantees)

16. What alternative collateral mechanisms would your bank consider? (Select all that apply)

- Loan guarantee fund (government-backed).
- Community-based guarantee (loans given to groups instead of individuals).
- Income-based assessment for loan eligibility.
- Partial collateral (e.g., business assets, savings deposits).
- Other (please specify): _____

Section 5: Loan Terms & Repayment Preferences

17. What would be the preferred loan tenure for informal housing loans?

- Up to 10 years
- 10-20 years
- 20-30 years
- More than 30 years

18. What type of support from the government would encourage your bank to offer housing loans to informal settlers? (Select all that apply)

- Interest rate subsidies.
- Loan guarantee funds to cover defaults.
- Regulatory relaxation for informal housing loans.
- Tax incentives for banks offering subsidized loans.
- Technical assistance in borrower assessment.
- Other (please specify): _____

FOR RELATIVE IMPORTANCE INDEX

1. Would access to the following influence your willingness to resettle? (Rate each from 1 - Not Important to 5 - Very Important)
 - Subsidized credit or loan schemes for housing
 - Free or low-cost land allotment
 - Employment or livelihood opportunities in the new location
 - Availability of public transportation
 - Proximity to schools and healthcare facilities
 - Legal ownership and security of housing

DUDBC

- a. Are there any resettlement plans upcoming?
- b. Do the existing urban and shelter policies support squatter upgrading projects in Nepal? Any challenges in implementation?
- c. Does the Bagmati Action Plan incorporate policies for squatter upgrading for riverside squatter settlements? Any challenges in implementation? What is the way forward?
- d. Do any regulations hinder implementation of squatter upgrading projects?
- e. Details on Ichangu Housing. What improvements would be required? Can any subsidies encourage informal settlers to resettle here.
- f. Is collaboration with housing developers possible? What kind of incentives can be provided to the private sector?
- g. What do you think of the feasibility of collaboration with commercial banks and NRB relating to loan subsidies for informal settlements?

APPENDIX C: IOEGC PAPER APPROVAL



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Date: April 21, 2025

To Whom It May Concern:

This is to certify that the paper titled "Resettlement Preferences of Informal Settlements along the Bagmati River in Kathmandu Valley" (Submission# 269) submitted by Sekiya Shakya as the first author, which had been accepted for presentation after the peer-review process, has successfully been presented at the 16th IOE Graduate Conference held during April 18 - 20, 2025. Kindly note that the final revision of the papers and publication process of the conference proceedings is still underway and hence inclusion of the accepted manuscript in the conference proceedings is contingent upon timely response to further edits during the publication process.



Dr. Raj Kumar Chaulagain,
Convener,
16th IOE Graduate Conference



Resettlement Preferences of Informal Settlements along the Bagmati River in Kathmandu Valley

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Abstract

Informal settlements along the Bagmati River in Kathmandu face persistent challenges due to tenure insecurity, environmental vulnerabilities, and government-led evictions. This research examines the resettlement preferences of these communities, focusing on how socioeconomic factors shape their choices. Using a mixed-methods approach, including surveys and key informant interviews, the study identifies critical determinants such as income stability, household structure, employment opportunities, and access to essential services. Findings indicate that while land ownership remains a primary concern, preferences for resettlement models vary across demographic and economic groups. The research also evaluates past resettlement projects like Kirtipur Housing and Ichangu Housing, highlighting their limitations in meeting community needs. The study underscores the importance of participatory planning, advocating for alternative strategies such as private public partnership for affordable housing. The paper offers insights into the adaptive capacity of relocated informal settlers and provides policy recommendations to foster sustainable resettlement interventions in Kathmandu.

Keywords

Informal settlements, resettlement preferences, land tenure

1. Introduction

Informal settlements, characterized by the lack of legal rights to land and inadequate living conditions, have become a significant challenge in rapidly urbanizing cities worldwide. In Kathmandu, informal settlers, known locally as "Sukumbasi", face a range of challenges due to their insecure housing. The informal settlements are diverse in terms of ethnicity, caste, place of origin, family structure, occupation, and reasons for squatting [1] and are often classified as informal wage workers and considered part of the urban poor. Most of these settlements are located along the banks of the Bagmati River, which is increasingly at risk during the monsoon season which contributes to the instability of their physical housing alongside their tenure insecurity [2]. Despite their vulnerability, these settlements persist due to lack of affordable housing options, proximity to employment and essential services. Informal settlers need to take initiatives themselves to reduce their flood risk as the government assistance is absent. However, residents face constant threats of eviction, and without secure land tenure, they are unable to make long-term investments in improving their homes or adapting to flood risks [3]. The vulnerability of these settlements was starkly highlighted by the floods of 2024, which caused significant damage and displacement among residents, underscoring the urgent need for effective and sustainable resettlement strategies.

Article 37 of Constitution of Nepal states that every citizen has right to proper housing. It guarantees the public right to housing and enjoying the benefits that are inseparable from housing. In view of these plans, numerous commissions have been formed to solve the issue of the informal settlements however, the efforts have not improved the situation.

Resettlement is the deliberate process of transforming informal and unauthorized settlements into legally recognized, officially regulated, and administratively managed land structures, often due to environmental vulnerabilities, legal pressures, or urban development projects, to alternative living arrangements. For informal settlers, resettlement is about ensuring an improvement or at least the preservation of their current quality of life, while addressing the factors that made their original settlement precarious. In this context, the informal community's needs and preferences for resettlement have often been overlooked, often employing a one size fits all approach leading to repeated failures in resettlement initiatives [4].

The objective of this research is to explore the resettlement preferences of informal settlements along the Bagmati River, particularly focusing on how socioeconomic factors shape these preferences. The research highlights the need for a participatory approach, where the perspectives of informal communities are integral to the design and execution of resettlement policies.

2. Literature Review

2.1 Informal Settlements

Informal settlements is an increasingly common, urban phenomenon in developing countries due to inefficient urban management and poor governance, unable to address the growing demand for adequate housing in cities [5]. A study by World Bank in 2013 states that rapid urbanization contributes to the growth of Nepal's urban population living in squatter settlements, which is estimated to be around 7 percent each year [6]. The National Urban Development Strategy, 2017,

notes about 10 percent of the urban population resides in informal settlements and that the increasing trend of informal settlements is a major urban issue. Informal settlement organisations, NBBSS and NMES are responsible for the enumeration and survey of informal households plus the mapping of their settlements, the ID cards they distribute can be a method of defining “fake and genuine” informal settlers [7]. Although obtaining land certificates for their current residence is preferred, there was acceptance by all representatives that resettlement is unavoidable for some informal settlements. These bodies argue that there should be certain norms that ensure the livelihood and wellbeing of relocated families. Health, education, basic services such as roads, water and sanitation, and access to jobs must all be accounted for in relocation plans and “absorbed into new communities”. Community leaders expressed their willingness to negotiate with government; claiming negotiation is the most effective way to meet their demands and protect their fundamental rights.

2.2 Resettlement

Resettlement must be intended and carried out as a development project over a minimum of two generations and comprises not only protective measures, but also the provision of new rights, resources and strategies [8]. Despite significant financial investment and policy provisions, many resettlement projects have produced limited outcomes in resettlement projects, which often overlook the long-term well-being of the affected communities. Steinberg stressed the importance of meeting the psychological, social, and economic expectations of households in the newly built environment [9]. Wijegunaratna et al. also highlighted that resettlement projects fail due to housing that does not respond to the needs of resettlers, such as the loss of livelihood and the disruption of daily routine [10]. A successful resettlement strategy is one that is instigated by the resettlers themselves.

2.3 Resettlement Principles

Tadgell has proposed the principle of resettlement for risk areas, the first of those principles is proactivity, which refers to the removal of people from high-risk areas before a disaster occurs. The second principle is communication and participation, meaning that, throughout the resettlement process, resettlers and other affected populations such as host communities must have enough information about the resettlement and opportunities to voice their interests, concerns, and propositions. The third principle is permanence; when resettlement is the only viable adaptation measure, special attention must be paid to “pull” factors, such as long-term adequate planning and site design, livelihood opportunities, and access to public services. The fourth principle is compensation of resettlers, which can be done through a combination of ways (e.g. cash, land, materials, and professional training), but it should be adequate to prevent resettlers from feeling unfairly treated or fearing they will be disadvantaged by the move. The last principle is livelihood protection, which refers to the need to, as quickly as possible, restore income opportunities and community bonds in the new resettlement area. If the five principles are fulfilled,

resettlement is more likely to become a durable solution with people enjoying their rights in similar ways as before resettlement [11]. Upgrading programmes must give attention to the experiences of women, persons with disabilities, migrants, non-citizens, the elderly, children, and any other vulnerable groups which are identified as living in the settlement.

2.4 Resettlement Practices

Based on the literature, resettlement preferences among households in landslide-prone areas of Cameroon are influenced by socioeconomic conditions and perceptions of risk. Poorer households are less willing to resettle due to the potential harm to their social networks and heightened risk perception, viewing resettlement as riskier than natural hazards. Their decisions are shaped by group behavior, historical events, and trust in institutions. In contrast, wealthier households, with better coping mechanisms, are more likely to take the risk of resettlement, especially to areas with improved infrastructure [12]. Similarly, in Kigali, Rwanda, urban-induced displacement studies highlight that participation in resettlement decisions fosters acceptance and mitigates feelings of unfairness, marginalization, and distrust. Proximity to essential services like education, healthcare, and markets is crucial, especially for low-income individuals who prioritize access to employment opportunities. However, discrepancies exist between the preferences of planning officials and affected people, underscoring the need for improved communication [13]. World Bank resettlement practices emphasize the management of social risks and the economic empowerment of women and vulnerable groups. Encouraging private sector participation through incentives like additional development rights (TDR and FAR) has been a strategy to engage developers in resettling informal settlers in modern housing at their expense. In China, studies on risk perception and mining-induced displacement in Anhui Province reveal that the age of the HH head has a significant negative correlation with willingness to resettle, while families with stable employment are more inclined to move. Greater social resources increase the opportunity cost of relocation [14]. Similarly, a survey in Beijing on residential push-pull factors influencing relocation from megacities indicates that HH type and marital status play a role, with younger generations more willing to move due to personal opportunities. Financial support, such as housing subsidies, is also critical in improving local housing affordability, making relocation more feasible [15].

2.5 Decision Making Theories and Preferences

In most cases, decision making means thinking in conditions of uncertainty: we cannot predict with certainty the future outcome of the available alternatives, but in the best of cases we can only estimate the probability of these outcomes. Contrary to the first theories, which saw decision making linked to rational choice, today it is known that human decisions are based both on hedonic and emotional motivations and on rational motivations. According to life cycle theory, people's resettlement preference might vary with the demographic and socioeconomic characteristics of age, gender, marital status, and educational experiences. A study

by Liu and Wang used survey data to discover that the willingness of high-educated residents to convert hukou status (which determines access to public services) and settle down in larger cities was greater than the willingness of less-educated residents [16]. According to Lee's push-pull model (1966), costs induced by resettlement can act as obstacles. Furthermore, resettlement intention can be significantly affected by residential stay duration and relocating costs present greater obstacles for residents [17]. It is argued that poorer households are more risk averse. This is particularly true for downside risks (i.e. loss aversion), since the livelihoods of poor people are severely affected by negative income shocks, like those caused by resettlement [18], it can be hypothesized that the poorer households consider the resettlement risk higher than the natural disaster risk. The group inhibition or bystander effect states that as long as there is no consensus within the community to resettle, the status quo remains. A study by Lu (1998) concluded that structural factors, such as housing tenure, household type, gender, income, and stay duration, can directly influence residential satisfaction and mobility intention, and thereby affect actual mobility [19]. Socioemotional selectivity theory maintains that as time horizons shrink, as they typically do with age, people become increasingly selective, investing greater resources in emotionally meaningful goals and activities whereas younger generations would invest in personal growth and opportunities [20]. Unlike purely rational models, the Willful Choice Model acknowledges the influence of subjective factors such as emotions, beliefs, and experiences, its reliance on individual capabilities and subjective preferences, which shape the decision-making process [18].

2.6 National Case Studies: Kirtipur Resettlement and Ichangu Housing

Kirtipur Housing Project (Paliphal Housing)

Kirtipur Housing Project was the first planned urban resettlement in the country [21]. This relocation project, a joint effort of Lumanti, informal settlers, Asian Coalition for Housing Rights, Slum Dwellers International, and the Kathmandu Municipal Corporation was financed by the Urban Community Support Fund [1]. It was inaugurated in 2005 and rehabilitated the families displaced due to the construction of Bishnumati Link Road in Kathmandu in the early 2000s. Among the 142 evicted families, only 62 were identified as "genuine squatters", but only 30 resettled in Kirtipur Housing Project while others opted out as the relocation site was not suitable for them. Low-income households of Kirtipur were also added to the beneficiary list. 44 dwellings of total built up 538 sq.ft and 550 sq.ft were priced at Rs.330,000 Rs.350,000 respectively. The community together with the Housing Management Committee decided they would pay Rs 2,000 per month and Rs 10,000 in down payment before they got the houses in their own names. The interest rate is at 3percent p.a. and repayment period of 15 years. The beneficiaries of the Kirtipur housing program were involved in decision making on both the site selection and the housing design [22]. The Kirtipur housing project is considered a successful resettlement in Nepal. Some challenges persist such as issues related to land tax, collective service fees and the houses presently not catering to the increasing household

sizes. The residents have not received legal ownership, there are ongoing discussions on whether the residents receive ownership of only the house and ownership of land remains with the Kirtipur Nagar Awas Samiti (KII). Lumanti shared that the lack of a policy for collective ownership is the reason for the delayed ownership documents to the residents in the Kirtipur Resettlement.

Ichangu Housing

In 2012, the Department of Urban Development and Building Construction had also constructed a multi-storey housing at Ichhangu Narayan, a land pooling site in Kathmandu as a part of the resettlement program for the informal settlers. The project was initiated after the government was condemned for evicting 250 squatters of Thapathali in Kathmandu without arranging alternative shelters for them. 227 housing units of sizes 200 sq.ft each was built. The informal settlers, however, resisted resettlement to the Ichhangu housing apartments, preferring to acquire land ownership of their current space of residence. Residents claimed high prices, distance from the city center where a majority of them work, and no public transportation or schools for their children as the main reason for the refusal [23]. Interviews with the informal settlements in Thapathali; Thapathali Settlement Committee Secretary, Mr. Gopal Poudel and NBBSS Secretary, Mr. Raju Lama further revealed inadequate sizes to fulfill the HH's requirements, lack of government's coordination with the informal settlement community and unclear process of legal ownership such as the total pricing of the apartment, installment periods, loan term, interest amount as the reasons.

Based on the literature review and the case studies, the following resettlement options have been provided to the informal settlements. The options were finalized during a Focus Grouped Discussion [24] conducted in Thapathali Informal Settlement.

Resettlement Option	Studied resettlement initiatives
Government housing with shared ownership schemes	<ul style="list-style-type: none"> Kenya – Tenant Purchase Schemes (TPS) Residents pay monthly installments to own the house while land ownership remains with the government. Kirtipur Resettlement (Ongoing discussion)
Rental Housing	<ul style="list-style-type: none"> PMAY Urban - Affordable Rental Housing Complexes (ARHCs) for Urban Migrants/ Poor
Direct Financial Assistance	<ul style="list-style-type: none"> PMAY Urban Janta Awas
Subsidised Credit Schemes	<ul style="list-style-type: none"> Housing For EWS Madras Neheza Resettlement For El Mina Kebbe
Community led housing development projects	<ul style="list-style-type: none"> Baan Mankong Housing Program (Thailand)
Free house allotment	

Figure 1: Resettlement options

3. Research Design

This research adopts a mixed-methods approach grounded in the pragmatic research paradigm to comprehensively explore the resettlement preferences of informal communities. By incorporating a transactive approach, integrating qualitative and quantitative methods, the study seeks to capture the complexities of resettlement dynamics, focusing on how

socioeconomic factors shape community preferences. The methodology ensures a balance between the nuanced perspectives of stakeholders and measurable insights derived from household-level data. Questionnaire design was prepared with the joint effort of Dr. Sanjaya Uprety and the author. Descriptive analysis was used to examine how socioeconomic factors influence resettlement preferences. A five-point Likert scale assessed the importance of various resettlement features, and the Relative Importance Index (RII) ranked these features by perceived significance.

The selection of case study areas for this research is designed to ensure relevance, diversity, and practicality in the implementation of the research objectives. The historical significance of settlements is a key factor, with a focus on locations that have undergone previous resettlement initiatives or eviction attempts and are located at risk prone areas. The study includes settlements with socioeconomic heterogeneity, reflecting variations in ethnicity, income levels, and occupations. In addition, sites with active community mobilization, such as the presence of local organizations advocating for the rights of informal settlements, are included to explore the role of collective action in shaping the outcomes of resettlement. The selected sites are

- Thapathali Informal Settlement
- Jagritinagar Informal Settlement

4. Study Context

4.1 Case Area 1: Jagritinagar Informal Settlement

The settlement consists of 116 households. Majority of the households have been staying for more than 15 years, while a few households sold the houses and moved elsewhere. The house construction is of temporary, semi permanent and permanent nature constructed of brick, AAC block or tin, most of which are of 2.5 storeys. Some households rent out their homes while continuing to live alongside the tenants, whereas 2-3 residents have rented out their houses and moved elsewhere. The tenants pay a monthly rent of Rs.3000–Rs.4000. The households claim they have invested 8-10 lakhs on their households till now, including the cost of annual maintenance. Residents often need to take loans to repair their homes, which they obtain from informal settlement cooperatives. These cooperatives offer loans of up to 5 lakhs at a 2 percent interest rate for various needs, including school fees, home repairs, and medical expenses. Any savings they have are deposited in these cooperatives, as they do not use commercial banks for savings. Infrastructure and services like electricity and water supply are accessed directly through the authorities, with approval obtained via ward recommendations. These services are provided individually to most households, and the associated fees are also paid separately by each household. The children in the settlement study in nearby semi government schools.

4.2 Case Area 2: Thapathali Informal Settlement

Thapathali informal settlement, established in 2006, also known as Paurakhi Basti lies adjacent to the Thapathali bridge

connecting Kathmandu and Lalitpur. The settlement consists of 142 Households of diverse communities, primarily rural migrants and marginalized groups. The Maoist insurgency played a major role in the increase of the residents here. Land plots are divided into sections measuring approximately 13' X 28'. The allocation of land plots is taken up by a committee called "Poor Settlement Conservation Advocacy Forum Nepal" [24]. There is no formal process or community or ward authorization required when a new household settles in the area. The infrastructure has been provided by various local bodies and informal settlement committees. The house number is given by the ward. Water is supplied through SPOSH Nepal and NMES. NEA has provided electricity in the site. For sanitation, they have septic tanks, and the wastewater directed to the government drainage system. All the houses are of temporary nature, constructed of bamboo and tin. In average, an investment of 3 to 4 lakhs was made to build the house and related infrastructure. About 3 percent of households in the community are renting their space. The monthly rent paid by the households is given voluntarily and typically ranges from Rs 200 to 400, the house owners also live in Thapathali. There is also a hotel for this purpose. All households currently have loans, as borrowing has become a common necessity due to expenses exceeding income.

5. Findings and Analysis

5.1 Jagritinagar Informal Settlement

5.1.1 Income Level and number of income source

With the increase in income sources, the households gradually shift from preferring a house to preferring other options such as subsidized credit for land purchase, direct financial assistance etc. 4.3 percent households with only one income source opted for subsidized credit for land whereas 14.8 percent of households with secondary income sources opted for the same. In households with income below Rs. 5000, most households opt for free housing or government built housing with shared ownership citing they do not have enough income to invest individually on a new home. HH are more affected by having multiple sources of income rather than income levels alone in case of subsidized credit for land purchase.

5.1.2 Type of Household

The type of household plays a role in determining the resettlement preference where 50 percent Joint families, preferred Free house allotment, 10 percent each on Subsidized credit for land and government built housing with shared ownership schemes and 20 percent on direct financial assistance whereas 10 percent on other options. Joint family is the only type of household who chose direct financial assistance which could be due to factors such as inadequate space for the family members in the free house allotment and government housing. A larger family size would consist of multiple sources of income, with direct financial assistance they could customize their house to their needs which may not be the case of nuclear and single person HH where in comparison, a large set of needs is not required to be met. 73

percent of nuclear families, preferred Free house allotment, 10.8 percent Subsidized credit for land, 13.5 percent on government built housing with shared ownership schemes and 2.7 percent on community lead developing projects. Single person Households, which in Jagritinagar only consists of people above 60 years have preferred housing options, where 66.7 percent have chosen free house allotment whereas 33.3 percent have chosen government built housing with shared ownership schemes. Secondary source of income has been attained by 50 percent of joint families, 54.1 percent of nuclear families and 66.7 percent of single person households. The elderly are also provided with “Bridhha Bhatta” which constitutes to being a secondary income source alongside money sent by children.

5.1.3 Age of Household Head

Free house allotment (68percent) is the most preferred resettlement option, with government built housing with shared ownership scheme (14 percent) being the second most preferred and subsidized credit in land (10 percent) is the third preference. The data also shows that the younger generation, 18-30 yrs and 31-45yrs prefer housing options rather than subsidized credit for land. This shows a significant change from the latter years where land was the first priority. Respondents from 31-45 age group also shared that if they were provided with direct financial assistance they would use it to go for foreign employment or start a new business.

5.1.4 Primary Occupation

Majority of service job holders prefer government built housing with shared ownership schemes. Subsidized credit for land purchase has been preferred moderately by daily wage labor, self employed as well as unemployed in contrast to service job holders. Their inability to access loans directly from banking institutions at affordable rates could be a reason behind their preference.

5.2 Thapathali Informal Settlement

In Thapathali, 14.3 percent male respondents prefer subsidized credit for land whereas 10.7 percent female respondents prefer the same. Similarly, only 7.1 male respondents preferred direct financial assistance whereas 10.7 percent female respondents opted for the same. 100 percent of single person households opted for free house allotment in a new settlement whereas 60 percent nuclear families and 46.7 percent joint families chose the same. A higher percentage of joint families (26.7 percent) preferred subsidized credit for land purchase which is similar to that of Jagritinagar, for the purpose of customizable design and sizes due to larger family size. Households in the same income bracket without a secondary source of income are perceived to not prefer subsidized credit for land purchase. Free house allotment is the main preference of all income groups except HH with income above Rs. 30,000 most of whom have chosen government built housing with shared ownership schemes. Secondary Source of Income is the major determinant for subsidized credit for land purchase which brings about more flexibility in the house design and construction. 33.3 percent of HH with secondary income source opted for subsidized

credit for land to built house whereas only 5.8 percent of HH without secondary income chose the subsidized credit.

5.3 Key Informant Interviews

5.3.1 Ashok Kumar Rai - Chairperson Jagritinagar Ekai Samiti + former Chairperson of NBBSS

Mr. Rai emphasized that land ownership is the most crucial factor for resettlement. He noted that informal settlers are willing to contribute a certain (1-2percent) percentage of the land's value and build their homes on their own terms. He stated, *“The state does not have to bear the full financial burden; we can also contribute through our efforts”*. He highlighted the need for employment opportunities near the resettlement site and the site to be in safe areas. Additionally, there is ailani/parti jagga (public or unused land) near the current settlement, which could accommodate some households, while others could be relocated elsewhere. He suggested that relocation does not have to occur in a single site; instead, small clusters of 4-5 households could be relocated together. For vulnerable groups, such as single-woman-headed households, persons with disabilities, and elderly-only households, additional support in the form of loans, benefits, or employment opportunities should be provided to enable them to repay their obligations more easily.

5.3.2 Gopal Poudel – Secretary Thapathali Samiti

Mr. Poudel stressed that all households should be relocated to the same place to maintain a sense of community and security against potential conflicts with nearby locals. If sufficient land for individual houses is not available, he proposed for walk up apartments with legal ownership and rent based cooperative housing model. He strongly emphasized the need for legal land ownership. While free housing is not necessary for most, but for vulnerable households—such as those headed by single women, persons with disabilities, or the elderly—free housing would be essential. Additionally, he expressed a strong aversion to being labeled as “sukumbasi” (squatter) in the relocated site, as it carries a derogatory connotation.

5.3.3 Raju Lama (NBBSS Secretary)

Mr. Lama emphasized the key factors for the success of a resettlement initiative would be the collaboration with the informal community and the design of acts, policies and working procedures accordingly. He shared the need of collective housing models and land ownership as the main criteria for resettlement. He also stressed the need of efficient coordination between KVDA, Bhumi Aayog, HPCIDBC, NGOs etc. He mentioned that, Ichangu Housing which is a past resettlement initiative has lead to the loss of trust in the government. However, if the government collaborates with the settlers and engages in negotiations, the settlers are willing to resettle. He further shared the difficulty in taking loans from commercial banks due to lack of ownership to keep collateral. There are finance cooperatives in informal settlements which could collaborate with commercial banks to provide larger loans to the settlers which are Gyan Jyoti Sahakari, Navadeep Jyoti Sahakari and Pragati Mahila Utthan.

5.3.4 Lumanti Support Group for Shelter

In the long run, Lumanti envisions affordable housing and rental models as sustainable solutions. To support this, they recommend joint or collective ownership regulations and advocate for Town Development Fund reforms, allowing committees and NGOs to access housing loans, which are currently restricted to municipalities. They also propose establishing a City-Level Fund managed by a committee comprising academicians, architects, engineers, NGOs, and city-wide networks to ensure fair beneficiary selection and fund allocation. Additionally, Lumanti suggests formulating cooperative housing guidelines to promote sustainable housing solutions. Despite these recommendations, several challenges persist. The high cost of land in Kathmandu necessitates municipal involvement to make housing projects feasible. Government housing initiatives often lack a phase-wise approach, leading to incomplete projects due to budget uncertainties. Another challenge is beneficiaries selling legally obtained properties, undermining long-term housing stability.

5.3.5 DUDBC: Ar. Yekraj Adhikari

Ar. Adhikari shared the important parameters of housing which are land, finance, materials and technology and household services and infrastructures. He mentioned that a systematic approach for the provision of Land and Finance is necessary in Nepal to provide affordable housing which could solve the problem of informal settlements.

5.3.6 Kathmandu Metropolitan City, City Planning Commission: Er. Baburam Bhattarai

Er. Bhattarai shared that the issue of the informal settlements cannot be solved by the KMC alone, a collaboration with the federal government is required to solve the challenge.

5.3.7 HPCIDBC, Yojana Sakha, Er. Uddhab Nepal

Er. Nepal stressed the importance of participatory resettlement planning and the need of providing options to the settlers. He also shared the need of improvement to land banking initiatives, employment opportunities, incremental housing and cooperative housing.

5.3.8 NLHDF - Er. Bhesh Raj Lohani – Immediate Past President

Er. Lohani cited that through TDR they could provide affordable housing to the urban poor if they got FAR incentives, concession in building permits and registration fees. He also mentioned the importance of multiple stakeholders participation in the initiative. He added that, Government support to the private sector would be vital for providing affordable housing. Some challenges such as social disparities due to social groups mixing and affordability issues due to high cost of land should be addressed.

6. Discussion

The main research objective of this study was to understand how socioeconomic factors shape the resettlement preferences of informal settlements. The secondary research objectives are to identify and assess the socio economic conditions of the informal settlements, To investigate the features informal settlements consider essential in resettlement models and to assess the past resettlement experiences of informal settlers in Kathmandu.

6.1 Socio Economic conditions of the informal settlements

A higher percentage of Female HH heads had income ranges Below Rs. 10,000 than Male HH Heads in Jagritinagar. The single person households in Jagritinagar constitutes 6percent of the HH and all of them are above the age of 60yrs. Majority of them have cited that subsidized rates in land would not be feasible for them as they are not capable of paying installments and incrementally constructing a house on it. All the respondents, the informal settlements and the KII agreed that they would require additional subsidies which is in line with the gender aspects and vulnerable groups discussed by World Bank in the case of Mahanarashtra and the Janata Aawas Karyakram in Nepal [25]. A respondent shared that she only opted for a house not even land because her income hardly sufficed for the fooding of their household, even if she was provided with land, she could not build a house on it. In households with situations as such, to repay the loan amount, some kind of subsidy could be provided by the state such that they could carry on their livelihood as well as repay the installments. A higher percentage of Joint Families are attracted towards subsidized rates in land, which can also be attributed to the presence of secondary sources of income and the need to accommodate more members in the same house which might not be the case for housing provided by the government. HH with secondary income in the same income level were more accommodating to subsidized rates in land than the group without secondary income, this can be attributed to the multiple wage earner theory. The age group below 45yrs in both the informal settlements were more open towards the various types of resettlement options such as community developed projects and financial assistance. The age group above 45 years were more accommodating towards subsidized rates in land than the younger age groups. The study by Song and Wu (2022) yield similar results where younger age groups were more sensitive to personal opportunities and modern solutions [15]. The NLSS also shows that households tend to diversify their income which would aid in their income generation. Many informal settlers rely on unstable employment, such as daily wage or informal jobs, making their ability to afford housing more dependent on secondary sources of income. The NLSS further reports that annual spending on consumption increased by 66 percent in the past 12 years, reaching Rs. 126,172 in 2023 from Rs. 75,902 in 2011 and the rise in rental housing from 7.8 percent to 15.1 percent in the same period. [26] With such an increase in living expenses, low-income households struggle to allocate resources for secure housing. Ensuring access to employment and creating flexible housing models that cater to the needs of

low-income groups will be key to the success of any resettlement or housing strategy. By addressing affordability barriers and expanding affordable housing initiatives for low-income groups will be key to ensuring equitable and long-term solutions for housing security in Nepal.

6.2 Past resettlement experiences of informal settlers in Kathmandu

The informal settlements take "Sukumbasi" as a derogatory term and do not want their future generations to have that name or be subjected to any kinds of eviction or inequality. The Kirtipur resettlement has been considered as it has resettled both informal settlements from Bishnumati link road and the low income groups in Kirtipur. While the legal ownership documents are still on their way, Kirtipur resettlement has been taken as an elite example of resettlement projects in Nepal and other informal communities also celebrate it. On discussing about resettlement, the informal settlements mention that the resettlement should be like the Kirtipur resettlement, it is being taken as a positive step and the informal settlements are motivated to resettle through this. Both the settlements have faced events of forced eviction however, Thapathali Informal Settlement has dealt with a higher number and degree of forced evictions. Thapathali Informal Settlement was subjected to eviction in 2012 and were provided an option to settle in Ichangu Housing. However, the housing received criticism from the informal community that it did not align with their needs. The model of ownership was not clearly determined which lead to confusion about its reliability. The opposition from the locals of Ichangu was also a major setback, where they even considered the price of their land had depreciated due to the settlement of informal settlements. The TIS are still sensitive when discussing about the Ichangu housing project. In connection to the forced evictions, the Thapathali Informal Settlement had to function as one and even in the present, they have a strong bond with their fellow neighbours. This has also affected their importance on social networks as on being resettled, they want the whole community to be resettled together. This is not the case of Jagritinagar Informal Settlement, where the residents share a good bond but do not give much importance on being resettled together as a group. Frequent flood risks were the main reason most settlers in both areas preferred resettlement. In Thapathali, weakening local government support and stronger community cohesion also influenced relocation decisions, driven by the need to unite during eviction threats and support from nearby communities.

6.3 Facilities informal settlements and other stakeholders consider essential in resettlement models

Respondents in Jagritinagar Informal Settlement have given the highest importance to legal ownership (RII = 0.996) whereas Thapathali Informal Settlement have attributed it to employment (0.991). The shifting housing landscape with declining household ownership from 89.37 percent in 2010/11 to 81.4 percent in 2022/23 suggests that homeownership is becoming less accessible for many Nepalese, likely due to rising land prices, increased urbanization, and limited

financial resources for home acquisition. This could be why the settlers place significant value on legal ownership and alternative, subsidized housing options. Jagritinagar Informal Settlement have given employment opportunities the second most importance with an RII of 0.952. While Thapathali Informal Settlement respondents have given availability of transport (0.949) and proximity of schools and healthcare (0.946) high importance, Jagritinagar Informal Settlement has given 0.88 and 0.848 respectively. The organizational stakeholders including Lumanti and government bodies have given the highest importance to subsidized credit scheme for housing (0.95), whereas employment opportunities, availability of transport and proximity of schools and healthcare have also been given importance. The government and NGO stakeholders believe secure tenure through access to finance would be more important than direct legal ownership. The difference in ideologies of the two groups can also be found in resettlement in Rwanda [13]. The opportunity given to resettled people to have reasonable access to public transport, health facilities and places of education, especially the households with children, contribute to the success of a resettlement project. This is in line with the findings by [15]. These findings prove that while shelter is a prerequisite popular in the phrase "Gaas, Baas ra Kapas", it is not attainable without employment opportunities and thus must be provided in the resettlement sites.

7. Conclusion

Informal settlements are a global phenomenon, rapidly expanding in urban areas and creating a growing demand for resettlement initiatives. This research has dived into the socio economic realities of the informal settlements and how it affects their resettlement preference. The findings reveal that while land ownership remains a primary concern, resettlement choices vary based on factors such as age, income stability, household structure, and employment opportunities. Joint family structures were found to prefer more flexible solutions to cater to their larger needs whereas a majority of nuclear and single person households preferred housing solutions such as government built housing and community developed housing. A key finding is that households were more influenced by the presence of secondary source of income rather than their income levels. Past resettlement projects, such as Ichangu Housing, underscores the need for participatory planning that aligns with community needs rather than imposing top-down solutions. In Thapathali, informal settlers preferred community-developed housing and resettling together, unlike Jagritinagar settlers who were indifferent. The court's 20m river setback verdict influenced resettlement decisions in Thapathali but had no impact in Jagritinagar, reflecting Thapathali settlers' increased organization due to repeated eviction threats. Key informant interviews further emphasize that successful resettlement requires a multi-faceted approach, integrating financial accessibility, livelihood security, and social cohesion. The study further recommends policy interventions such as flexible financing mechanisms to facilitate sustainable resettlement and allocation of affordable housing for low income groups through housing developers in exchange for incentives.

8. Recommendation

This study recommends the housing provision to LIG and EWS through private housing developers. To encourage private developers to invest in affordable housing for resettling informal settlements, various financial, regulatory, and policy-driven incentives can be implemented. Tax benefits such as property tax abatements, tax credits, and subsidies (including low-interest loans and infrastructure support) can significantly reduce development costs. Zoning and land-use incentives, such as density bonuses, fast-tracked permits, and relaxed parking requirements, help lower land and construction expenses. Additionally, regulatory flexibility—such as waiving impact fees, relaxing building codes, and reducing minimum lot sizes—can further facilitate the development of affordable housing. Income tax exemptions and reduced GST rates for affordable housing projects would also help lower costs, making these projects more attractive to developers. Granting infrastructure status to affordable housing would provide access to priority lending at lower interest rates, further incentivizing investment. Furthermore, cross-subsidization, where commercial development funds affordable housing, can enhance the viability of these projects. Finally, state-specific incentives, such as additional FAR or TDR for slum redevelopment, should be considered to address regional housing needs. Collectively, these incentives would make affordable housing projects financially viable and attractive, while addressing the housing needs of informal settlers and contributing to long-term community development.

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APPENDIX D: PLAGIARISM TEST REPORT

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