UNDERSTANDING VULNERABILITIES THROUGH AN INTERSECTIONAL LENS IN KHOKANA, KATHMANDU, NEPAL

Rachana Upadhyaya, Southasia Institute of Advanced Studies
María Evangelina Filippi, University of Bristol
Ryerson Christie, University of Bristol
Jonathan Ensor, University of York

TOMORROW'S CITIES WORKING PAPER

SEPTEMBER 2022

http://dx.doi.org/10.7488/era/2767

Tomorrow's Cities is the UKRI GCRF Urban Disaster Risk Hub

About Tomorrow's Cities

"Our mission is to reduce disaster risk for the poor in tomorrow's cities."

Tomorrow's Cities is the UK Research and Innovation (UKRI) Global Challenges Research Fund (GCRF) Urban Disaster Risk Hub – a five-year global interdisciplinary research hub.

Our aim is to catalyse a transition from crisis management to multi-hazard risk-informed and inclusive planning and decision-making, for cities in low-and-middle income countries.

Globally, more than two billion people living in cities of low-to-middle income countries are exposed to multiple hazards such as floods, earthquakes, landslides, volcanoes and fires, which threaten the cyclical destruction of their lives and livelihoods. With urban areas expanding at unprecedented rates, this number is expected to reach four billion by 2050.

Failure to integrate multi-hazard disaster risk into urban planning and decision-making presents a major barrier to sustainable development, including the single greatest global challenge of eradicating poverty in all its forms.

But this global challenge is also major opportunity: as ~60% of the area expected to be urban by 2030 remains to be built, we can reduce disaster risk in tomorrow's cities by design.

We are one of 12 UKRI GCRF Hubs funded by a UKRI Collective Fund Award, as part of the UK AID strategy, putting research at the heart of efforts to deliver the United Nation's Sustainable Development Goals (SDGs).

www.tomorrowscities.org
@UrbanRiskHub
The UKRI GCRF Urban Disaster Risk Hub
ECCI High School Yards, Infirmary Street, Edinburgh EH1 1LZ

Acknowledgments

We would like to acknowledge a group of people who engaged in designing, refining, and commenting on the conceptual framework, interview questionnaires, and the report itself. Therefore, we would like to acknowledge the contributions of Netra Prasad Timsina, Alejandro Barcena, Sophie Blackburn, Anushiya Shrestha, and Dilli Prasad Paudel. We would also like to thank Helen Shova Maharjan for her help in arranging the interviews despite COVID-19 lockdowns. We are very much grateful to all the research participants for their time and sharing their experiences with us.

Table of Contents

List of Tables 5
List of Acronyms 6
1. Introduction 1
1.1 An intersectional lens to understanding vulnerabilities 3
2. Research Design and Methods 5
2.1 Data generation 5
2.3 Ethical considerations 6
3. Khokana: contextualising vulnerabilities 8
3.1 Introduction to the place 8
3.1.1 Administrative evolution of Khokana 10
3.2 People of Khokana: community composition 11
3.2.1 Newar caste sub-systems: Jyapus and 'the others' of Khokana 13
3.2.2 Guthi System in Khokana 16
3.3 People's perception on hazard and risk in Khokana 17
4. Analysing vulnerabilities 21
4.1 Vulnerability as policy discourse 21
4.2 Intersecting vulnerabilities in post-disaster reconstruction 26
5. Conclusion and policy recommendations 32
Annex 1. Information on Research participants 34
Annex 2: Overview of large-scale development projects in Khokana 36
1. Kathmandu-Terai Fast Track Project 36
2.Kulekhani High Tension Project 38
3. Satellite City Project. 39
4. The Outer Ring Road Project 40
5. Bagmati Corridor Project (Bagmati River Basin Improvement Project) 41
References 42

List of Tables

Table 1. Caste segregated household distribution 12
Table 2. Population with disability 13
Table 3. Newar caste hierarchy 14
Table 4. The history of hazards and hazard risk perception in Khokana 18
Table 5. Provisions for the inclusion of marginalised groups in national and local DRR&M Acts . 24
Table 6. List of Research Participants- Interviews 34
Table 7. Participants of Focus Group Discussion with WDMC 35

List of Acronyms

ADB: Asian Development Bank

CDO: Chief District Officer

CBS: Central Bureau of Statistics

DPR: Detailed Project Report

DRR: Disaster Risk Reduction

DRR&M: Disaster Risk Reduction and Management

EoI- Expression of Interest

FGD: Focus Group Discussion

KII: Key Informant Interview

GESI: Gender Equality and Social Inclusion

GoN: Government of Nepal

HPCIDBC: High Powered Committee for Integrated Development of the Bagmati Civilization

JICA: Japanese International Cooperation Agency

KV- Kathmandu Valley

KVDA: Kathmandu Valley Development Authority

LMC: Lalitpur Metropolitan City

LGOA- Local Governance Operation Act

MoFAGA: Ministry of Federal Affairs and General Administration

MoHA: Ministry of Home Affairs

MoPIT: Ministry of Physical Infrastructure and Transport

MoUD: Ministry of Urban Development

NEA: Nepal Electricity Authority

NSET- National Society for Earthquake Technology

NUDS: National Urban Development Strategy

ORR: Outer Ring Road

UNESCO: United Nations Educational, Scientific and Cultural Organization

VDC: Village Development Committee

WDMC: Ward Disaster Management Committee

1. Introduction

This working paper is part of, and contributes to, the overarching research conducted under Tomorrow's Cities, the UKRI GCRF Urban Disaster Risk Hub, focusing on the cross-city social sciences inquiry about Vulnerabilities and Capacities. Specifically, the working paper analyses and presents preliminary conclusions drawing on the case study of Ward No. 21, Khokana, with the objective of better understanding the cultural, social, and political rootedness of vulnerability that differs among individuals and different social groups.

Nepal is ranked fourth in global climate risk and eleventh in occurrence and impact of earthquakes globally (UNDRR, 2019), which makes it one of the most vulnerable countries to the impacts of multiple hazards. Vulnerability analyses as a core component in studying disaster risk emerged in the 1970s. Through the next decade, literature analysing what led to some places and communities more prone to disasters compared to others increased significantly with study areas from around the world, especially in countries of the so-called 'global South'. Such studies underscored the apparent unequal impact of extreme natural and physical events, both at country and community level. This emphasis of the differential impacts of disasters on individuals and communities helped to create an understanding that disasters are not 'natural' phenomena, but very much social and political in nature, thereby redefining vulnerability as social vulnerability (Enarson & Meyreles, 2004: 50). This shift also identified that the root causes of disaster risk lie in the socio-political context. Hence, hazards and disaster situations do not create vulnerability but rather reproduce a situation where pre-existing vulnerabilities manifest in a myriad of ways. Thus, the study of vulnerability(ies) requires this entry point to their existence prior (ex-ante) or beyond the extent of a particular potentially hazardous event.

In Nepal, this social turn in the conceptualisation of disasters and vulnerabilities has been acknowledged through the new Constitution of Nepal (2015) and rather recent national legislation and policy documents, including the Disaster Risk Reduction and Management Act (2017), the National Disaster Risk Reduction and Management Strategic Plan of Action (2018-2030) and relevant sectoral policies. These legal frameworks and policy documents call for special attention to specific social groups, namely, women, children, senior citizens, persons with disability and people from lower caste groups (such as Dalits), in disaster situations. In this context, the concept of Gender Equity and Social Inclusion (GESI) has made substantial inroads into policy and programmes, across different sectors and government levels. The identification and inclusion of certain social groups, as mentioned above, across policies and programmes at all levels of government functioning through what is commonly referred to as the 'GESI mainstreaming' process is framed as a redressal for the systemic discrimination and historical exclusion of these groups from the state functioning (Rawal,2008; Gurung,2019). The interim constitution of Nepal (2007) that came into existence after a decade-long Maoist insurgency culminating in a people's movement (popularly known as Jana Andolan-II), abolished, and replaced the monarchy by a federal republic government. In subsequent

years, there have been attempts to mainstream GESI into all policy sectors (like urban planning, forestry, environment, infrastructure development). At present, eight national ministries1 have their own sector-wise GESI operational guidelines (ADB, 2020).

While the efforts of the government of Nepal is commendable in forming policies that are responsive to the needs of groups that have been historically excluded, it is important to consider whether such categorical approach2 in the understanding of marginalisation will eventuate the 'inclusive and egalitarian society' envisioned by the new constitution (2015). In the context of disasters, this discussion becomes relevant as to better comprehend the extent to which the inclusion of certain predetermined social categories in policies, plans and programmes can reduce the vulnerability of those individuals and groups that are most exposed to, and might potentially be most affected by, disaster situations.

The conventional study of vulnerability in the Nepali context is largely directed towards finding the variables and indicators that determine social vulnerability (see Aksha et. al, 2019; Gautam, 2017). However, a recent study carried out by Gupta et. al (2021) about social vulnerability during the COVID-19 pandemic in rural Nepal and India emphasises the need to understand the dynamic nature of vulnerability for a better institutional response during disasters. This working paper aims at drawing attention towards the dynamic and complex nature of vulnerability, that is, how vulnerability changes according to context (time and space) and hence cannot be encapsulated under a static and monolithic socio-demographic category. As an alternative to current policy discourse and in tune to more critical scholarly work, an intersectional understanding of vulnerability(ies) is proposed. The use of this intersectional lens allows us to understand vulnerability as "the result of different and interdependent societal stratification processes that result in multiple dimensions of marginalisation" (Kuran, 2020:1). In addition to Kuran's conceptualisation of vulnerability, this working paper also assumes that an intersectional analysis allows a more dynamic understanding of vulnerability by not labelling individuals into social categories of either privileged or oppressed, but rather highlighting how people can experience power and oppression simultaneously (Chaplin et.al., 2019:1).

This working paper is structured around five sections. The **Introduction** is followed by a subsection on intersectionality, tracing the brief history of the concept to highlight its contributions for understanding the

[1] The eight ministries which have approved GESI guidelines for their sectors include: (i) Federal Affairs and General Administration, GESI Policy, 2010; (ii) Urban Development GESI Operational Guidelines, 2012; (iii) Forest and Soil Conservation GESI Strategy, 2010; (iv) Education Consolidated Equity Strategy; (v) Health GESI Operational Guidelines, 2012; (vi) Agriculture GESI Strategy; (vii) Irrigation GESI Guidelines; and (viii) Physical Infrastructure and Transport GESI Operational Guidelines, 2017.

[2] Dividing people in homogenous categories such as women, children, elderly, or people with disability without considering the possible intersection of identities.

dynamic and complex nature of vulnerability. Section 2 synthesises the overall research design and methodology, including a reflection on the ethical considerations and procedural challenges of the research process. Section 3 introduces the case study of Khokana and its contextual particularities. An intersectional study of vulnerabilities requires a thorough understanding of the context where it is studied, including the socio-political situation, the history of the place and people, and caste and ethnic composition of the community. Section 4 concentrates on the analysis of vulnerabilities at two levels: (1) as policy discourse across the Nepali legislation and framing of policymakers (Section 4.1) and (2) as experiences of the residents in Khokana (Section 4.2) which presents how different identity categories (caste, migration status, language) intersect to produce differential marginalisation in post disaster recovery and reconstruction. The analysis at these two levels highlights the need for broadening the understanding of vulnerability in policy and practise through an intersectional lens not only in Khokana but potentially in all disaster risk reduction initiatives as the disaster vulnerabilities differ with individual's social location and social histories. Finally, Section 5 presents the conclusions and policy recommendations towards introducing an intersectional analysis of vulnerabilities when considering the reduction and management of disaster risk policies and project interventions.

1.1 An intersectional lens to understanding vulnerabilities

The term 'intersectional vulnerability' brings together two concepts, intersectionality, and vulnerability, to underscore the need to understand vulnerability beyond the characteristics of a predefined socio-demographic group (C.H.A. Kuran et al., 2020). Intersectionality or intersectional theory conceptualises the mutually constitutive nature of social divisions such as gender, class, race, and ethnicity that interact with each other to (re)produce discrimination and marginalisation[3] (Yuval Davis, 2006). The term intersectionality was introduced by Kimberely Crenshaw (1989, 1991) while raising the issues of Black women, whose unique positionality on the intersections of race and gender rendered their experience invisible in discourses of gender (focused on white women) and race (focused on Black men). While Crenshaw identifies race, gender and class as the 'axes of intersection', Davis (2006, p.205) asserts that

[3] By marginalization we understand the process that "render people invisible, voiceless in decisions that affect their lives, dismissing their local knowledge" (Wisner, 2016, p.30).

> "[t]he point of intersectional analysis is not to find 'several identities under one' (...). This would reinscribe the fragmented, additive model of oppression and essentialize specific social identities. Instead, the point is to analyse the differential ways in which different social divisions are concretely enmeshed and constructed by each other and how they relate to political and subjective constructions of identities".

Davis's conceptualisation of intersectionality as an analysis that looks beyond additive 'axes of identities' align better to the understanding of vulnerability advances in this working paper. That is, vulnerability in relation to multiple hazards, ranging from everyday threats to extreme events, to which individuals and their groups are exposed.

The emergence of vulnerability as a fundamental concept to better understanding disasters can be traced back to the 1970s and helped to shift technocratic hazard-focused studies and disaster management initiatives to a more socially situated understanding of disasters. The social vulnerability turn in disaster and disaster risk research and practice focused the attention on the structural inequalities that account for the differential impacts of hazardous events on certain social groups. In short, the social vulnerability approach asserts that societal power structures cause differential impacts or consequences, making some people and social groups more susceptible to disasters than others (Bankoff 2003; Enarson et al., 2003). Within such a conceptualisation, an intersectional approach enables an understanding of vulnerability beyond the socio-demographic characteristics of certain groups classified based on gender, caste, or ethnicity. C.H.A. Kuran (2020, p.1) asserts that "vulnerability is not a characteristic of a social category but a result of different and interdependent societal stratification processes that result in multiple dimensions of marginalisation". Hence, in advancing an intersectional approach to understanding vulnerabilities in DRR research and practice, we are aiming at moving beyond collecting sex/caste disaggregated data towards a more nuanced study of how different social identities associated with gender, caste, class, land ownership and migration status interact to result in differential experiences among individuals in disaster situations.

In this study, two distinct but interconnected methodological approaches are undertaken to understand vulnerability through an intersectional lens. In the first place, a detailed review of contemporary policies is carried out to identify how national, regional, and sectoral policies frame vulnerability and vulnerable groups in Nepal, in general, and Kathmandu, in particular. This was an

important exercise as the Nepali word for vulnerability, '*sankatasanatta*', is not commonly used; instead, the words for risk, '*jokhim*', and marginalised, '*simantakrit*', are used to denote social categories for special protection/affirmative action[4]. Such categorisation homogenises each social category and runs the risk of further marginalising the most excluded. In the second place, the case study of Khokana in Lalitpur Metropolitan City, Ward 21, is presented to underscore the relevance of an intersectional approach to vulnerability. A detailed description of the place is elaborated to locate the research participants in the wider context of their everyday living. The context description is followed by the empirical findings derived from fieldwork, showcasing the limitations of the present policies in addressing the complex and dynamic nature of vulnerability.

2. Research Design and Methods

2.1 Data generation

The research followed a qualitative mode of inquiry and drew from both primary and secondary data sources. The primary data presented in this report are collected as part of a larger social science research project in Kathmandu, directed towards understanding root causes of risk and risk narratives, DRR institutions and governance, political economy of urban change, and vulnerability and capacity at the case study level. Various research methods such as field visits (observation), transect walks, focus groups, and individual interviews were carried out collect data for different themes. Combined interview checklists were prepared by the researchers working across these themes. The interviews were carried at three levels:

1. City level, with urban planners, DRR experts, migration experts at both government and non-government agencies (11 interviews).
2. Lalitpur Metropolitan City Office with DRR section heads and planning officers (3 interviews).

[4] Wisner (2016) emphasises that "[t]he English word "vulnerability" turns out to be difficult to translate into many languages; even when a term is found, inevitably a good deal is lost in translation" (ibid., p.50).

3. Community level- KII with the ward chair, ward members, 2 FGD with the Ward Disaster Management Committee (WDMC), and household level interviews identified through purposive sampling (17 interviews).

The field research was carried out between August 2020 and September 2021. However, many exploratory visits to Khokana were carried out in 2019 and 2021 before and after the COVID-19 lock-down was in place, respectively.

2.2 Data analysis

Data analysis was carried out at two levels. Initially, a policy review (secondary data analysis presented in section 4.1) of national and local level DRR policies was carried out to understand the special protection provisions for 'vulnerable' people in disaster situation. The review helped to understand the formal/official understanding of vulnerability. Following the review, primary data was collected from Khokana through individual interviews with people living in lingering aftermath of 2015 Nepal earthquake. The interviews were transcribed and translated. Data generated through the interviews, helped us understand the lived experiences of the participants and their intersectional identities.

2.3 Ethical considerations

It is important to reflect on some of the ethical considerations that underpinned the field research and data generation process. The ongoing COVID-19 pandemic posed an ethical challenge of recruiting interviewees for in-person interviews at the community due to the health-related risk. The community where the fieldwork was carried out has also been engaged in a protest of the federal government's development plan for more than a decade (See Annex 2). Researchers have written about the ethical dilemma in situations where people would assume that they will receive some kind of support after sharing their stories (See Wood, 2008; Lake, 2018); here, a similar ethical challenge was faced as the individuals that were interviewed either had a family member who had lost their job due to the COVID-19, or the family was on the brink of losing their land to the federal government's development interventions. While everyone was grappling with COVID-19 uncertainties and sudden changes in the way of life, livelihood security due to formal employment made us, the researchers, less vulnerable to COVID-19 related mobility restrictions compared to the interviewees. We acknowledge our privilege of being safe from many of the

issues ailing our interviewees during the time of the interview. We hope this report, underscoring the intersecting vulnerabilities of interviewees, does justice to the voices of the people being interviewed and helps bring to the fore the issues otherwise unreported.

While the use of digital technology such as video conference apps (e.g., Zoom and Skype) made it possible to get connected with the interviewees during the time of social distancing, it further exacerbated the extractive nature of research as we appeared on people's phone screen, in their houses, without prior rapport. However, it gave the interviewees more control over the research process as they had to accept the invitation for an interview. Although we purposively selected the interviewees, the availability of a smart device and internet connection were the main criteria for selection. However, being mindful of the limitations set by such criteria, the research team reached out to community members without such facilities through telephone.

The researchers also purposively sought to interview people living in tin huts in the fringes of the ward-21 - the people displaced/unable to reconstruct their homes after the 2015 earthquake and with low economic means. Such extra effort was made despite the ethical qualms of doing research among economically challenged individuals during the COVID-19 pandemic to ensure the voices of the marginalised/urban poor were included to better understand the relevance of an intersectional approach in the analysis of vulnerability. Most of the households, because of the informal nature of their settlement, did not have internet access, and hence telephone interviews were carried out with the help of a research associate working in the field site. To limit the use of technology which was already a differentiating factor among the individuals we interviewed, we decided not to email consent forms to the interviewees, and oral consent was taken in each case. Pseudonyms are used to anonymize the identity of the respondents.

The researchers were mindful of the pressures of the interviewees from lower socio-economic groups that limit their time and energy in participating in the research. The situation was particularly challenging for interviewees from lower economic classes working in informal settings such as construction sites as they had lost their source of livelihood due to the COVID-19related mobility restriction. Hence, interviews were planned on a day/time that suited the interviewees the most. One of the reflections of the researchers while interviewing women participants is that they felt more relaxed and comfortable to speak with female researchers. The perceived superiority of men in patriarchal societies add to the already hierarchical relation between the researcher and respondent, which makes female researchers better suited in interviewing women.

3. Khokana: contextualising vulnerabilities

This section sets the context of the study. As disaster vulnerabilities exist prior to and beyond a disaster event, rooted in social histories and realities, an understanding of the context is important for understanding different causes of marginalization and its intersections. This section is divided in three subsections. The first subsection describes Khokana from a spatial and administrative perspective. The community composition with an exposition on Newari caste system and guthi system is presented in the second sub section. The final sub-section presents hazards and risks through the perspective of the lived experiences of the individuals.

3.1 Introduction to the place

Ward 21 of the Lalitpur Metropolitan City (LMC), locally known as Khokana, is a traditional '[5]' village located on the southern edge of the Kathmandu valley. Perched between two rivers, Bagmati in the west and Nakhhu in the east, Khokana is one of the last remaining farming communities within the Kathmandu valley. Etymologically, the word Khokana is derived from *Khwana*, where '*Khwa*' in Newari means cutting made by water and '*na*' means water (Manandhar, 2018).

Topography

Khokana is situated at 27° 28' N to 27° 38' N and 85° 17' 20" E to 85° 17' 60" in the southwestern part of the Lalitpur Metropolitan city. It is in an elevation of 1320-1358 m. The ward-21 covers the area of 3.169 sq.km.

Khokana is divided into two settlements: Khokana and *Sano*[6] Khokana, located on the south and north part of the ward, respectively. The official website of Ward21, shows that the total area of Khokana is 3,169 Km2 (Khokana, 2018). The old settlement, where 90 percent of the population reside (National Research Institute for Cultural Properties, 2016) covers only 0.20 Km2 (UNESCO, 2015). The old settlement is a conglomeration of densely constructed buildings joined wall to wall. The neighbourhoods are interconnected through narrow alleyways paved with bricks and cobblestones. This settlement was completely

[5] Newar, a caste group classified within Hindu varnashrama caste hierarchies as Vaishyas. They are the natives of Kathmandu valley with their own language, customs and tradition. Refer Shrestha (2007:205) for the history of Newars.

[6] The literal translation to English is small

rebuilt after the 1934 Bihar-Nepal earthquake which left only 9 houses standing, including the Rudrayani Temple (National Research Institute for Cultural Properties, 2016).

The terraced agriculture fields that look like an 'amphitheatre', on the ridges off the Ekantakuna-Tikabhairav highway, expands westward to the fertile *Doh fant*[7]. It separates Sano Khokana from the old core[8] settlement. The Shikali hillock lies in between, with the famous temple of goddess Shikali, the main deity of the *Newars* of Khokana, perched on top. The main entrance to the old settlement is through the southern gate, next to the bus park. The main road in this mediaeval style settlement is a narrow earthen road with alleyways branching out left and right. It leads to the famous Rudrayani temple, believed to be built around the 15th century by King Amar Malla (ibid). The road opens up to the *Kwe-lachhi chowk*[9], the main activity centre of the community that is surrounded by traditional old buildings designated for three main *Guthis*[10] of Khokana. Opposite to Rudrayani temple, there is another landmark of Khokana, the *De Pukhu* pond.

While the outer periphery of this traditional settlement on the southern part of Khokana is in the process of urbanisation, with a housing colony being built and sporadic modern buildings scattered along the ridges, this undulating countryside still retains its rustic charm with predominance of traditional architecture. The same cannot be said about *Sano* Khokana, a smaller settlement at the northern side of the ward. The townscape of Sano Khokana is quite different as the settlement is spread out and has more open spaces (rapidly filling) than buildings. The urban development happening in *Sano Khokana* mimics the development of other peripheral settlements in the Kathmandu valley, where people build their homes first and basic infrastructure such as roads, water and sewage connections follows.

[7] Doh fant is Newari for flat land

[8] 'Core' settlement is the word used by ward representatives and community leaders of Khokana who are mostly from the old town.

[9] An enclosed open space like a courtyard common in *Newar* settlements often with a well in the middle that are shared by the neighbours.

[10] Guthis are traditional lineage-based institutions (or details about guthis in Khokana, please refer to: Poudel. and Blackburn, 2020)

3.1.1 Administrative evolution of Khokana

The present-day boundary of Ward21, Khokana, was set in March 2017 as part of the administrative restructuring of the country into a federal state following the promulgation of the new constitution (2015). While tracing back the administrative boundary of Khokana, it was found that Khokana village was part of the *Aadarsh Gaun Panchyat* between 1975-1980. This village *panchyat* also included nearby villages, namely, Sainbu and Bungmati. For another decade (1980-1990), Khokana village existed as *Khokana Adharsha Panchyat*. With the restoration of democracy in 1991, it became the Khokana Village Development Committee (V.D.C) that replaced the monarch-centred system of *Panchyat*. In 2014, the Government of Nepal took a momentous decision to merge 283 VDCs into 72 municipalities (Devkota, 2014). Khokana village thus became integrated into the Karyabinayak municipality along with neighbouring VDCs (Bungmanti, Sainbu, Chhampi and Dukuchhap). Geographically, Khokana village spread through four wards (6, 7, 8 and 9) of the then Karyabinayak municipality.

This transition from villages (rural area) to municipalities (urban area) through administrative redefinition of the place was criticised as basic services and urban amenities were missing in these new municipalities (Devkota, 2014). In Nepal, population has been a determining factor in declaring certain places as urban, yet "new cities are created not on the recommendation of the central bureau of statistics but on the political decision of the Ministry of Local Development [currently, Ministry of Federal Affairs and General Administration]" (Sharma, 2012).

Despite the merger with a municipality in 2014 and integration into the jurisdiction of Lalitpur Metropolitan City (LMC) in 2017, Khokana is still identified as a 'typical *Newari* village' as per its official website (Khokana, 2018). The dichotomy between the state-given identity of urbanity (sans the urban ensembles) and the local way of life grounded in age-old traditions and livelihood dependent on agriculture has been manifested in different ways in Khokana. This contestation on the identity of the place is reflected in the resistance movement against the development plans of the federal government that has been unfolding in Khokana and neighbouring villages/wards since the mid-1990s (see Annex 2).

3.2 People of Khokana: community composition

According to the 2011 official census, the total population of Khokana was 4,927, living in 1,056 households with 2,452 men and 2,475 women (Khokana, 2020). The same population size has been used in the 'Annual Municipality Development Plan' by the LMC office for its plans and programmes for 2020-21 (LMC, 2020). However, data collected by a Japanese university post-2015 Earthquake shows a slight increase in population to 5,386 (National Research Institute for Cultural Properties, 2016). A demographic survey was carried out by the ward office in Khokana in 2019. The survey report has not been finalised yet as the Ward Office considers the result of the survey inconsistent with their previous data. The preliminary report of the survey showed a decrease in household number (refer Table 1). Ward officials mentioned that the disintegration of joint family into small nuclear families after the 2015 earthquake and spreading of the land and house ownership of people of Khokana across different neighbouring villages (now wards) such as Sainbu, and Bhaisepati, are the reasons for the discrepancies in data which has delayed the finalisation of the report. Box 1 presents one such case that illustrates the challenges in collecting demographic information in Ward 21.

Box 1. Case of floating population in Khokana

> Maharjan, 62, is a resident of Sano Khokana. He is the head of the household with 9 family members. The joint family constitutes his two sons and their wife and children, and Maharjan's wife. He owns 20 ropani land spread across ward- 25 (Bhaisepati), ward-18 (Sainbu) and Khokana (ward- 21). He has not legally divided the property between his sons and hence they are 'together' despite living in separate houses, in separate wards. Maharjan and his wife whose main occupation is agriculture divide their time between their two houses in different wards- living in the house closer to farm during sowing and harvesting season and elsewhere other time of the year. He owns another house in ward-18 which has been rented. Because of the floating nature of his/and his wife's residence, they can be constituted in the demographics of any of the three wards depending on the time of the year/day the survey is conducted.

The previous census report showed that 97 percent of the people residing in Khokana are Newar belonging to the 'jyapu'[11] community (CBS, 2011), most of them with a surname either 'Dongols'

[11] Jyapu caste group in Newari community are predominantly involved in agriculture. The word jyapu means skilled worker. For more information, please refer to: https://www.indigenousvoice.com/en/why-jyapus-are-where-they-are.html)

or 'Maharjans'. The surveys carried out after the 2015 earthquake and in 2019[12] show a discrepancy on caste-based household disaggregation. Table 1 below presents the comparative figure of 2015 and 2019.

Table 1. Caste segregated household distribution

Caste Disaggregated Household Distribution			
S.No.	**Caste Group**	**No. of household (Survey I- 2015)**	**No. of Household (Survey II- 2019)**
1	Jyapus(Maharjan+Dongol)	984	868
2	Shahi/Khadgi/Kasai	34	34
3	Shrestha	13	15
4	Thakuri(Malla+Shahi)	11	12
5	Kapali/kusle	6	7
6	Tuladhar	5	5
7	Shakya	1	1
8	Napit	2	2
	Total households	**1056**	**944**

The ward officials are sceptical as to the decreased number of households as presented in the draft report of the survey because they consider the number of households should have increased given the widespread family disintegration phenomena taking place within Khokana after the 2015 earthquake.

The ward records based on the 2011 census show that there are 37 people with disabilities, 29 of which are categorised as disabled and 8 as severely disabled. Under the social protection programme of the GoN, people with disabilities (PWD) receive a monthly allowance of Rs. 2,000 (red card holders) and Rs. 600 (blue card holders). Table 2 figures are based on the number of

[12] The draft report was shared by the ward official to the author. The survey report is yet to be finalised; therefore, figures presented here can change.

people receiving the allowance from the ward office, therefore, it may not be representative of the total number of people with disability in the ward. People with disabilities who do not receive/require allowance from the ward are not recorded in the figure presented below as the ward office did not have such data recorded.

The demographic composition based on age is not available in the ward office records. However, a list of senior citizens is maintained as this is another group that receives monthly allowance from the GoN and distributed through the ward office as part of their social protection programme. The age threshold for receiving the monthly allowance of Rs. 2,000 (approx. 200 USD) is 65 years. On that basis, the total number of senior citizens in Khokana is 299, 131 of which are male and 168 females. Caste and class disaggregated information of recipients of the monthly social protection allowance has not been maintained by the ward office.

Different official generic categories that are used to collect demographic information do not completely reflect the intricacies of the population division and social organisation in a predominantly Newari settlement like Khokana. This includes the intricacies of caste subsystem (subsection 3.2.1) and guthi system (subsection 3.2.2).

Table 2. Population with disability

People with Disability		**Male**	**Female**
total population with disability	37	23	14
Disabled (blue card holders)	29	18	11
severely disabled (red card holders)	8	5	4
Total no. of household with PWD as household head	10	10	0

3.2.1 Newar caste sub-systems: Jyapus and 'the others' of Khokana

Newar caste groups are the indigenous inhabitants of the Kathmandu valley. The Newar community is stratified based on the hindu caste division principles, which dictate five

hierarchical subdivisions of the population based on occupation: headed by the Brahmins, followed by Kshatriyas, Vaisyas (Newars), Sudras and 'the untouchable'. While the fifth category has been eliminated with the promulgation of the 'Caste based Discrimination and Untouchability (Offence and Punishment) Act (2011), the age-old discriminatory practice of untouchability is still found in the Nepali society. The Newar caste system is very complicated with numerous occupation-based castes and sub-castes. However, understanding the caste system becomes crucial to make sense of the socio-economic structure and hierarchies within a Newari community (Müller-Böker, 1988).

The caste disaggregated demographic data presented in Table 1 show that 'Jyapus/Jyapoo' are the dominant caste group in Khokana identified with the surname Dongol and Maharjan (can be used interchangeably). Newari historian Gopi Singh Nepali refers to '*jyapus*' as the 'dominant peasant class' within the Kathmandu valley (Nepali, 1965). This indigenous community has their own music, rituals, festivals, costumes, and food. The word *jyapu* is made with two words, '*jya'* meaning work and '*pu'* meaning skill, and hence it means skilled worker. As per the occupation-based caste division within the Newars, *jypaus* represent farmers, with mid-level status in the caste hierarchy . However, in the case of Khokana, they are the dominant caste group. Traditionally, the castes belonging to higher ranks do not accept food and marriage relations with *Jyapus*. *Jyapus* are also endogamous but accept marriage relationships with higher ranking Newars. As their traditional occupation was related to land and because of their higher population, much of the land in Khokana (and in the Kathmandu valley) belongs/ed to *jyapus*[13]. The domination of the *jypau* community in Khokana is not only the prerogative of their caste and class, but it is also reinforced by the socio-cultural practices. Within newar caste system, the other castes in lower rungs of caste hierarchy compared to the *jyapus* such as Kasai/Khadgi/Shahi, Kusle, Napit exist/ed as functionaries in *jyapu* cultural practices (and everyday living). Napit or Nau are the barber caste, that is, they cut the nails and colour the toes of females of higher caste, in return of which they receive wheat from the *jyapu* families during harvest season (Maharjan, 1965).

[13] During our numerous conversations in Khokana, people (mostly elderly people) lamented how they lost their land to the GoN through their various development projects in the past (such as the Sainbu-Bhaisepati Awas project, the para jumping practice area in Khudole).

Table 3. Newar caste hierarchy

Social/Caste Hierarchy of Newar
A. Water Acceptable (Pure)/High Caste
i. Upper caste Newars
Shrestha, Raj Bhandari, Bajracharyas , Udas
ii. Lower caste Newars
Jyapu (Dongols, Maharjans)
Nau (Napits), Manandhar, Chitrakar, Ranjitkar
B. Water Unacceptable (Impure)
i. Touchable (Unclean Caste)
Dhobi, Kasai (Khadgis)
Kusle (or Jogi), Kapali
ii. Untouchable
Chyame Pode
Note: By law, the practice of untouchability has been criminalised (Caste based Discrimination and Untouchability (Offence and Punishment) Act, 2011). Nevertheless, these societal practices are still prevalent in Khokana, as confirmed by research participants in this study.

This practice is still prevalent in Khokana, with some changes as there are families who remunerate the service through money. Another major group in Khokana is that of Kasai/Khadgi identified with the surname Shahi. Kasai and Kusle were categorised as the 'unclean caste', who are not 'untouchables' but marriage relations and food touched by the caste groups are not accepted by the higher castes (ibid). The traditional occupation associated with Kasai is butchering/animal slaughter. Kusle have the role of playing music during festivals and funeral processions. In Khokana, both Kasai and Kusle have an important role during various festival celebrations and during funeral processions.

During interviews in the community, both jyapus and 'lower caste' groups stressed on the role of the latter in socio-cultural functioning of the *jyapus*- the practices (like the Sikali Jatra/festival) that the locals believe represent the identity of the place. Despite the indispensability of other caste groups in *Jyapus* functions, the boundaries of caste intermingling have been clearly demarcated, materially and through the norms of socially acceptable behaviour. For instance, during the biggest festival in Khokana (in September/October), the communal feasts are organised in the *guthi* buildings where seating for the communal feast is

arranged based on social hierarchy. The older jyapus males eat on the top floor of the building, while the *Khadgis* sit on the ground floor. *Kusles* are provided a separate space outside of the *guthi* building.

The interviewees from the Kasai and Kusle group noted that the practice of untouchability and caste-based discrimination has significantly decreased compared to the past, but the vestiges of the system remain in their community. Interestingly, when asked about the social discrimination they have experienced during their lifetime, none of the participants referred to the communal feasts and religious practices that discriminate against them as it is accepted as tradition. They either referred to their childhood and some cited how they experienced being 'lower caste' during the aftermath of the 2015 earthquake. While living in temporary shelters, people from the 'higher caste groups', especially seniors, did not share the same drinking water tap and water bottles with the 'lower castes'. Some also recalled how common shelters were disaggregated based on caste.

The *jyapu* domination is also clear in the politico-bureaucratic sphere. Four out of five ward committee members belong to the *jyapu* community. The fifth ward member position is vacant as there is no 'Dalit' caste group in the community. Similar lack of representation can be observed in other ward committees such as the Ward Disaster Management Committee (WDMC) where all but one member is not *jyapu*). The committee membership is based on membership on other community organization, and there is no official provision for inclusion of marginalized social categories.

3.2.2 Guthi System in Khokana

As a close-knit Newar community, '*guthi*' is one of the most important institutions within Khokana. *Guthi*s are endogenous groups with socio-religious functioning which regulates the social behaviour of its members through 'three-tier sanctions for the defaulting person or household' which can be in form of social boycott, denied participation in ritualistic feasts and denying *guthi* services (Maharjan, 1965). Every person in a Newar community is a member of one type of *guthi* or the other. In Khokana, the two most important *guthi*s are Funeral *Guthi* (locally called as *Sana-guthi)* and the Festival or *Jatra guthi*. *Guthi*s are gender and class exclusive. Although a household becomes a member of a *guthi*, representation in the group belongs

exclusively to men of the family. In Khokana, all important *guthi*s are also caste exclusive as only jyapus (Dongols and Maharjans) can be members of this institution. Other caste groups of 'lower' status play functionary roles in the *guthi* functions, like playing music during festivities (Kapalis), leading processions (Khadigs) or initiating festivities (Napits).

Apart from its socio- religious functions, *guthi* is also a system of managing land endowment (Regmi, 1976). The land managed by *guthis* are very important in preserving the cultural heritage of Kathmandu Valley (Toffin, 2007). However, a contradictory opinion on *guthi* system is about its 'institutional landlordism' with the *guthi* managers/priests having total power over the tenants (Khadka, 2021). The farmers who till the *guthi* land do not have any legal authority over the land. The power dynamics between the tenants and the guthi is further complicated (as in the case of Khokana) due to the caste exclusivity in *guthis*.

The socio-religious rituals during the festivals and funeral ceremony have helped perpetuate the caste-based hierarchy in Khokana which is not apparent in other social situations. Caste-assigned roles and caste boundaries are reinforced every year through ranking in seating position during the feast, separate dining based on caste and practice of untouchability in the guise of cultural practices. The people in Khokana, belonging to different caste and class, however, emphasised the importance of *guthis* to hold together a community that is divided in political fractions.

3.3 People's perception on hazard and risk in Khokana

Nepal is one of the most hazard and disaster-prone nations in the world and the entire population lives in perennial risk with differential vulnerabilities. From the perspective of localised hazards and local impacts of hazards in Khokana, earthquake is considered as the most disastrous because of the style of settlement characterised by narrow alleys, traditional style houses and settlements where residential houses, local shrines and religious buildings are conglomerated in small spaces. All historical buildings in Khokana were less than 80 years old when the 2015 earthquake occurred. 1,852 houses were rendered uninhabitable (Daly et al., 2017). The ward office records show that 9 people died and 34 people were injured.

Table 3 synthesises the perceptions of residents and ward members in Khokana about the history of hazards and present hazard risk in the area. The order of hazards does not represent rank, however.

Table 4. The history of hazards and hazard risk perception in Khokana

Hazard	Date of Occurrence	Community perception on hazard risk	Preparation/Mitigation measures
Fire	The major incidents of fire as reported by the ward office were in 1990, 1993 and 2009. In all of these incidents, fire started from a single house and quickly spread through the community due to closed packed houses in Khokana.	Ta Jhya Tole[14] the neighbourhood that starts with the alleyway opposite the ward office. This place is considered particularly vulnerable for fire hazard because of densely packed houses on both sides of a narrow alleyway without any open space.	With the support of NSET, a fire extinguishing system has been set up in 2018. 'De Pukhu' pond is the immediate water source which is connected with a water hose and electric water pumps. Residents believe that with Reinforced cement concrete (RCC) houses replacing the old mud and brick houses, fire hazard has also decreased.
Earthquake	1934 and 2015. These are the two dates that all interviewees referred to while speaking about earthquakes.	The entire old settlement is at risk. Some residents believe that earthquake risk has been mitigated with the construction of new RCC houses. In 2015, it was mostly mud and mortar houses that completely collapsed. The ward officials pointed out that **Ta Jhya Tole** has the highest risk as there are no open spaces and the alleyways are narrow for emergency escape. From the experience of the 2015 earthquake, officials have realised that the narrow alleyways get blocked by the debris and thereby delay the rescue operation.	Building codes mandated by LMC. Emergency rescue equipment stored in the ward office. Maintenance of women safe space building by the ward office. A Disaster Management Fund of one hundred thousand rupees is maintained at the ward office to be used during emergencies.
Flood	1981[15]	The majority of respondents referred to the 1981 floods as there have been no recent events of flooding. There is no apparent risk	Since this was not considered an apparent risk, there has been no preparedness/mitigation measure.

[14] Tole are smaller units with a ward, which can be understood as a neighbourhood. There are 9 toles in Khokana: Nayajho, Thalachi, Nayela, Gabu, Nahayobou, Tai le/Ta Jhya, Dhokasi, Kuttupukhu and Chikhona.

[15] No information on this flooding was found in secondary sources apart from one mention of flooding in the Lele area of KV in 1981 due to high intensity precipitation. Available at. http://www.fukuoka.unhabitat.org/programmes/ccci/pdf/Kathmandu_Valley(Nepal)March2015.pdf

		of flooding to the community as the settlement is stretched over a small plateau. In case of the unlikely event of flooding, the agricultural lands situated along the river basin are at higher risk. One of the WDMC members during the FGD pointed out a potential scenario for inundation due to high surface run off, if the agricultural fields on the basin and the terraced slopes for farming are covered in concrete (referring to the rapid urbanisation and change in land use pattern).	
Landslides	1988	The WDMC members, the ward officials, and the community people believed that there is no apparent landslide related risk to the community at present. Nevertheless, areas like **Narayangal, Bhabu pa** are more prone to landslides. The last landslide as said by the WDMC members happened in 1988. The Gabion wall was built in the area with the support of JICA.	Since this was not considered an apparent risk, in the past two years (2019/20-2020/21) of ward annual plans, there is no budget allocated specifically for landslide preparedness/mitigation measures.
Epidemics/Pandemics	1981 and 2020. Respondents referred to an outbreak of gastroenteritis/cholera in Khokana during the 1980s. However, there is no recorded information about the incident except for a WASH training report on a sanitation campaign organised by IRC in 1983. COVID-19 pandemic	The open drainage system and open defecation and shared communal toilets were the main reasons for gastroenteritis/cholera back in the 1980s. As of 28th December 2021, 113 people were infected with COVID-19, 75 of which were male and 38 females. 108 cases have recovered and the remaining 5 were in the process of recovering from the infection. Despite COVID-19 induced lockdown, all festivals were celebrated in Khokana. The festivals were organised with the consultation between Guthis and the ward office.	The ward office used the ward level Disaster Management Fund to provide relief to the poor families in Khokana whose source of livelihood was affected by the lockdown measures. In its annual budget for 2020-21, a sum of 150 thousand rupees is allocated under the 'Social Development' category as a relief support for the 'Disable, Helpless and Poor family' (LMC, 2020). Since the budget distribution under social development heading for last fiscal year did not have this particular heading, it is assumed that the budget this year was allocated as COVID-19 response[16].

During the interviews with residents, it was noted that when asked about risk/threat, most of the participants referred to the impending large-scale development projects in Khokana. In the words

[16] This assumption couldn't be verified during the FGD with the WDMC, as the committee mentioned they did not have any functional role in managing the COVID-19 crisis in the ward.

of one of the interviewees, "*it is the man-made disaster [development project] that is the biggest threat for the people in Khokana at present rather than any natural disaster*" (Participant 4, Nov 2020). This sentiment was reflected in all the participants who owned land and belonged to the *jyapu* community.

The five large-scale development projects which have been characterised as the major risk in Khokana are described in detail in Annex 2. The information is collated based on secondary literature, including government planning documents, the official Environmental Impact Assessment (EIA) reports, newspaper articles and personal/official blogs of the people/organisations involved in the resistance movement against the development projects. All five projects, i) Kathmandu-Terai Fast Track Project, ii) Satellite City project, iii) The Outer Ring Road Project, iv) Kulekhani High tension Project, v) Bagmati Corridor Project directly impact Khokana community as all these projects require land acquisition from residents of Khokana. The different people in Khokana have different causes for their opposition of the project. However, they all agree that any of the project can alter the traditional land use system and Newar rituals based on land.

4. Analysing vulnerabilities

Vulnerability, as described by Wisner et al. (2004: p.11), encompasses "the characteristics of a person or group and their situation that influence their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard"'. Such an understanding of disaster that its outcomes are experienced differently by different people demarcates disaster from hazard and redefines disaster as a social process as opposed to an event/occurring. This sociological turn in understanding disasters is not limited to academic scholarship. Disaster risk reduction and management plans and policies (like the Sendai Framework for Disaster RIsk Reduction) have adopted this new understanding of disaster.

Section 4.1 reviews policies and plans with the intention to understand if, and how, the concept of vulnerability is defined within the Nepali national laws and policy documents. Section 4.2 presents the empirical findings highlighting the importance of intersectional analysis for nuanced understanding of disaster vulnerability.

4.1 Vulnerability as policy discourse

This section seeks to unpack the extent to which national policies in Nepal have shifted from a post-hazard response approach to broader policy provisions that aim to address structural inequalities that produce differential vulnerabilities. Thus, the selection of policies under analysis considers both Disaster Risk Reduction and Management (DRR&M) policies, including the recently promulgated Disaster Risk Reduction and Management Act (2017), as well as policy documents that expand beyond the domain of disasters, including the Constitution of Nepal (2015), the Local Government Operations Act (2017) and the Social Security Act (2018).

In Nepal, one of the first disaster-related acts can be traced back to the *Daibik Prakop Ain*[17] (2039) or Natural Calamity Act (1982). Except for one article that mentions preparedness in the potential event of a 'natural calamity', the entire act focuses on disaster response and post-disaster relief distribution. The act does not mention any special provisions for specific social groups and

[17] Daibik Prakop Ain does not literally translate to Natural Calamity Act. The latter is the English name given to the act which in literal sense means calamity caused by divine intervention.

generalises all disaster affected populations as 'victims' (HMG, 1982). The act is quite consistent with the national government perspective back then (as reflected in the 1-5th national periodic plan) as the development approach during that period did not acknowledge the structural inequalities and differences in the population (Shrestha and Poudel, 2020).

The Disaster Risk Reduction and Management Act (2017) replaced the Natural Calamity Act (1982). Throughout the 35 years between the sanctioning of these two governing acts, Nepal has gone through various critical processes, namely: i) changes in the government system of the country (from autocratic monarchical rule (1960-1989) to multiparty-democracy (1990-2006) to federalism (2006-present); ii) a decade long Maoist insurgency that surfaced the structural inequalities in the Nepali society based on caste, class, gender and geography (Murshed and Gates, 2005); iii) a devastating disaster in the form of the 2015 Nepal Earthquake; iv) two constituent assemblies[18]; and v) a new national constitution (2015). All these socio-political upheavals have resulted in a political/legal consciousness of marginality in Nepal (Tamang, 2009). Marginality is more than just a function of poverty in a complex society where various 'axes of identity' such as, but not limited to, caste, class, gender, traditional occupation, spatial location, and disability (intersect to) produce marginality.

The **Constitution of Nepal (2015)** is guided by the principle of inclusion, underscored by its overarching aim "*to eliminate discrimination based on caste, class, region, language, religion, gender and all forms of untouchability"* (GoN, 2015). Furthermore, on the clause on 'Right to Equality', the constitution mentions "*special provisions for protection, empowerment or development of women from culturally and socially backward groups, Dalits, indigenous people, indigenous nationalities, Madhesi, Tharu, Muslim, oppressed class, Pichhada class, minorities, the marginalized, farmers, labours, youths, children, senior citizens, gender and sexual minorities, persons with disabilities, persons in pregnancy, incapacitated or helpless, backward region and indigent Khas Arya*". Similarly, on the 'Fundamental Rights' section, there are separate clauses for the right of women, children, Dalits, and senior citizen to emphasize their special protected status. In ally, the clause on 'Right to Social Justice', lists the categories that will have the right to participate in the state bodies based on the principle of inclusion. The groups listed are "*socially backward women, Dalit, indigenous people, indigenous*

[18] Two Constituent Assembly (2008 and 2012) were elected by people to draft the new constitution of Nepal following the declaration of Nepal (from former Kingdom) to Federal Republic.

nationalities, *Madhesi*, *Tharu*, *minorities*, *persons with disabilities*, *marginalized communities*, *Muslims*, *backward classes*, *gender and sexual minorities*, *youths*, *farmers*, *labourers*, *oppressed or citizens of backward regions and indigent Khas Arya"*. Such listing of social categories as homogenous groups oversimplifies the intersecting ways in which marginalities are created and hides the possible differences between individuals within each category.

The Local Governance Operation Act (LGOA) 2017 operationalizes the laws coded in the constitution at the local level (e.g., municipalities and wards). Thus, local governments are responsible for adhering to the principle of inclusion and formulating social security plans for the 'targeted groups. Municipal governments are also responsible for mid- and long-term development planning in their jurisdiction and the LGOA (2017) dictates that "*while designing and implementing programs at the local level, the municipality should ensure participation of local intellectuals, experts on the issue at hand, experienced professionals, **marginalised and people from endangered ethnic groups, women, children, Dalits, young people, people with disability, and senior citizens**"* (LGOA, 2017, our translation and emphasis) to make the development plans inclusive. Furthermore, municipal governments are responsible for local social security plans, and local statistics and information management for social security programmes.

Ward level governments are expected to "*keep records of **socially and economically marginalised women, children, Dalits, people with disability, senior citizens, minority groups, marginalised groups,** and organise programmes for their social and economic development*" (LGOA, 2017, our translation and emphasis). The ward office also implements the social security plans for the people at risk, which are guided by the **Social Security Act (2018)** and are limited to cash transfer schemes. The Social Security Act, as mentioned in its preamble, is formulated "*to make necessary provisions on the protection of the right to social security of the indigent citizens, incapacitated and helpless citizens, helpless single women, citizens with disabilities, children, citizens who are unable to take care of themselves and citizens belonging to the tribes on the verge of extinction*". The act defines each category and delineates the necessary criteria for eligibility to receive the social security allowance.

All in all, the Constitution (2015) attempts to address the structural inequalities by protecting certain groups, the Local Governance Operation Act (2017) operationalizes the rights enshrined in the constitution through the principle of inclusion in planning and ensuring social protection schemes for the marginalized groups, and the Social Security Act (2018) defines each social category eligible for cash transfer schemes. Some argue that after the federalisation in 2006, there

have been positive changes towards ending the exclusion of marginalised groups in the governance process through affirmative action and social protection (Khanal, 2012). Nevertheless, these policies follow a blanket approach and do not recognize the complexities of marginalized identities based on their societal context.

The same can be said about the **National Disaster Risk Reduction and Management Act (2017) and Disaster Risk Reduction and Management Act for Lalitpur Metropolitan City (2019**). Both acts, which are the guiding documents for all disaster and risk related policies and strategies, fail to address differential vulnerability apart from using the same static categories as suffixes in the social protection schemes in a post-disaster situation.

The table 4 shows the Gender Equality and Social Inclusion (GESI) provisions in national and local DRR acts and policies.

Table 5. Provisions for the inclusion of marginalised groups in national and local DRR&M Acts

Act/Policy Document	Level of government	Gender and Social Inclusion Provisions
National Disaster Risk Reduction and Management Act (2017)	National level	Among the roles and responsibilities of the National level Executive committee, the act mandates the formulation and implementation of special plans and programmes for **women**, **children, senior citizen, Dalits, marginalised groups and community, and people with disability**
		As part of their roles and responsibilities, local disaster management committees are expected to categorize people based on their losses in disaster by and provide identity cards accordingly.
		The executive committee for DRRM will set the minimum criteria for relief distribution which should consider the needs of **women, children, senior citizens, incapacitated and people with disability.**
National Policy for Disaster Risk Reduction (2018)	National level	Access, representation and meaningful participation of **women, children, senior citizens, people with disabilities and the people from economically and socially marginalised communities** will be ensured in all steps and structures of disaster risk reduction to make disaster management inclusive.

National Reconstruction Authority - Operational Guideline for Selection of At-Risk Beneficiaries (2019)	National Level	At risk people are identified as: Single women over 65, Senior Citizen above 70, Children below 16 who have lost both parents, Person with disability. The people in the above categories qualify as 'at-risk' people, if are not living with a person between 16 and 70 in the same household.
Disaster Risk Reduction and Management Act LMC (2019)	Municipal and ward levels (LMC)	**Women, children, senior citizen people and people with disabilities** have special needs during relief distribution. Relief distribution should recognise the difference and provide accordingly (e.g., dignity kit for women, children kit).
		The Act Identifies people at risk as **women, children, young girls, people with disability, and senior citizen**

The acts and policies in Table 4 define disasters as events and list out and categorise these events as 'Natural Disaster' and 'Non-natural Disaster'. With the characterisation of disasters as events, the acts elaborate on how disasters can be managed in a post-event scenario but informs very little on risk reduction prior to an event. 'People at risk' are identified however, they are simply 'added and stirred' (Harding, 1995) in acts and policies that are focused on post-event scenarios rather than designed toward addressing vulnerabilities. For instance, although different categories of 'people at risk' are identified by **the National Policy for Disaster Risk Reduction (2018)** and "*Access, representation and meaningful participation" is advocated for them*, the current DRR&M governance structure lacks any such provisions of inclusion. Specifically, neither the national DRR&M Council (chaired by the Prime Minister), the national DRR&M Executive Committee (Chaired by the Minister of Home Affairs), nor the District Disaster Management Committee (Chaired by Chief District Officer) have any special provisions of representation from categories that are identified as 'at risk'.

It is important to note that the **National Policy for Disaster Risk Reduction (2018)** does try to envision vulnerability beyond a particular hazard event; for example, clause 7.18 states that the "*entire development process will be implemented and managed in reducing the prospective risks on the basis of multi-hazard risk sensitivity"* and clause 7.41 "*Disaster risk reduction works will be integrated and mainstreamed in the development activities. The recommendations in different sectors made by local disaster risk management plan will be included and implemented with preference in the local development plan*".

Apart from the DRR acts and policies, the **National Urban Development Strategy (2017)** through its five guiding principles of "Sustainability**, Inclusivity, Resilience**, Green and Efficient" has tried to bring together a concept of an urban system that promotes "… social justice and contributes to equality and balanced development while also enhancing capacity … to cope with different types of hazards and absorb shock and risk". While the policy and the strategy try to address the issue of vulnerability in their rhetoric, nevertheless, it is important to understand how/whether these policies and strategies have been able to do what they claim to do.

To conclude, DRR&M acts and policies at national and local levels follow the same set template of social groups and categories, and do not mention how these categories can change based on the local contexts. Characterising vulnerability through defined social categories poses the danger of i) the social categories assuming a homogeneous identity within each category, and ii) the reification of the same social categories which may not provide the nuanced contextual picture of vulnerabilities (Twigg, 2014). There are also significant risks in terms of recognition justice by (iii) overlooking or deliberately ignoring the views, interests and values of groups; and, conversely, (iv) reinforcing artificial social categories through discourse and practice (e.g., identification of a group in policy generates narratives and actions that inform popular perceptions of that group) (Ensor *et al.*, 2015; Ensor, Forrester and Matin, 2018). The static social categories as listed in legal and policy documents portray vulnerability as a characteristic of a socio-demographic group when "it is rather the result of different and interdependent societal stratification processes that result in multiple dimensions of marginalization" (Kuran et al., 2020, p.1). The next section presents an exploration of vulnerabilities through an intersectional lens in the context of post-disaster reconstruction in Khokana.

4.2 Intersecting vulnerabilities in post-disaster reconstruction

Drawing from residents' experiences of post-disaster reconstruction and the COVID-19 pandemic relief initiative from the Ward Office, we analyse how disaster reconstruction interacts with personal identifiers such as caste, land ownership, migration status and language to create differential impacts not only in the aftermath of a disaster but also in the mid- and long-term recovery. Noteworthy, the experiences presented below are not intended to "generalise" the intersectional nature of vulnerability for the groups identified in this study. Rather than portraying a homogenising reality for people of certain caste, land ownership, migration status and language spoken, the individual experiences are aimed at highlighting how i) characteristics beyond those

anticipated in policy or practice shape vulnerability in unexpected ways, and ii) social/personal identifiers are enmeshed and mutually constructed. In so doing, we intend to illustrate how a categorical understanding of vulnerability can limit the purview of disaster impacts for different people.

Caste - Land ownership

Residents in Khokana have traditionally derived their subsistence from land, use it as a source for alternative livelihood (through farming and/or renting), and have resorted to land as a personal safety net to recover from the 2015 Nepal earthquake. Reconstruction after the 2015 earthquake followed an 'owner-driven' approach (National Planning Commission, 2015a). The affected inhabitants were primarily responsible for the reconstruction of their homes and commercial properties, although they were supported with housing aid from government (USD. $ 3,000 provided in three tranches) to encourage adherence to earthquake resistance building codes and by-laws. A 2019 study (Mori,2019) confirms that individual household reconstruction in Khokana has been resourced through the sale of agricultural land as the reconstruction grant from the government proved not sufficient to rebuild houses in the urban area. Hence, land ownership became the most important factor for people's ability to 'build back better' or simply 'build back' after the earthquake.

Despite rapid changes in its demographic, Khokana is predominantly a Newar settlement and follows the Newari caste-based community organisation. As described in Section 3.2, the Newari caste division is occupation-based. One of the direct consequences of this occupation-based caste system relates to land ownership. The 'jyapus' farming caste, who are considered the 'upper' caste, owns most of the farming land in Khokana. Other caste groups, who represent a minority, were given 'guthi' land to earn their livelihood, not as legal landowners but users. This 'user' status was particularly challenging after the 2015 earthquake when these households wanted to sell a piece of land to rebuild their destroyed houses:

> "It took us 5 years to reconstruct our house after the earthquake. We couldn't rebuild like other people [jyapus] as we did not have land to sell […] We have 2.5 anna [0.007 ha] of *baari* land that we used to farm and where we have built our temporary shelter, but we do not have the *purja* [land ownership certificate]. I don't know who the land belongs to. We have been using the land since our great grandfathers" (Participant 14. Sep 2021).

Housing aid by the National Reconstruction Authority adopted a blanket approach. The Government of Nepal offered approx $3,000 USD per household for those whose houses were partially damaged due to the earthquake, irrespective of the geographic location (urban/rural). The housing aid was inadequate to reconstruct houses in the rural areas, let alone in Khokana, where the reconstruction cost was higher due to the 'heritage by-laws' that required upholding Newari architectural aesthetics. The aid money was given in three instalments, based on predetermined reconstruction milestones. People who did not own land that they could sell to finance the reconstruction of their damaged houses, could not plan their reconstruction as per the government's payment schedule, and hence missed out on the cash grants offered by the government:

> "We received the first instalment, which was 50,000 rupees. We couldn't apply for the second instalment because that money was not enough for clearing the debris. To receive the second instalment, we at least needed to lay the foundations. We do not have the money, so we did not start reconstruction (...) We will not be able to get the government's reconstruction grant if someday we want to build back our house" (Participant 14, Sep 2021).

The marginalisation created from the interaction of caste and land ownership has another nuanced dimension rooted in guthi system. The 'lower' caste people do not have representation in the 'guthis' caste-segregated system that makes decisions over land allocation. Only Dongols and Maharjans, the high caste males, are members of the guthi. The people of the 'lower' caste who have been farming in 'guthi' land since their forefathers cannot be a member of 'jyapu' guthi, which creates another facet of marginalisation because of lack of representation in the guthi. It is outside the scope of this research whether inaccessibility to the guthi and guthi-related decision-making is the reason for the landlessness of certain caste groups. Nevertheless, preliminary findings suggest caste-based exclusion from land ownership:

> "In our grandfather's time, there used to be [caste] domination. The elite people in the religious organisation [guthi] cajoled our grandfather into transferring his land to guthi. We have evidence. We have papers that can prove that the land that once belonged to our family was later transferred to the guthi" (Participant 14, Sep 2021).

The 'lower' castes such as Kapali, Kusle and Napit have been using the guthi land for the cultural/religious services they provide to the guthi. They hope the land ownership would be transferred to them in honour of their age-old service. Since the 2015 earthquake, there have been negotiations between guthi and the people dependent on guthi land; however, the likelihood of such ownership transfer was not examined within the scope of this study. Caste-based

segregation and its historical roots on land ownership have interacted and created a unique situation of marginalisation for the 'lower' caste people of Khokana, which have been overlooked by both national and local building reconstruction policies and plans post-2015 earthquake.

Land ownership – Migration status

This section explores the heterogeneity of incomer communities in Khokana, including migrants, and the implications in terms of citizenship rights and their recognition as members of the community. Ward citizenship accounts for the recognition of an individual as a permanent resident of the ward and the related rights that are attached to this status (i.e., the right to vote in local elections, hold publicly elected posts in the ward office and receive government benefits). In addition to ward citizenship, the homogenous caste composition of a Newar community like Khokana also defines 'insiders' and 'outsiders' based on Newar identity[19]. Thus, people who are not 'Newars' and who do not speak the Newari language are considered 'outsiders' in the community. Our study identified three types of incomer communities as described below:

1. Women who come into the community through inter-caste marriage, meaning, a non-Newar woman marrying a Newar man. In this case, language becomes the barrier to engage with a predominately homogenous community. This is explained in detail in the next section.
2. People (both Newars and non-Newars) who have bought houses in Khokana. They can choose to have ward citizenship in Khokana and, therefore, being part of the electorate (i.e., they can vote and be appointed for positions in the ward office).
3. Migrants living in temporary shelters in the edges of the ward. They are people who have migrated to Kathmandu in search of employment and live in the hinterlands because of the cheaper cost of living compared to the capital city. In Khokana, these residents were not recognised by the Ward Office by the time the fieldwork for this study was completed (September 2021). Lack of ward citizenship entails these individuals are not counted in

[19] According to the latest Ward Office survey (2019/2020, unpublished), 909 out of 944 (96.2%) households of Khokana belong to either jyapus, Khadgi/shahi or Kusles/kapalis, the caste groups that are considered indigenous to Khokana. Furthermore, approximately 92% of the total households belong to 'jyapus' (Dongol/Maharjans), the 'high' caste group of Khokana. The authors accessed the survey's raw data with the help of the Ward Office.

census data for Khokana, cannot vote nor be considered to occupy positions in the Ward Office. They cannot access Ward subsidies either.

In the above characterisation, individuals who belong to the first two groups have ward citizenship and associated rights but are nevertheless considered 'outsiders' because of their inability to speak the language (group 1) or engage in the religious festivities and the guthi in Khokana (group 2). The third group, migrants, are the most marginalised as they are not recognised as formal citizens. Therefore, they cannot vote, take part in any ward roles nor access any social benefits provided by the ward. This differentiation highlights the nuances of being a migrant in Khokana.

Nearly 100-150 households[20] of migrants, mostly from the eastern part of Nepal, belong to this third group and live in shanty huts on the border of Ward 21. Most of them once lived in rented rooms in Khokana and the vicinity. However, housing damages and rising rent and utility costs following the 2015 earthquake forced them to find cheaper housing alternatives:

> "I was living near Khokana bus park in a rented room before the earthquake [2015 Nepal earthquake]. The house I lived in got severely damaged due to the earthquake. The walls of my room were cracked. The landlord wanted to retrofit, therefore I had to move out. Other people were getting support from the ward office; therefore I went there asking for some help. They told me to go back to my village where I belonged to get support. After such behaviour, I never went back to the ward office. During the lockdown [COVID-19 related], I had heard that they were distributing 1 Kg of rice and lentil each for poor households. I did not go to collect mine" (Participant 9, Nov 2020).

The rapidly dwindling agricultural land in Khokana is leased (often annually) to these migrants who both live on, and earn a living through, the land. Lack of irrigation, increasing cost of labour-intensive farming, and better income through land lease compared to agriculture have encouraged the local landowners of Khokana to lease out their fallow land (Focus group discussion, 2021). As renters, migrants have been excluded from the government's disaster recovery and reconstruction plans which exclusively focused on house owners[21]. There was no grant/compensation for renters' post-disaster and, as a result, many migrants became homeless due to the lack of shelter and started living in shanty huts. Similarly, during the COVID-19 lockdown, while other low-income

[20] This is an estimate as these households are not counted in the Ward official census.
[21] The reconstruction grant was exclusively provided to reconstruct houses that were damaged, and not based on the damage of personal property.

households received food subsidies from the Ward Office, migrants were unaware of any such support.

> "We do not have any relation with the Ward Office. I have never been to the Ward Office. I don't know where it is and I think they also do not know about us living here" (Participant 10, Sep 2021).

> "If we were Newars, I think there were chances that we would be supported by the Ward Office" (Participant 10, Sep 2021).

Migrants think that they do not have 'social capital' in Khokana since they have neither access to the Ward Office nor to the broader community. In times of need, they rely on each other as neighbours who tend to be concentrated in certain spatial areas:

> "I think the Newar community, the locals of this place, do not really like us. To earn our livelihood, we rear and sell pigs for meat. The local people complain that we [migrants] are making the neighbourhood filthy with pig farming" (Participant 12, Sep 2021).

Migration status - Language

Language is another axis of differentiation and inequality in Khokana which interacts with migration status to (re)create marginalisation. As a relatively homogenous community, Newari is the predominantly spoken language in the community, which often creates communication barriers for people who do not speak the language. Different incomer communities, as explained in the previous sub-section, create different forms of marginalisation. In the case of women who migrated to Khokana after inter-caste marriage (group 1), they find it difficult to build relations with the locals because of the language:

> "If I spoke the same language, it would be easier to participate in the meetings [women's group/ward]. I understand a few words here and there, but the majority of the people who come to the meeting are Newars and they speak in their own language. Therefore, I am hesitant in participating in the meetings" (Participant 15, Sep 2020).

Social capital plays an important role in individual, household, and community resilience in post-disaster situations (Panday et al.,2021). In Khokana, for example, it was observed that women who spoke the language had better access to community-based organisations such as women's saving groups and local cooperatives. Such organisations played an important role for people in post-

disaster recovery and reconstruction phases, and barriers to accessing them for some can further reproduce their conditions of marginalisation:

> "I am in the mother's group created by Homenet [local NGO]. We used to save 100 rupees every month. The savings is not that much, but I became part of the group because I could also get a loan when I needed money. I took some loan from the group to restart my business after the COVID-19 lockdown" (Participant 7, Nov 2020).

While access to such community-based organisations was easier for residents, migrants did not find it as easy as they did not speak the language and hence did not consider membership. Specifically, none of the four women living in the migrant community interviewed for this study knew about, or were part of, the local cooperatives. Moreover, women who were micro-entrepreneurs (e.g., poultry or livestock farmers) lamented their lack of language skills as it would open business opportunities at the local market. The four migrant women interviewed for this study unanimously agreed that language was one of the factors that constrained their ability to cope with the disaster as it limited their relationships not only with the local government but also the broader community.

5. Conclusion and policy recommendations

Vulnerability is the product of historical, political, cultural and social processes. Thus, a nuanced understanding of vulnerabilities requires unpacking context-specific processes of marginalisation over time and space. Intersectionality provides a lens for interrogating marginalisation as enmeshed processes where multiple axes interact and mutually co-constitute each other. In so doing, intersectionality opens the possibility of understanding vulnerabilities beyond the predetermined categories that often permeate disaster risk reduction and management policy and practice.

This working paper contrasts how vulnerability is framed in national and local policy discourses in Nepal, on the one hand, and how it is experienced by residents of Khokana in the context of post-2015 earthquake reconstruction, on the other hand. As illustrated in Section 4.1, national and local acts and policies ascribe vulnerability to predetermined marginal social categories such as women, children, senior citizen and people with disability. This contrasts with our intersectional analysis in Section 4.2, where the narratives of people living in Khokana reveal the limitations of a categorical approach to vulnerability that overlooks the multiple experiences of marginalisation on the ground.

National and local DRR acts and policies in Nepal consider the historical marginalisation of certain social groups and attempt to recognise their differential vulnerability in disaster situations by conferring them special attention. However, our study depicts how such a generic approach can limit the potential of disaster risk reduction initiatives to reach the most affected in a given situation. In this context, an intersectional lens can provide a more nuanced picture to emerge to inform more targeted policy approaches. The case of Khokana reveals how personal identifiers such as caste, land ownership, migration status and language interact with each other to create differential experiences of reconstruction and recovery in a post disaster situation. Specifically, our findings indicate that (a) there are context specific categories of vulnerability that arise, sometimes due to the nature of the hazard, and sometimes generated by the nature of the policy response; (b) there are cases of double, and sometimes triple, disadvantage where vulnerabilities intersect.

Based on our preliminary findings, the following policy recommendations are suggested:

- DRR policies and programmes need to acknowledge the multiple processes that produce and reproduce vulnerabilities beyond hazardous situations. An intersectional understanding of vulnerabilities makes room for context dependent drivers and processes, shifting the focus from vulnerability as a characteristic of a social group to the 'vulnerable situations' in which people live.

- Disaggregated data on relevant context-specific identifiers (e.g., land ownership, migration status, among others) should be collected to inform the design and implementation of policies and programmes towards targeted approaches that account for the conditions in which people live over time.
- An intersectional approach to vulnerabilities problematises the categorisation and definition of marginalised groups in official policy documents. In so doing, it invites policymakers and practitioners to revise overarching social categories based on the local context.
- In the case of Nepal, the federal governance structure and devolution of power to the local level (i.e., ward committees and ward disaster management committees) can provide the space for context-specific analyses. These exercises will still reduce people to social categories; yet it could provide a more nuanced understanding of their lived experiences.

Annex 1. Information on Research participants

Table 6. List of Research Participants- Interviews

Participant Number	Caste	Ethnicity	Sex	Organisational Affiliation	Remarks
1	Maharjan	Newar- Jyapu	F	Ward office	
2	Shahi	Newar- Kasai/ Khadgi	M	NGO	Marginalized caste group. Unemployed due to COVID hence working as a farmer.
3	Dongol	Newar- Jyapu	F	INGO	
4	Maharjan	Newar- Jyapu	M	WDMC/ Resistance group	
5	Dongol	Newar- Jyapu	F	Women's group	
6	Maharjan	Newar- Jyapu	M	Red cross subchapter in Khokana	
7	Kapali	Newar- Kapali	F	-	Marginalized caste group
8	Kapali	Newar- Kapali	F	-	Marginalized caste group
9	Shrestha	Newar	F	-	Higher caste Newar through inter-caste marriage
10	Tamang	Hill Janjati	F		Migrant living in temp. shelter
11	Majhi	Hill Janjati	F		Migrant living in temp. shelter
12	Tamang	Hill Janjati	F		Migrant living in temp. shelter

13	Majhi		F		Migrant living in temp. shelter
14	Kapali	Newar- Kapali	F		'low' caste in Khokana
15	Kapali	Newar- Kapali	F		'low' caste in Khokana, inter-caste marriage with Khokana resident
16	Dongol	Newar- jyapu	F	Women safe space in Khokana	

Table 7. Participants of Focus Group Discussion with WDMC

Participant Number	Name of the Participants	Organisational Affiliation	WDMC Affiliation
1	Rabindra Maharjan	Ward chairman	WDMC-chair
2	Helen Shova Maharjan	Ward Member	WDMC member
3	Laxmi Shova Maharjan	Women's Safe House	WDMC member
4	Heera Mayaju Maharjan		WDMC Member
5	Barsha Khadgi	Youth group	WDMC Member
6	Bishnu Maya Thapa		WDMC member
7	Manoj Kumar Maharjan	Grand Community	WDMC member
8	Susan Kapali	Youth Group	WDMC member
9	Astendra Kumar Maharjan		WDMC Member
10	Satya Narayan Shahi	Nepal Scout	WDMC Member
11	Bhuwan Bdr. Rayamajhi	Nepal Police	WDMC member
12	Gyanendra maharjan	Nepal Red Cross Society	WDMC member
13	Shyam Maharjan	Ward member	WDMC Member

Annex 2: Overview of large-scale development projects in Khokana

1. Kathmandu-Terai Fast Track Project

Kathmandu-Terai Fast Track Project was conceptualised in 1996, when for the first time the GoN called an Expression of Interest (EoI) to implement the project. The project that was initiated as Build-Own-Operate Transfer (BOOT) model in 1996, after nearly a decade-long halt, was revived with the possibility of Asian Development Bank (ADB) funding. The ADB provided the funds and the technical assistance for the feasibility study of the 'North-South Fast-Track Project' with the objective to create road connection between Kathmandu and East-West Highway (ADB, 2006). The ADB justifies the need for this route that is designed to connect the trade route between China-Nepal and India "*from the standpoint of promoting economic and trade activities and subregional cooperation*" with the aim to reduce poverty in Nepal (ibid). With ADB's technical assistance, the ministry responsible for implementing the project back then, the Ministry of Physical Infrastructure and Transport commissioned an Environmental Impact Study (EIA) and submitted a report to the Ministry of Science, Technology and Environment in 2015 (GoN, 2015). An Indian company, Infrastructure Leasing and Financial Services (IL&FS) won the bid for the construction of fast-track in 2015. However, the contract was annulled in 2016 following the Supreme Court decision that considered the contract against the national interest in the aftermath of the 'unofficial' economic blockade from India in the months following the 2015 earthquake (Manadhar,2018). A year later the project was elevated to a project of 'National Pride[22]' and handed over to the Nepali Army for construction. The Detailed Project Report (DPR) presented by the Nepali Army (prepared by a Korean Company – Soosung Engineering &Consulting Company) projected a total cost of NPR70.45 million which was one third of the budget estimated by the Indian company IL&FS. The foundation stone of the project was laid in Nijhgad (the endpoint) by the then Prime Minister Pushpa Kamal Dahal. The sequence of events is summarised in Figure 1 below. While the foundation stone was laid in the endpoint of the 4-lane highway, the starting

[22] The concept of National Pride Project was introduced in 2012 as a strategy to expedite the construction process of infrastructures that are critical to sustainable development of the country. The projects were declared as 'National Pride Project' based on cabinet decisions. The National Planning Commission(NPC) has formulated a guideline for selection in 2019. Available at: https://www.npc.gov.np/images/category/national_priority_guideline.pdf

point or referred to as 'the zero point' in the official documents, Sano Khokana (ward-21, LMC) has been mired in contestation and resistance. A section of the indigenous Newar community of Khokana and the adjoining ward, Bungmati, are protesting the Fast Track project. The then VDC office had refused to endorse the project 'respecting the sentiment during the community consultation'. The EIA report has posted the letter as it is but does not mention the dissent while summarizing the letter of recommendations from different affected VDCs.

There has been a significant objection against the project in Khokana and Bungmati since 2008 after which the government changed the alignment of the track, which is now along the bank of the river, while the original plan ran through the sacred Sikali hillock (Cemsoj, 2019). Despite these changes, around 200 households, several archaeological and religio-culturally important sites and *guthi* land will be affected (AHRC, 2018). In March 2020, movements leading the resistance in Khokana and Bungmati- Save Nepa Valley Movement and Nepal *Sanskritik Punarjagaran Abhiyan*(Nepal Cultural Revitalization Movement, presented letters to the resident office of the UN in Nepal urging for their attention on the issue (CEMSOJ,2020). The people of Khokana are demanding the track to be constructed along the west bank of the Bagmati river, the Nepal Army (who are managing the project), however, claim that the Khudol flat area in *Sano Khokana* is the most appropriate site for the fast track compared to Pharsidol (across the Bagmati river) as permanent structures needs to be demolished to clear space for the proposed bus park if latter is considered (Onlinekhabar, 2020). By the time this report was written, both the parties had not come to an agreement and hence local protest had been taking place with every attempt by the Nepal Army to start the work in the area.

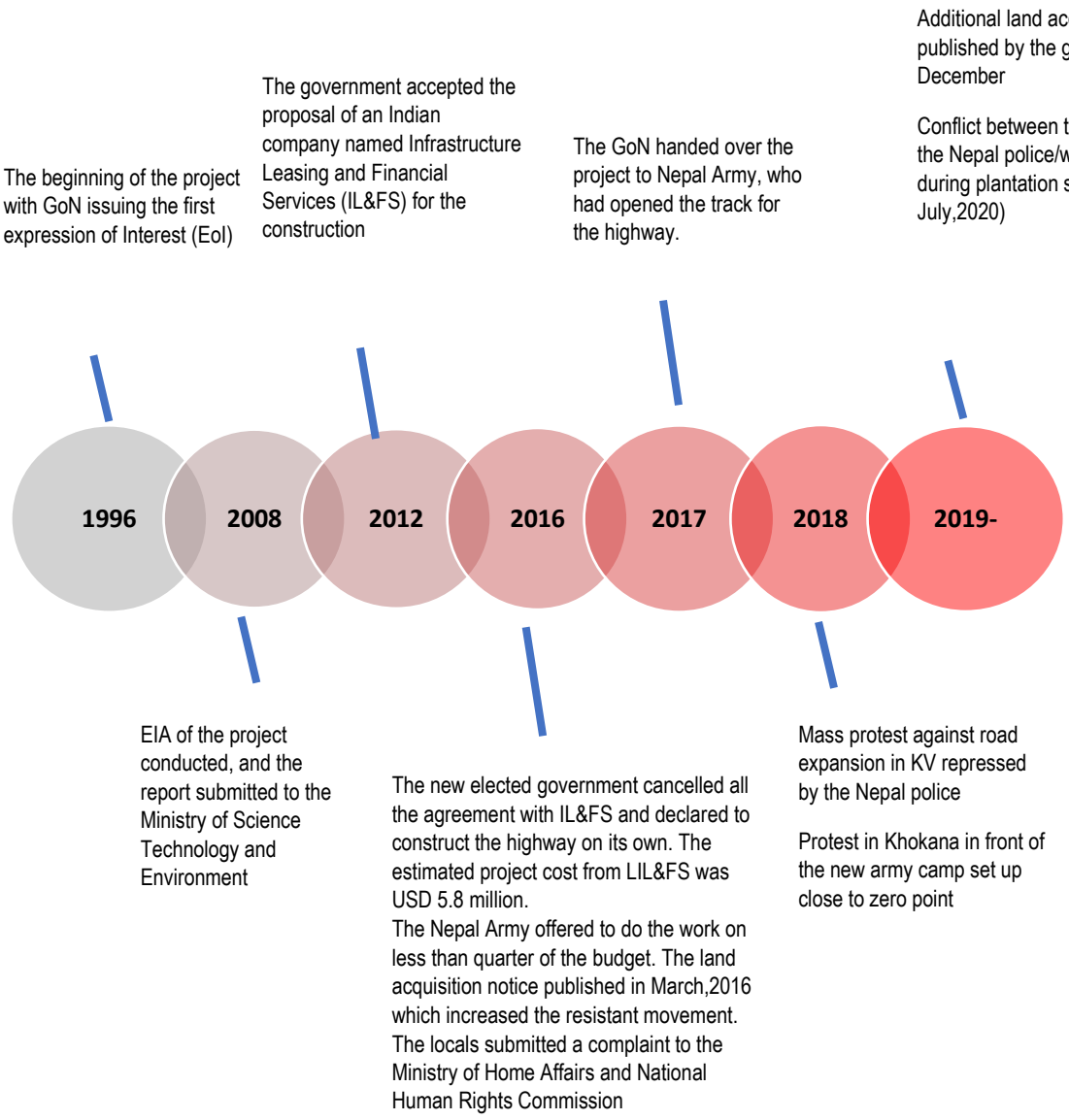

Figure 2. Timeline of Event-Fast track Local Resistance

2.Kulekhani High Tension Project

The project was started in 1997/8 and was estimated to be completed by 2015/16. The report of the independent consultants that prepared the 'Resettlement Plan' for the people affected by the transmission line project write the aim of the project was "*increase the power transfer capacities of transmission lines of the Kathmandu Valley in order to accommodate the planned additional power and load growth in the Valley*" (Sharma and Bhattarai, 2004). The same report also underscores the main project component that would affect people and their personal properties were the overhead

transmission line and two sub stations in Kathmandu and Lalitpur districts (ibid). The transmission line project, if completed, would have spanned across all three districts in KV (Thankot (Kathmandu)- Chapagoan (Lalitpur) – Bhaktapur). The yearly review report of Nepal Electricity Authority (NEA) for the FY 2014/15 reports that the construction work of the project was completed in Kathmandu and Bhaktapur, however, due to the protest in Harisiddhi (ward no. 28 in LMC) against the substation construction(NEA,2015). Similarly, the transmission line that goes through *Doh Fant*, agriculture flat land of Khokana, has not been connected as the local uprooted a truss tower during their protest in 2008/2009 (The Himalayan Times, 2019) . However, the locals of Khokana deny any vandalism and have reported that the truss tower was uprooted by strong wind. The affected locals of the then Khokana VDC (wards 3, 4, 5, 6, 8 and 9) have demanded hundred percent compensation for the land that lies within 25 meters on the either side of the transmission line, while the practice is of compensating land within 9 meters. **The NEA chairperson has cautioned the locals of Khokana against such protest citing possible load-shedding, if the new transmission line is not connected** (ibid). Apart from the compensation issue, the locals are also against the present route chosen by the NEA for the transmission line as the metal truss towers and wires affects the aesthetics of traditional Newar community, and the scenic beauty of the place (ibid).

3. Satellite City Project.

Kathmandu Valley Development Authority (KVDA) in its 20-year strategy (2015-2035) envisages a guided urban transition of settlement in KV from 3D (Distant, Disconnected and Dispersed) to 3C (Compact, coordinated and connected) (KVDA, 2015). Also, the aim is guide development away from areas with deep aquifers and potential water recharge zones (ibid). One of the strategies to achieve this transition that leads to an improvement of the existing urban space within KV is development of the 'smart satellite cities'. Within this scheme, four cities are planned on the periphery of the existing settlement that will span on approximately 6000 ha. of land through land pooling method. The four cities are given Sanskrit names based on the direction they lie- *Ishaan* (north-east), *Agneya*(south-east), *Uttar* (north) and *Nairitya* (south-west). The city in the south-west spread over 500 ha. of land will cover Ranikot, Bhaisepati, Khokana, Bungmati and Chhampi (Karki,2019). The GoN has allocated 180 million for the project in FY 2019/20. During the research interview in April 2020, a KVDA official mentioned that the Detailed Project Report (DPR)

for the cities, apart from Nairitya has been sent to the council of ministers for approval and the work will start as soon as the project is approved. The DPR of the Nairitya city was not sent because of the ongoing protest in Khokana and Bungmati area (ward 21 and 25 in LMC), said the official. Contrarily, the annual budget of the Ministry of Urban Development, 2020-21 (MoUD) shows some amount of budget being allocated for each satellite city plan (GoN, 2020).

4. The Outer Ring Road Project

The Outer Ring Road (ORR) project aims to construct a 72 k.m. long road that will connect the traditional settlements surrounding the city core in all three districts of KV. The preliminary idea of the outer ring road was proposed by Japanese International Cooperation Agency back in 1993 in a form of 'Kathmandu Urban Road Development plan' that suggested linking the Gokarana (north of Kathmandu) to Lubhu (south of Lalitpur) (JICA,2012). The GoN established the Outer Ring Road Development Project office in 2004/2005 (ibid). The dormant project was revived when in 2019 the Ministry of Urban Development (MoUD) hired a Chinese company to re-evaluate the project and its cost as the original plan was made 15 years ago. The ORR project planned to construct a 50 m wide road and develop 250 meters of land on either side of the proposed road through land pooling technique (Shrestha, 2016). At present, the ORR is proposed for 'homogenous development' of all parts of KV by linking the traditional settlement and the new satellite cities, and controlling urban sprawl (New Business Age,2019). The adjoining figure as cited in Manandhar (2017) shows the tentative alignment of the ORR. The route of the new alignment has not been finalized yet.

Figure SEQ Figure * ARABIC 3. The proposed alignment of the Outer Ring Road

5. Bagmati Corridor Project (Bagmati River Basin Improvement Project)

The Bagmati River Basin Improvement Project (BRBIP) is designed under the Bagmati action plan (2009-2014)[23]. The main objective of the action plan is to 'restore and conserve the Bagmati river system and its tributaries in an integrated and coordinate approach' (GoN, 2009). The action plan is being implemented by the High-Powered Committee for Integrated Development of the Bagmati Civilization (HPCIDBC). Guided by the action plan, two of the main projects- The Bagmati River Basin Improvement Project or popularly referred to as Bagmati corridor project and Bagmati Area Physical Infrastructure Development Project have carried out various activities like canaling of the river through sewer road construction along the Bagmati river and its tributaries around KV, beautification of the river corridor. The responsibility of the project implementation is shared between MoUD, departments of road, and HPCIDBC.

The Bagmati corridor project has been repeatedly cited by the media and the protest group in Khokana as one of the five projects that are being implemented in Khokana. The official documents of BAP and the projects do not indicate any work in Khokana. Nevertheless, the Ministry of Urban Development in its Annual Development Program (2020-21) has allocated NPR 200,000 for the feasibility study of Chovar-Khokana-Bungmati- Dakshikali road under the Bagmati corridor project (GoN,2020) heading.

[23] Available at: https://un.info.np/Net/NeoDocs/View/7697#:~:text=The%20Bagmati%20Action%20Plan%20(BAP,Shivapuri%20hill%20to%20Katuwal%20Daha

References

Angelo, H. and Wachsmuth, D., 2015. Urbanizing urban political ecology: A critique of methodological cityism. *International Journal of Urban and Regional Research*, *39*(1), pp.16-27.

Asian Development Bank (ADB), 2006. Nepal: Preparing the North–South Fast Track Road Project. *Technical Assistance Report*. ADB. [Available at: https://www.adb.org/sites/default/files/project-document/66905/40011-nep-tar.pdf]

Asian Development Bank (ADB), 2020. Gender Equality and Social Inclusion Diagnostic of Selected Sectors in Nepal. ADB. [Available at: https://www.adb.org/sites/default/files/publication/646661/nepal-gender-equality-social-inclusion-diagnostic.pdf]

Asian Human Rights Commission (AHRC) ,2018. Kathmandu-Terai expressway alignment should be changed to preserve arable land and local heritage. AHRC. Hongkong. [Available at: http://www.humanrights.asia/news/ahrc-news/AHRC-STM-020-2018/].

Batubara, B., Kooy, M. and Zwarteveen, M., 2018. Uneven urbanisation: Connecting flows of water to flows of labour and capital through Jakarta's flood infrastructure. *Antipode*, *50*(5), pp.1186-1205.

Bhattarai, K. and Conway, D., 2010. Urban vulnerabilities in the Kathmandu Valley, Nepal: visualizations of human/hazard interactions. *Journal of Geographic Information System*, *2*(02), p.63.

Chaplin, D., Twigg, J. and Lovell, E., 2019. Intersectional approaches to vulnerability reduction and resilience-building. Resilience Intel, 12.

Community Empowerment and Social Justice Network (CemSoj) , 2020. UNESCO, ILO and UN Nepal office called to take actions against displacement of Newars in Khokana and Bungamati due to Fast Track highway and other projects. CemSoj. [Available at: https://cemsoj.wordpress.com/2020/04/01/unesco-ilo-and-un-nepal-office-called-to-take-actions-against-displacement-of-Newars-in-khokana-and-bungamati-due-to-fast-track-highway-and-other-projects/].

Daly, P, Duyne Barenstein, J, Hollenbach, P and Ninglekhu, S., 2017. Post-disaster housing reconstruction in urban areas in Nepal: aid governance and local rebuilding initiatives. IIED Working Paper, IIED, London.

Devkota,K.,2014. New Municipalities: A Decision without Vision. *Nepali Headline.* [Available at: https://nepaliheadlines.com/new-municipalities-decision-without-vision/]

Ensor, J. *et al.* (2015) 'A rights-based perspective on adaptive capacity', *Global Environmental Change*, 31, pp. 38–49. doi: http://dx.doi.org/10.1016/j.gloenvcha.2014.12.005.

Ensor, J., Forrester, J. and Matin, N. (2018) 'Bringing rights into resilience: revealing complexities of climate risks and social conflict', *Disasters*, 42(S2), pp. 287–305. doi: 10.1111/disa.12304.

Food and Agriculture Organization of the United Nations (FAO).,2019. Country Gender Assessment of Agriculture and Rural Sector in Nepal. Kathmandu. [Available at: http://www.fao.org/3/CA3128EN/ca3128en.pdf]

Government of Nepal (GoN) ,2020. Annual Development Plan. Kathmandu: Ministry of Urban Development. [Available at: https://www.moud.gov.np/storage/listies/July2019/budget-book-final-2077-078.pdf]
Government of Nepal (GoN), 2015. Constitution of Nepal 2015. Kathmandu: Constituent Assembly Secretariat.

Government of Nepal (GoN),2017. Disaster Risk Reduction and Management Act. Kathmandu: Ministry of Home Affairs

Government of Nepal (GoN), 2017. Local Government Operation Act, 2017. Kathmandu: Ministry of Federal Affairs and General Administration.

Government of Nepal (GoN), 2018. National Policy for Disaster Risk Reduction. Kathmandu: Ministry of Home Affairs.

Government of Nepal (GoN), 2018. Social Security Act-2018. Kathmandu

Government of Nepal (GoN),2017. National Urban Development Strategy-2017. Kathmandu: Ministry of Urban Development.

Gurung, O., 2019. Social inclusion/exclusion: Policy discourse in Nepal. In *Including the Excluded in South Asia* (pp. 39-55). Springer, Singapore.

Harding, S., 1995. Just add women and stir? In *Missing links: Gender equity in science and technology for development*. IDRC, Ottawa, ON, CA.

Ishtiaque, A., Shrestha, M. and Chhetri, N., 2017. Rapid urban growth in the Kathmandu Valley, Nepal: Monitoring land use land cover dynamics of a himalayan city with landsat imageries. *Environments*, *4*(4), p.72.

Japanese International Cooperation Agency (JICA)., 2012. Data Collection Survey on Traffic Improvement in Kathmandu Valley. Kathmandu: Departments of Road. [Available at: https://openjicareport.jica.go.jp/pdf/12082459_01.pdf].

Karki, S., 2019. Kathmandu Valley to get four smart cities in five years. *Khabarhub*. 25 August. [Available at: https://english.khabarhub.com/2019/25/40175/].

Kathmandu Valley Development Authority (KVDA), 2016. Vision 2035 and Beyond: 20 Years' Strategic Development Master Plan (2015-2035) for Kathmandu Valley, Ministry of Urban Development, Government of Nepal. [Available at: http://www.kvda.gov.np/document]

Khadka, Krishna Radha (November 21,2020). Guthi system in Nepal and perpetual debate: Win-win deal is possible and inevitable. Online Khabar. [Available at: https://english.onlinekhabar.com/guthi-system-in-nepal-and-perpetual-debate-win-win-deal-is-possible-and-inevitable.html]. [Accessed on 10/09/2022]

Khanal, P., Gurung, A. and Chand, P.B., 2017. Road expansion and urban highways: consequences outweigh benefits in Kathmandu. *HIMALAYA, the Journal of the Association for Nepal and Himalayan Studies*, *37*(1), p.15.

Khokana., 2020. Lalitpur Municipality Ward 21- Khokana. [Available at: https://www.khokana.org/]

Kuran, C.H.A., Morsut, C., Kruke, B.I., Krüger, M., Segnestam, L., Orru, K., Nævestad, T.O., Airola, M., Keränen, J., Gabel, F. and Hansson, S., 2020. Vulnerability and vulnerable groups from an intersectionality perspective. *International Journal of Disaster Risk Reduction*, *50*, p.101826.

New Business Age, 2019. Urban Development Ministry Orders Re-evaluation of Outer Ring Road Project. *New Business Age*. October 18. Kathmandu. [Available at: https://www.newbusinessage.com/Articles/view/11542]

Lalitpur Metropolitan City (LMC),2020. Annual Municipality Development Plan Fiscal Year 2077/78. LMC [Available at https://lalitpurmun.gov.np/sites/lalitpurmun.gov.np/files/Budget%20pustika%20of%20LMC%202077%20PLATE.pdf]

Lead Group Nepal,2018. State of Environment Report: Khokana. Lalitpur: Lalitpur Metropolitan City Office(LMC)

Manandhar, S., 2018. Khokana cultural-archeological interest sites on large scale construction project routes. Kathmandu

Manandhar,S., 2018. Fast Track Brings Tears of Displacement to Khokana. *The Record*. 19 March. Kathmandu. [Available at: https://www.recordnepal.com/wire/fast-track-brings-fear-of-displacement-to-khokana/]

Ministry of Home Affairs (MoHA), 1982. Natural calamity (relief) act, 1982. Kathmandu: Ministry of Home Affairs.

Mitchell, M. and Iglesias, A.R., 2020. Urban agriculture in Kathmandu as a catalyst for the civic inclusion of migrants and the making of a greener city. *Frontiers of Architectural Research*, *9*(1), pp.169-190.

Müller-Böker, U., 1988. Spatial organization of a caste society: the example of the Newar in the Kathmandu Valley, Nepal. *Mountain Research and Development*, pp.23-31.

Murshed, S.M. and Gates, S., 2005. Spatial–horizontal inequality and the Maoist insurgency in Nepal. *Review of development economics*, *9*(1), pp.121-134.

Narain, V., 2009. Growing city, shrinking hinterland: land acquisition, transition and conflict in peri-urban Gurgaon, India. *Environment and Urbanization*, *21*(2), pp.501-512.

National Research Institute for Cultural Properties., 2016. Project for Investigation of Damage Situation of Cultural Heritage of Nepal. JICA. Tokyo. [Available at: https://www.tobunken.go.jp/japanese/publication/pdf/Nepal_TNRICP_2017_eng.pdf]

Nepali, G.S., 1965. *The Newars: An Ethno-Sociological Study of a Himalayan Community*. 2nd edn. Mandala Book Point. Kathmandu

Ohsumi, T., Mukai, Y. and Fujitani, H., 2016. Investigation of damage in and around Kathmandu Valley related to the 2015 Gorkha, Nepal earthquake and beyond. *Geotechnical and Geological Engineering*, *34*(4), pp.1223-1245.

Online Khabar., 2018. Khokana is appropriate starting point for fast track, asserts Nepal Army. *Online Khabar.*[Available at: https://english.onlinekhabar.com/khokana-is-appropriate-starting-point-for-fast-track-asserts-nepal-army.html]

Panday, S., Rushton, S., Karki, J., Balen, J. and Barnes, A., 2021. The role of social capital in disaster resilience in remote communities after the 2015 Nepal earthquake. *International Journal of Disaster Risk Reduction*, *55*, pp.102-112.

Pelling, M., 2003. *The vulnerability of cities: natural disasters and social resilience*. Earthscan.

Poudel, D.P. and Blackburn, S. (2020). Mapping DRR institutions and actors across scales from centre to local: Kathmandu, Nepal, March 2020. Southasia Institute of Advanced Studies(SIAS), Kathmandu, Nepal.

Rai, M.K., Paudel, B., Zhang, Y., Khanal, N.R., Nepal, P. and Koirala, H.L., 2019. Vegetable farming and farmers' livelihood: Insights from Kathmandu valley, Nepal. *Sustainability*, *11*(3), p.889.

Rawal, N., 2008. Social inclusion and exclusion: A review. *Dhaulagiri Journal of Sociology and Anthropology*, *2*, pp.161-180.

Regmi, M.C., 1976. *Landownership in Nepal*. University of California Press.

Sharma, P.,2012. *Urbanization in Nepal: An Overview* in Urbanization: Various Dimension of livelihood. Martin Chautari. Kathmandu

Sharma, T., and Bhattarai, H.P., 2004. Independent Assessment of Acquisition, Compensation, Rehabilitation Plan. Nepal Electricity Authority (NEA). Kathmandu.

Shrestha, B.K., 2013. Implementing the proposed outer ring road in Kathmandu Valley. *Journal of Management and Development Studies*, *25*(1), pp.23-38.

Shrestha,S. 2018. 'Our land is us, We are our land'. *Nepali Times*. May 04. [Available at: https://www.nepalitimes.com/banner/our-land-is-us-we-are-our-land/

Thapa, R.B., Murayama, Y. and Ale, S., 2008. Kathmandu. *Cities*, *25*(1), pp.45-57.

The Himalayan Times., 2019. The Local Obstruct Transmission Line Tower Work in Khokana. The Himalayan Times. Kathmandu [Available at: https://thehimalayantimes.com/business/locals-obstruct-transmission-line-tower-work-in-khokana/].

Twigg, J., 2014. Attitude before method: disability in vulnerability and capacity assessment. *Disasters*, *38*(3), pp.465-482.

Toffin, G., 2007. *Newar society*. Social Science Baha, Himal Books.

Wisner, B., 2016. Vulnerability as Concept, Model, Metric and Tool, in *Oxford Research Encyclopedia of Natural Hazard Science*. Oxford University Press. doi: 10.1093/acrefore/9780199389407.013.25.

Wisner, B., Blaikie, P., Blaikie, P.M., Cannon, T. and Davis, I., 2004. *At risk: natural hazards, people's vulnerability and disasters*. Psychology Press.

Zurick, D. and Rose, A., 2009. Landscape change in Kathmandu valley, Nepal. *Focus on Geography*, *51*(4), pp.7-16.