



Tomorrow's Resilient Kathmandu: Report on Imagining Futures Workshop, 25 February, 2020

Rachana Upadhyaya and Mark Pelling

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ECCI High School Yards, Infirmary Street, Edinburgh EH1 1LZ

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This report draws the background information, objective, and outcomes of the workshop from the 'workshop concept note' drafted by Dr. Mark Pelling. Some of the insights on the urban development of Kathmandu valley and institutions working on urban development were gained while working with Dr. Netra Prasad Timsina on the report entitled 'Trend of Urban Growth in Nepal with a Focus in Kathmandu Valley: A Review of Process and Drivers of Change'.

Abstract

The niche of the Tomorrow's Cities project lies in the fact that 60 percent of the area that is expected to be urban by 2030 is yet to be built. Kathmandu is one of the fastest-growing metropolitan areas in the South Asia region and the most critical place within Nepal that is facing unprecedented challenges – ramifications of unplanned development and urban sprawl. Kathmandu's core city can no longer accommodate population or infrastructural expansion and therefore, the urban settlements have slowly begun to spread on the last remaining agricultural lands on the peripheral areas of the core city. With the new publicly elected representatives at the local level, after more than two decades, the development planning has been handed down to these local units. However, there also exist overlapping structures in the federal government that employ federal mandates of city planning. Within the Kathmandu context, the development plans of both the municipal government and the federal government play out in these last remaining green spaces of the valley. Hence, the different city actors need to agree on a vision of what a resilient Kathmandu would look like.

Workshop methods with participatory adult learning tools were employed to bring together key city policy actors and understand (differing) visions of resilient Kathmandu. Through a series of sessions, the participants agreed on a vision where a capacitated municipal government was the precondition for a resilient city. Better technical knowledge of the municipal staff, participatory and inclusive planning, community cohesion, and strong social networks were the characteristics of the high capacity of municipal government that enhanced city resilience. Whereas, redundant policies and institutional structure at different tiers of government, low capacity of human resources at the municipal offices impeded the desired vision of the resilient city. The participants agreed on the positive role science can play in capacitating the municipal government on participatory and evidence-based decision making.

While the municipal government is one of the key actors, there are other structures within different tiers of government that can enhance/undermine the city resilience. Taking the municipal authority as a departure point, the Tomorrow's Cities project can inquire on the roles and relationship of the municipal government with the community it governs, the federal policies/institutions that it is regulated by and its relationship with other potential external influencers like the private sector and donor agencies. And hence understand how the urbanization process will unfold (converge or depart from the old ways) in the new federal system of governance.

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List of abbreviations/acronyms

CBOs: Community-Based Organizations

DRR: Disaster Risk Reduction

DUDBC: Department of Urban Development and Building Construction

IoE: Institute of Engineering

INGOs: International Non- government Organizations

KTM: Kathmandu

KV: Kathmandu Valley

KVDA: Kathmandu Valley Development Board

KMC: Kathmandu Metropolitan City

LMC: Lalitpur Metropolitan City

MoUD: Ministry of Urban Development

NDRC: Nepal Disaster Risk Reduction Center

NDRI: Nepal Development Research Institute

NGOs: Non-governmental Organizations

NSET: National Society for Earthquake Technology

PPP: Private-Public Partnership

UNDP: United Nations Development Project

Introduction

This report constitutes the proceedings, discussions, and findings from the 'Resilient Futures' Workshop held in Kathmandu on 25th February 2020. The workshop was the first technical activity organized in Kathmandu as a part of the Tomorrow's Cities project- a research collaboration between UK universities and different organizations in Kathmandu. The workshop was organized in collaboration between The King's College, London, and the Institute of Engineering (IoE).

The workshop was organized to bring together city policy actors in the identification of a shared vision of 'future resilient' Kathmandu; while in the process also identifying factors that can undermine or enable resilience of KTM city. Hence, the report starts with situating the present day Kathmandu drawing a timeline of major events that have shaped the city in its present form. In the following section, the methodology of the workshop is described. In the fourth section of the report, the findings from the four technical sessions are detailed. A summary of the process and findings are presented at the end of the report in a form of conclusion.

Situating Kathmandu

Kathmandu, the capital city of Nepal, is also the main urban center of Nepal. Kathmandu, in the local lingo, refers to Kathmandu Valley (KV) that comprises of three districts- Kathmandu, Lalitpur, and Bhaktapur¹. At present, KV is the largest urban agglomeration in Nepal with a population of 2.5 million (CBS, 2012). KV has a history of more than 200 years to become the city it is today.

Kathmandu Valley that existed as three separate kingdoms were unified and declared the capital city of Nepal in 1768 during the unification of Nepal (Stiller, 1973). Since the declaration, Kathmandu has remained the center of power, politics, culture, and economy of the country. There are specific events in history that have made it possible. It is believed that the Shah King who unified Nepal shifted the capital from Gorkha to Kathmandu for its temperate climate and fertile land and rich cultural heritage. A snapshot of the history of present-day Kathmandu is presented in the timeline below.

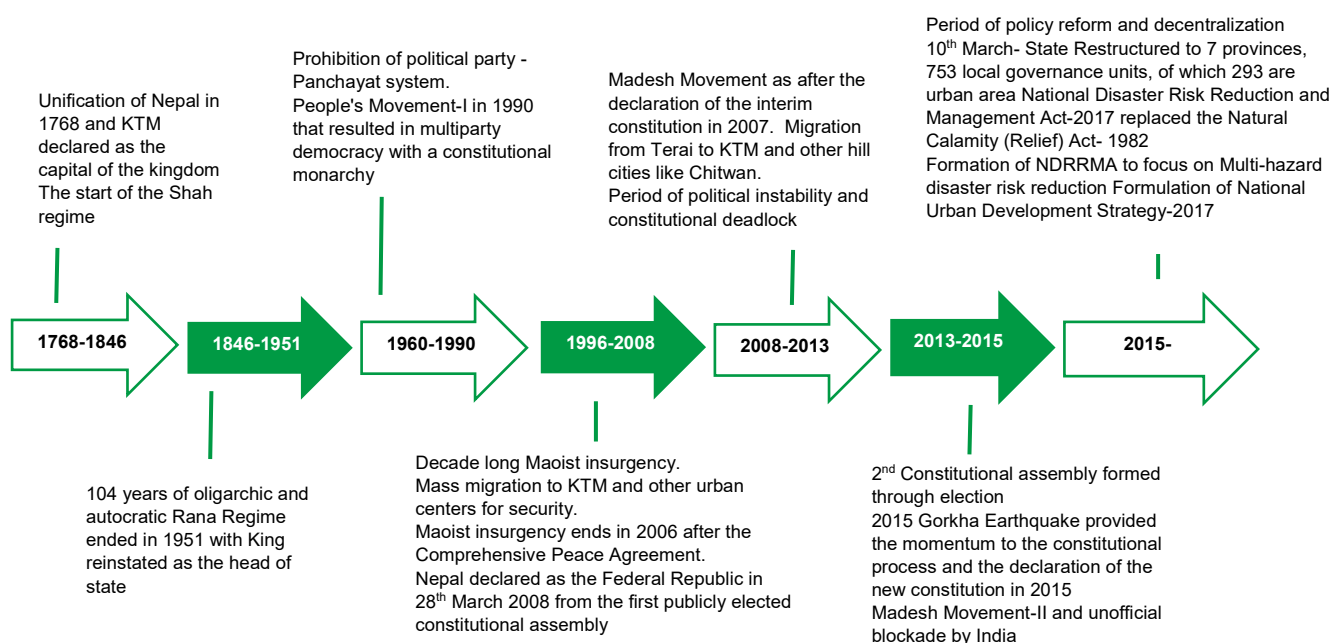


Figure 1. Timeline of Major Events

¹ The entire Kathmandu and Bhaktapur districts and the 50 % of Lalitpur district as mentioned in KVDA(2016) Can be accessed from <http://www.kvda.gov.np/documents/1512972778.pdf>

The precursory event that shaped the present-day Kathmandu started during the 1950s- with the construction of the Tribhuvan International Airport in 1949, the Tribhuvan Highway that linked KTM to India through Raxual/Birgunj and Arniko Highway that linked to China in 1950/60s. The opening of air and road travel made Kathmandu more accessible to people living in other parts of the country and eased migration. People's Movement- I in the 1990s- when multi-party democracy was restored and the reign of absolute monarchy was brought under the constitution, was another significant event. The unmitigated demand of a political faction that demanded the abolition of the monarchy and federal system of government started an insurgency against the government in 1996. This decade long (1996-2006) insurgency has been identified as the major driver of rural-urban migration (K.C., 2020). This decade hence marks the mass exodus from Maoist affected rural areas to urban centers (mainly Kathmandu), that remained unaffected by the conflict in the rest of the country. The regions/districts with low HDI were more affected by Maoist insurgency (Bohra-Mishra and Massey, 2011) which also stalled 'development' for a decade in those rural areas. The same period is also marked with rapid population growth in urban centers like Kathmandu. Between 1999 and 2009, there was 117% growth in the built-up area in Kathmandu (Ishiaque et.al., 2017). The 20 years' strategic plan of the Kathmandu Valley Development Authority (KVDA) also mentions political instability expedited rural-urban migration, which coupled with unplanned urban development, was the prime factor for increasing the built-up area in Kathmandu (KVDA, 2016). The concentration of economic opportunities, education, and health facilities within the Kathmandu valley are other major pull factors for internal migration to Kathmandu.

When the Gorkha Earthquake struck Nepal in April 2015, the country was grappling in a political quagmire following mainstreaming of Maoist in national politics, monarchy replaced by a federal system, and two failed constitutional assemblies that resulted into a constitutional deadlock. The political imbroglio was being played out in a country that ranks 4th in global climate risk and 11th in occurrence and impact of earthquake globally (UNDRR, 2019). The earthquake killed 8,896 people and rendered 800,000 people homeless (MoHA and DPNet, 2015). The earthquake provided momentum for the promulgation of the new constitution, which took place 5 months after the earthquake and opened the way for the new federal restructuring of the country. Following the declaration, three levels of government, i) federal, ii) provincial and iii) local were introduced. At present, there are 7 provinces with 753 local governments that constitute 6 metropolitan cities, 11 sub-metropolitan cities, 276 municipalities (nagarpalika), and 460 rural municipalities (gaunpalika). In 2017 with the enactment of Local Government Operation Act (2017), the federal government made steps towards devolving power to the local government along with authority over local planning, community infrastructure and economic development (Acharya,2018), thereby, taking steps towards decentralizing development and easing migration pressure off cities like Kathmandu.

At present, KV comprises of 16 municipalities and 2 metropolitan cities, each with their local planning rights. There are other institutions under federal ministries such as Kathmandu Valley Development Board, High Powered Committee for Integrated Development of Bagmati Civilization, and Department of Roads (under the ministry of physical infrastructure and transport) - the working area of these agencies can overlap and also go beyond the municipal jurisdiction. The core of Kathmandu can no longer accommodate population or infrastructure expansion, in an expanse of 25 years, there was an increase of 412% in the built-up area in KV (Ishtiaque et.al., 2017). Therefore, the last remaining spaces on the peripheral regions of the city are where both municipal and federal plans intersect for local development and city expansion. These institutions located at various scales within the governance system need a conceptual and operational alignment for a future resilient KV.

Methodology

To achieve a common idea of what resilient Kathmandu would look like various city actors were brought together through a participatory workshop method. There were 15 participants apart from the

facilitators and the organizers. The city policy actors constituted of representatives from government, non-government and UN agencies, working as policymakers and practitioners. Representing the government agencies were:

Kathmandu Valley Development Authority (KVDA) - responsible for formulation and implementation of an integrated physical development plan of Kathmandu valley².

Lalitpur Metropolitan City office (LMC) - publicly elected local self-governing entity that can make their policies but without contradicting the federal mandates³.

City Planning Commission- advises/guides the Kathmandu Metropolitan City office on formulation and implementation of both short and long term plans, monitors the projects of KMC⁴.

The SDG and Good Governance Committee - One of the four committees formed within National Assembly (NA), which is responsible for monitoring government/non-government organizations mainstreaming SDGs⁵, from national-level plans and policies to community-level development activities. Kathmandu Metropolitan City office (KMC) - publicly elected local self-governing entity that can make their own policies without contradicting the federal mandates⁶.

Department of urban development and building construction (DUDBC) - the department is under the Ministry of Urban Development(MoUD) that is responsible for 'formulation, planning, and implementation of the urban policies⁷.

In the case of policy influencers and practitioners, the workshop had representatives from **UNDP, UN-HABITAT, and Regional Urban Planner's Society of Nepal (RUPSON)**. And finally, other research partners -Practical Action-Nepal, NSET-Nepal, NDRI, NDRC, and Lumanti, with long working experience on DRR practice and policy advocacy⁸.

Since different participating city actors have a different understanding of what a resilient future of Kathmandu would look like, participatory methods were used to provide a space for (differing) ideas that were brought together to form a broad scenario agreeable to all the participants. To achieve this outcome, the workshop was divided into four technical sessions- **i) Preparing Development Trajectory and Discussion, ii) Characterizing Four Scenarios, iii) Desired Future Situation of Resilient Cities and iv) Discussion on where science can help transition to the desired scenario**. The sequence of the workshop was set to first identify the drivers of development, and converging on one most important factor agreed by the participants that if strengthened can result in a more resilient future. Then, the four scenarios for the urban poor were drawn out and participants in groups discussed and presented imaginary situations where each scenario could be a reality. With these brainstorming exercises, the participants were finally asked to vote twice, first, the situation of the local government vis-à-vis the resilience of the community, and second, the desired future in terms of the capacity of the local governments against the resilience of the community. At the end of the workshop, the participants discussed how science (research) can help facilitate the process to reach the desired future. The outcomes of each technical session are elaborated in the following sections.

² <http://www.kvda.gov.np/kvda-functions>

³ <http://lalitpurmun.gov.np/en>

⁴ <http://www.kathmandu.gov.np/en/node/4?fbclid=IwAR3Yz62LAYyPfbkgdK2FHgtPtaMmPyV2CBYwxJXvYd5mRaa0E1-sJA1zk2Y>

⁵ <https://na.parliament.gov.np/committees/Sustainable-Development-and-Good-Governance-Committee>

⁶ <http://www.kathmandu.gov.np/en/node/78>

⁷ <https://www.dudbc.gov.np/about-dudbc/functions>

⁸ Limitations of this workshop method that can affect the outcome can be the time commitment of the participants. If the participants leave the workshop before the final exercise (like in the case of Kathmandu), the final outlook of what a resilient city should look like may not be as representative as hoped for while designing the workshop.

Session outcomes and discussions

This section presents the process summary of each activity along with its outcome.

Technical Session I: Development Trajectory

- In the first technical session, the participants were asked to write the three major drivers of development in the Kathmandu valley. The facilitator along with the participants categorized the answers in four broad themes (not in an order of priority):
The new federal governance system and subsequent policy reforms
- Urbanization Process
- Disaster Shocks
- Social changes

The participant emphasized people/capital-driven development as opposed to state-led planned development. The majority of the participants mentioned the increased purchasing power of people fueled by remittance money has been a major driver of the urbanization process in the Kathmandu valley. Foreign migration was linked to insecurity caused by the Maoist movement coupled with the concentration of all government power in Kathmandu valley. Interestingly, while in discussion the participants spoke about individual/non-state factors shaping the trajectory of development in Kathmandu, however, in writing, most of them emphasized the role of the federal system, the new local government, and the policies in driving development.

In the next activity of this session, the participants were asked to envision Kathmandu in 10 years, if the present government system was strengthened and the human resource capacitated. The majority of participants visualized city that is better capacitated with dealing with risk as a result of better implementation of policies, such as building codes, risk-sensitive land use plans. A strengthened local level was visualized with an increased number of technical staff at the local level. Such pre-requisites of the future resilient city at an implementation level would have pro-poor policies, especially in the housing and land-use sector. The participants also related a strong government system with the one with having robust demographic data of the city dwellers- that factored in in/out-migration. A few of the participants, based on the working modality of the local government so far, expressed a bleak vision of the future. They believed if the local government continues in the present trend of development and taxation, then the urban living can be unaffordable to the urban poor.

In this session, what went unobserved was the absence of the publicly elected local government for more than 2 decades, and the gap filled in by bureaucracy under the authority of the central government. The government intervention on local development was virtually non-existent during the period. Therefore, it is important to consider how the community will respond to the new laws formulated by the newly elected representative. Furthermore, it is equally of importance to consider the time that the present inexperienced local representatives might take to be able to guide the local development that is resilient (as their tenure is only 5 years and policy focus changes with every new government).

Summary of the outcomes from the exercise

The trajectory of development in Kathmandu is set by a combination of multiple factors, urban migration influx as a result of insecurities associated with Maoist insurgency, and later due to an increase in purchasing power as a result of remittance money. The new federal system and the local government can be the driving force of sustainable and disaster-resilient Kathmandu but its capacities should be enhanced through increasing technical knowledge of these agencies.

Technical Session II: Characterising Four Scenarios

At the end of the first session, the facilitators drew a general consensus among the participants that the newly publicly elected local government can be the driving force of the development and hence are in the most important actors in shaping a future resilient Kathmandu. Moving forward from this conclusion, in the second session, 4 scenarios for the resilience of the urban poor were drawn out. The participants, in separate groups, characterized each scenario and the outcomes of the exercise are illustrated in the figure below. The exercise helped the participants to brainstorm on the key obstacles and opportunities to make Kathmandu a resilient city in the future

Limited municipal capacity and high resilience for urban poor

- Good social harmony/social cohesion.
- Good coping strategy
- Resilient civil society. Good presence of NGOs and INGOs
- open to external support and resource mobilization
- High presence of federal and provincial government in local level development
- Active grass-root community-based organizations
- Limited resource among communities
- Decreased crime rate

Strong municipal capacity and high resilience for urban poor

- Clarity on vision, mission, goal, objectives, and action
- Adequate capacity for implementation (characterized by: good H/R, finance and institutional mechanism, research-based decision making, inclusive professional team, and law enforcement)
- Inclusion (both in planning and implementation)
- Public support (through PPP, social mobilization, CSR)

Strong municipal capacity and low resilience for urban poor

- Overlaps/Duplications (conflict of interest, the difference in opinion between bureaucracy and publicly elected representatives)
- Policy ambiguity (lack of coordination and harmony between federal and local institutions)
- Barriers/Resistance (policy, markets, civil society, and donors)
- Monopoly and over-ambition of municipal governments

Limited municipal capacity and low resilience for urban poor

- Social conflicts between communities. Escalated crime rates
- Non-acceptance of government rules
- Lack of external support/non-acceptance to external support
- Non-responsive community
- Poor resource sharing
- Absence of social cohesion
- High vulnerability of urban poor to natural hazards
- weak human resource/lack of knowledge in the community

Figure 2. Characteristics of 4 scenarios as presented by the workshop participants

When the municipal capacities are limited, the findings show that the community cohesion and the presence of external support such as community-based organizations, NGOs/INGOs, directly correlated with the level of resilience of the community. As seen in the findings on the 2nd and the 4th quadrant on the above chart, where the capacities of the municipal governments are limited- the scenarios for high resilience are more or less the exact opposite of the scenario where the resilience of the urban poor is low. These findings align with post-disaster studies that emphasize the immediate and important role of community and social networks in immediate disaster response when publicly elected representatives were absent from local governance institutions (Poudel, 2019; Bhandari, 2014). It is important to note that the role of community and social networks may not be adequate for community resilience unless supplemented through pro-public/poor risk-sensitive development planning.

In the second set of scenarios, where the municipal capacity is strong, the characteristics of society for high and low resilience did not appear in clean contrast as in the previous scenario. In both the scenarios- high resilience and low resilience of the urban poor- the causes were located within the municipal government. The high-high scenario was characterized in terms of the strength of municipal

government- in policies, sound institutional mechanisms, inclusive development planning, and implementation. And in the high- low scenario, the focus was on redundant and ambivalent federal and local policies, and lack of technical capacity of the municipality.

The findings imply that despite strong governance, there could be various pitfalls that could lead to the low resilience of the urban poor. Such as policy duplication, redundancy in decision making structures (the federal level organizations like KVDA implement federal development plans that could stretch across municipal jurisdictions and development priorities- that could undermine the municipal capacity in shaping the development outlook of their area like in the case of Khokana where series of protest took place in June 2020 by the locals against the federal development plans⁹), lack of the people's participation in local decision making. In short, problems that are associated with governance systems in transition (centralized governance system to three tiers of governance in Nepal). Interestingly, the role of external actors such as CBOs/NGOs/INGOs did not feature in strong municipal governance scenarios, which was prominent in the situation otherwise.

Technical Session III: Desired Future Situation of Resilient Cities

In this session, the participants were asked to vote twice, first on the prevailing condition of the local government against the resilience of the community and second, the desired future in terms of the capacity of the local governments against the resilience of the community. The graphical representation of the desired transition is presented in figure 3. The orange dots represent the present situation and the blue ones show the desired state. The arrows illustrate the transition pathway for the desired scenario for city resilience vis-à-vis the municipal capacity.

During the first round of voting, the majority of participants voted higher resilience despite the limited capacity of the local government. As the justification of voting for higher resilience despite low municipal capacity, the participants referred to the response of the 2015 Gorkha Earthquake. Drawing from their own lived experiences, the participants mentioned how the immediate and effective community response compensated for the lack of publicly elected local governments¹⁰. Among the outliers, the DRR experts (representing NSET-Nepal, NDRI, NDRC) voted low resilience of the city and the representatives of municipal and city level government agencies (city planning commission, LMC, KVDA, DUDBC) voted for comparatively higher capacity of the municipal governments. Apart from the difference in DRR knowledge and possible professional bias, a differential understanding of resilience among different actors can be a reason for such differentiated opinions. Various literature around resilience has underscored the difference in conceptual understanding of resilience especially when it is operationalized (Alexander, 2013; White&O'Hare, 2014, Borie et.al, 2019).

In the second round of voting, the participants were asked where they wanted the city to be in terms of municipal capacity and resilience of the urban poor, the participants unanimously voted for strong municipal capacity that would then result in high resilience of the urban poor. The participants identified the characteristics of and precondition for a high capacity municipal government in terms of inclusive mechanism for program planning and benefit sharing, research based decision making, skilled municipal staff, and most importantly clear delineation of roles and responsibilities between all tiers of government through transparent policies.

⁹ Khokana is the ward 21 of Lalitpur metropolitan city. The reports of the clashes can be read at <https://kathmandupost.com/editorial/2020/07/06/listen-to-khokana>

¹⁰ It is important to note how the majority of the participants understood effective disaster response as 'resilience'.

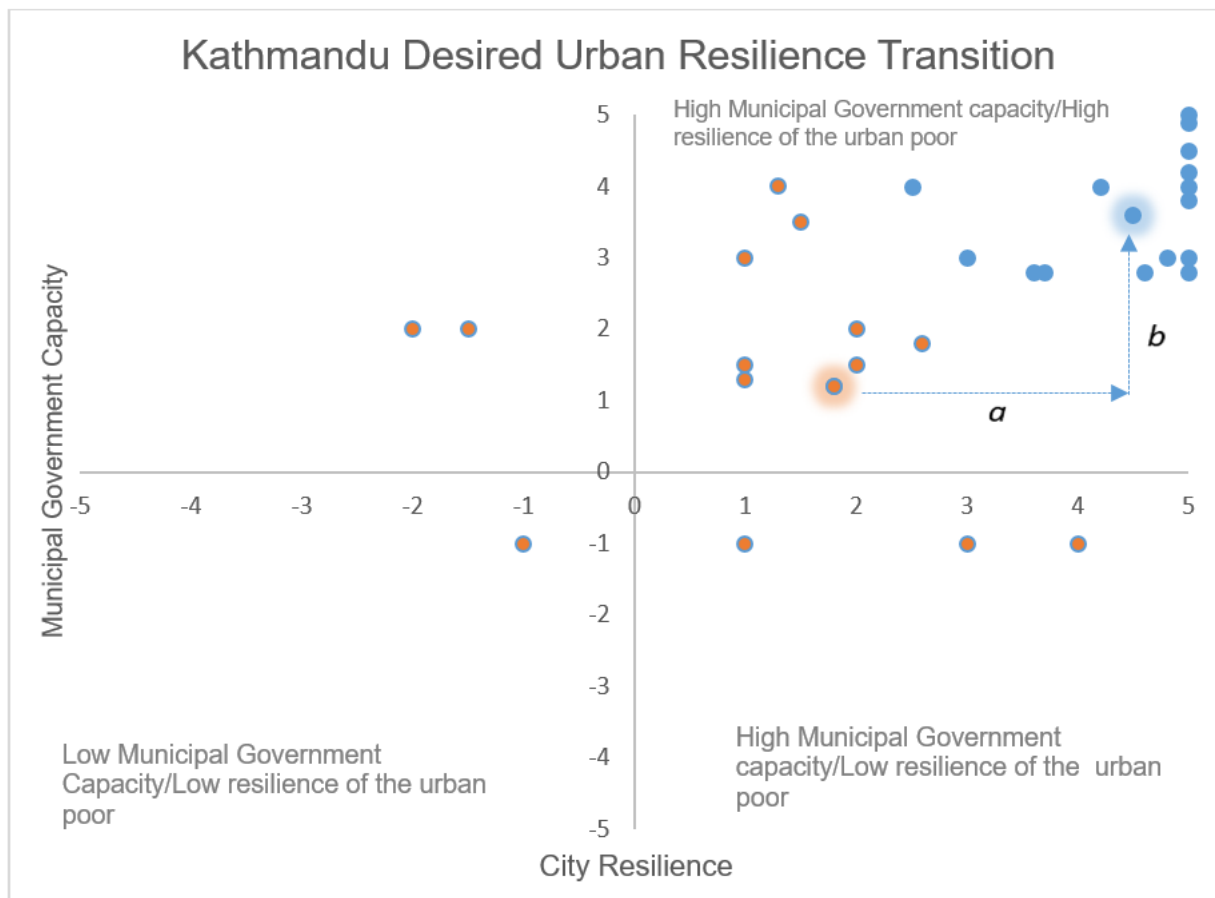


Figure 3. Graph illustrating desired urban transition in Kathmandu

Technical Session IV: Science Input for Transitioning into the Desired Scenario

In the final session of the workshop, the participants were asked how science (research projects like Tomorrow's Cities) can help in improving the governance relationship and the city resilience. The summary of the participants' responses is presented below.

Resilience	<ul style="list-style-type: none"> -Tools and techniques and evidence for resilience -Develop alternate options for Resilience -Forecast flood inundation, early warning -Risk informed decision making -Integrating DRR in planning/implementation -Urban planning action -Strong entrepreneur/building code enforcement -Development of resilience of sector-wise -More budget allocation on research -Inclusive urban design
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Capacities	<ul style="list-style-type: none"> -Demystifying science and technology and help the city to internalize the importance of evidence-based decision making -The capacity of local governance and all other tiers on multi-hazard risk reduction -Review of Municipal Policies -Support municipality in the mapping of informal settlements /informal economic activities and a floating population of the city -Policy advocacy for clear delineation of roles and responsibility among different organizations in different tiers of the governance system
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Conclusion

The workshop was conducted to 'facilitate key in-city policy actors in the identification of an agreed vision for the future resilience, the identification of key obstacles and opportunities for enabling transition and where science might help'. Methodologically not all 'key policy-actors' may have been reached through the workshop therefore, the agreed outcomes at the end of the workshop may not be as representative. It is understood that the outcome may not be fixed and also may not align with the priorities of other actors. Nevertheless, the workshop process did help identify one of the visions of 'future resilient Kathmandu' and also laid out the constraints and prospects for realizing the vision.

The workshop brought together federal agencies with a stake in development planning and implementation, the municipal representatives and practitioners from within UN agencies and civil society organizations. Through four different sessions, the participants identified the trajectory of the development of Kathmandu and the major drivers of change. With a consensus, the emphasis was placed on the potential role of the newly elected local government as the major driver of development which also determined the resilience of the urban poor in KV. Through group work, the participants brainstormed on 4 potential scenarios for KV hence identifying the factors that enhanced resilience like a strong social network and community cohesion, a capacitated local government, inclusive structures, and participatory decision making. The participants also listed out potential aspects that can undermine the city resilience such as redundant policies and institutional structures at local and federal levels, lack of technical knowledge of the municipal staff, local planning without public consultation. While assessing the present situation, the majority of the participants considered the relatively low capacity of municipal officials compared to city resilience. Albeit the present condition, the participant unanimously voted for enhanced resilience of the city in the future through a more capacitated municipal government.

Interestingly, in the workshop, there were representatives from federal organizations and municipal authorities whose roles conflicted with one another in terms of carrying out development work. Yet, the conflict did not appear significantly during the session. One possible explanation could be the source of conflict lies elsewhere than these structures (like in the case of Khokana). During the workshop, the focus for enhancing urban resilience was limited to the local governments. However, the institutions with the mandates for urban development are fragmented across different levels of governance and different ministries within the federal government as well. Additionally, there is a contradiction between the development visions of the government plans and actual actions. For example, the 20 Years Strategic Development Master Plan of KVDA has the mission statement that implies KV will be developed as a cultural city (KVDA 2016), but the actual action decries its mission by obliterating the last remaining green spaces of the valley and unique cultural heritage of people owning those land through projects like the satellite cities, and the outer ring road.

The findings from the workshop, however, opens many lines of inquiry that the Tomorrow's Cities research project can pursue.- especially in relation to the vertical engagement of municipal authorities with the federal and provincial development planning units, and horizontal engagement with adjoining local units for a coordinated effort. Also, it directs towards a requirement of a more nuanced understanding of the process of development planning, the actors involved, and the causes, sources, and the location of conflict (whether within the municipality offices or in the community). This also further requires inquiry on the relationship between the municipalities and the local community, especially the groups that are made vulnerable by the ramification of development. Finally, the research project needs to recognize the different conceptual understanding of 'risk' and 'resilience' within these institutions operating in various scale so as to be able to bring them together to an understanding of the shared vision of future resilient Kathmandu, at the end of the research project period.

References

1. Acharya, K.K., 2018. The capacity of local governments in Nepal: From government to governance and governability? *Asia Pacific Journal of Public Administration*, 40(3), pp.186–197.
2. Alexander, D.E., 2013. Resilience and disaster risk reduction: an etymological journey. *Natural Hazards & Earth System Sciences*, 13(11).
3. Bhandari, R.B., 2014. Social capital in disaster risk management; a case study of social capital mobilization following the 1934 Kathmandu Valley earthquake in Nepal. *Disaster Prevention and Management*.
4. Bohra-Mishra, P., and Massey, D.S., 2011. Individual decisions to migrate during civil conflict. *Demography*, 48(2), pp.401-424.
5. Borie, M., Pelling, M., Ziervogel, G. and Hyams, K., 2019. Mapping narratives of urban resilience in the global south. *Global Environmental Change*, 54, pp.203-213.
6. CBS, N., 2012. National population and housing census 2011. National Report.
7. DoR (Department of Road) (2004) List of important roads and status. Road Statistics, Government of Nepal
8. GoN., 2017. Local Government Operation Plan-2017. Kathmandu, Nepal. Government of Nepal, Ministry of Federal Affairs and Gender Administration.
9. 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.
10. 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>]
11. MoHA., and DPNNet., 2015. Nepal Disaster Report 2015. Kathmandu, Nepal. The Government of Nepal, Ministry of Home Affairs (MoHA) and Disaster Preparedness Network Nepal (DPNet) [Available at: <http://www.drrportal.gov.np/uploads/document/329.pdf>]
12. Poudel, P., 2018. Disaster Risks and Community Response: A Case Study from Ilam, Nepal. In *Multidisciplinary Digital Publishing Institute Proceedings (Vol. 6, No. 1, p. 12)*.
13. Samir, K.C., 2020. Internal Migration in Nepal. In *Internal Migration in the Countries of Asia (pp. 249-267)*. Springer, Cham.
14. Stiller, L.F., 1973. *The Rise of the House of Gorkha: A Study in the Unification of Nepal, 1768-1816*. 1995 edition. Human Resources Development Research Center: Kathmandu.
15. UNDRR., 2019. *Disaster Risk Reduction in Nepal: Status Report 2019*. Bangkok, Thailand, United Nations Office for Disaster Risk Reduction (UNDRR), Regional Office for Asia and the Pacific
16. White, I. and O'Hare, P., 2014. From rhetoric to reality: which resilience, why resilience, and whose resilience in spatial planning?. *Environment and Planning C: Government and Policy*, 32(5), pp.934-950.

Annex

List of participants

S.No.	Name of the Participants	Organizational Affiliation
1	Ramesh Guragain	National Society for Earthquake Technology
2	Pradip Amatya	Lalitpur Metropolitan City Office – Solid Waste Division
3	Uddhav Bhattarai	Lumanti
4	Shyam Gyawali	National Disaster Risk Reduction Center(NDRC)
5	Manoj Bhatta	SDGs parliamentary committee(National Assembly)
6	Shankar Shrestha	Nepal Development Research Institute
7	Ram Raj	DRR specialist, UNDP
8	Sobina Lama	Lumanti
9	Padma Joshi	UN-Habitat
10	Kirti Kusum Joshi	City Planning Commission
11	Bhagwat Bhakta Khokali	Kathmandu Valley Development Authority(KVDA)-
12	Jeeta Gurung	Department of Urban Development and Building Construction
13	Bishnu Prasad Joshi	Kathmandu Metropolitan City Office
14	Suresh Acharya-	Regional Urban Planner's Society of Nepal (RUPSON)
15	Ambika Amatya	Housing Recovery and Reconstruction Platform
16	Dharam Raj Uprety	Practical Action
17	Sangeeta Singh	IoE - Facilitator
18	Rachana Upadhyaya-	Rapporteur
19	Prafulla Pradhan –	Workshop Facilitator
20	Mark Pelling-	Workshop Facilitator