Shaping Visioning Scenarios for Future Rapti City by Community Representatives and Planners

Various representative groups from local communities and also authorities and city planners have jointly worked on shaping Visioning Scenarios for Tomorrow's Rapti City.

Sharing Group works on Visioning Scenarios for Tomorrow's Rapti City, Photos: NSET/Tomorrow's Cities

The Provincial Infrastructure Development Authority (PIDA), Lumbini has collaborated with Tomorrow's Cities, to ensure the future Rapti City, the Lumbini Provincial Capital City (LPCC) is built resilient to disasters. The local governments from Rapti & Gadhawa Rural Municipalities and Shitaganga Munipality are the key stakeholders of the collaboration. The aim is to work together to incorporate Tomorrow's Cities Decision Support Environment (TCDSE) into the development of Rapti City. The collaboration is implementing effective strategies and measures that will contribute to the overall resilience and sustainability of the Capital City in the face of potential hazards and challenges. Tomorrow's Cities embodies the essence of disaster risk reduction, forging a path toward future cities in a risk-informed manner.

Shaping Visioning Scenarios for future cities is one of the key milestones of the TCDSE . In that context, a Visioning Scenarios Validation Workshop was held in Rapti from September 14-15, 2023. Six stakeholder groups had been identified during the Future Visioning stage of the TCDSE, and they are the same as the assemblage of disaggregated stakeholder groups. The groups were formed of representatives from Tharu, Migrants (Pahade), Squatters, Madhesi-Muslim-Dalit, Ethnic (Magars) and the Planners & Authorities. The groups participated in group discussions & exercises and contributed to shape Visioning Scenarios for their own city.

The workshop was designed in different segments: Discussion on Land Use Plan (LUP) for Future Rapti City, Discussion on Trade Off and Equity Check, Hazard Impact Brainstorming, Impact Priority Exercise and Policy Discussion.

Discussion on Land Use Plan (LUP) for Future Rapti City

Participants were initially introduced to their interpretations of the land use plans produced in the previous stage, Future Visioning. Subsequently, they gained a

comprehensive understanding of all the land use plans and developed the confidence to challenge the interpretations made by planners. They also suggested changes to the products. In each group, the participants reached a consensus that the Land Use Map incorporated most of the elements and infrastructures envisioned during the Future Visioning Workshop. Nevertheless, they recommended some changes and additions to the Land Use Plan map.

The Tharu Group had originally not thought of an airport but later conceived of the plan thinking that there might be a need in the future urbanized city. Now, the proposed airport area is near to the highly populated area and there is no sufficient flat space available for an airport within the city. Hence, they suggested to shift the airport to somewhere in Gadhawa or Lamahi within Deukhuri valley. They also wished to connect the ring road. A signature bridge is planned to be built near Basantapur and they would also like to add one bridge after each 2km along the river.

Modifications in Land Use Map by the Tharu Group, Photos: NSET/Tomorrow's Cities

Other groups also engaged in brainstorming the Land Use Plan for their future city and made efforts to bring them in shape.

Group Works and sharing on Land Use Plan for Future Rapti, Photos: NSET/Tomorrow's Cities
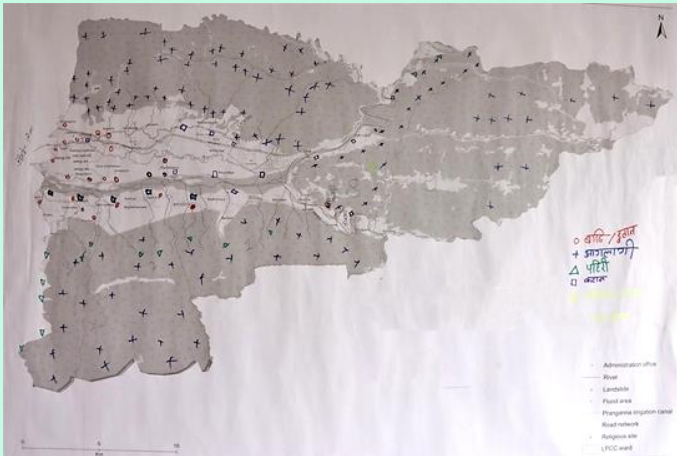
Discussion on Trade Off and Equity Check

Each group then discussed on equity concerns focusing on pro-poor philosophy. Who is likely to benefit more from your decisions in this plan? Will your choices serve the urban poor or disadvantaged and marginalized groups in the future? How accessible are low-income households from critical services & other opportunities?

The groups have proposed establishing high-income settlements near the East-West Highway and Postal Highway, low-income settlements along the riverbank and in the jungle areas, and designating all other areas for middle-income settlements. Furthermore, the groups have emphasized the importance of providing land ownership certificates to all squatter dwellers.

Hazard Impact Brainstorming

Participants were instructed to identify various scenarios that could unfold following a hazard event in the future city they had envisioned. Additionally, a discussion on existing hazards took place to document the significant effects of these current hazards. This brainstorming session was conducted using the community hazard mapping data gathered from the same group before the Future Visioning Workshop.

Community Hazard Map by Squatter Group

As shown in the map, the Squatter Group, has identified four main hazards: Flood, Fire, Landslide, and Earthquake. The group prioritized flood, fire, landslide, and earthquake in a sequence of their experience with those hazards. Also, the participants highlighted the three major impacts of these hazards and linked all the impacts with the seven assets of the wheel of urban assets. The major impacts of existing hazards are identified as follows:

Flood

Loss of houses and livelihood

Damage of infrastructures such as bridge, roads etc.

Loss of Human Life and casualties

Mental problems

Increase in communicable diseases

Loss of crops

Loss of jungle

Interruption in education and health services

Legends of the assets of the Wheel of Urban Assets:

SN	Wheel of Urban Assets	Symbols
1	Micro Infrastructure	
2	Macro Infrastructure	
3	Social Assets	
4	Environmental Assets	
5	Jobs and Livelihood	
6	Knowledge and Culture Assets	
7	Institution and Rule of Law	

The squatter group has worked for Fire, Landslide and Earthquake too.

Each group has completed this exercise of Hazard Impact Brainstorm.

Impact Priority Exercise

In this stage, participants discussed and voted on their collective priorities and justify their choices. Participants had a budget of 25 stickers (to allocate priority points) and they used this budget to define what their priority 'clusters' are in the event of a hazard. This step helped connect disaggregated groups collective identities and perceptions that would be used to provide a bespoke definition of risk.

To prioritize the impact, the wheel of urban assets was provided to each individual group. The participants from Squatter Group were allowed to prioritize the impact based on the hazard brainstorming exercise.

Wheel of Urban Asset and Impact Prioritization by Squatter Group, Photos: NSET/Tomorrow's Cities

The squatter group prioritized Institution and Rule of Law first (6 points), as they believe if there are policies to govern the plans, then everything will be properly institutionalized and thus function well. They prioritized social assets and micro-infrastructure equally in a second number (4 points) believing that these two assets impact their life directly. After this, they prioritized environmental asset, jobs and livelihood and macro-infrastructure (3 points) believing that all of these have some major indirect impact on life and could not be prioritized less over the other. The least prioritized is the knowledge and cultural assets (2 points) as the group think that if everything else works well then this can be taken care of.

Each group did this exercise to prioritize impact based on their analysis.

Wheel of Urban Asset and Impact Prioritization by various Groups, Photos: NSET/Tomorrow's Cities

Policy Discussion

Each team recalled the policies that were produced by the groups during previous task. They worked to detail policies, and refine them so they would be more efficient at tackling the impacts of future hazards. Each team then had an opportunity to discuss their policies and refine them. The groups still had the power to choose whether to change or further detail their policies.

The Planners and Authorities Group had identified following policies during the Future Visioning Workshop:

- Disaster Risk Management Policy.
- Policy to conserve natural and cultural heritage.
- Local Land Use Policy.
- Institutions and the rule of law.
- Environment, institutions, and the rule of law.
- Social capital, institutions, and the rule of law.
- Employment and Livelihood policy.
- Environmental Policy.
- Micro-infrastructure, Social Capital and Environment Policy

The participants agreed to these policies and added one new policy: Building and Infrastructure Development Bylaws.

After the discussion the prioritized policies got modified as follows:

- Building and Infrastructure Development Bylaws: This policy can reduce disaster risk directly after making the building and infrastructure safe. National Building Code 2020, The Fundamental Construction Bylaws on Settlement Development, Urban Planning and Building Construction 2015 and local government's building bylaws can help formulation of this policy.
- Disaster Risk Management Policy: This policy can reduce disaster risk directly by identifying the risk areas. Disaster Risk Reduction and Management Act 2017, Disaster Risk Reduction and Management (DRRM) Rules 2019, and Local Disaster and Climate Resilience Planning Guidelines of Rapti (LDCRP Guidelines) 2017 can help formulation of this policy at local level.
- Local Land Use Policy: This policy can be formulated based on Land Use Act 2019, Land Use Policy 2015, Land pooling reference manual 2017, National Land Policy, 2019 and Land Act, 2021. There are some constraints for implementation of this policy but awareness raising and enhanced citizen engagement help resolve the issues.

At the end of the two days long exercise, each group made presentation and shared their insights and opinions.

Group works on Visioning Scenarios for Tomorrow's Rapti City Photos: NSET/Tomorrow's Cities

Opening Session of the Validation Workshop

Opening of Validation Workshop jointly done by Mayor of Shitaganga, Chairperson from Rapti & Vice Chairperson from Gadhawa and Dr. Max Hope from Tomorrow's Cities resaerch project, Photo: NSET/Tomorrow's Cities

To begin with, the speakers from the Local Governments and project highlighted the importance of this process in due course of preparing for better future city.

"Making Rapti Valley a beautiful city is our dream, and we are working to fulfill the dream into reality. The process of building Rapti a planned city is underway, and we are so lucky that such an opportunity to build a planned city was not available to most of the cities in the world. Therefore, I would like to thank Tomorrow's City project and Provincial Infrastructure Development Authority (PIDA), Lumbini Province Nepal for this initiative."

Mr. Prakash Bista, Chairperson Rapti Rural Municipality

"While developing a city, we must be far-sighted enough and need to consider the future scenario. As we are embarking on building a resilient, beautiful and model city to Rapti Valley, I would like to urge all of you to express your ideas and feedback so that we can achieve our aspiration of making this city as good as possible."

Mr. Chhabi Lal Paudel, Mayor, Shitaganga Municipality

"I would like to make the request to the experts and intellectuals who are present here in this program to share your important thoughts, experiences, perceptions, ideas, and visions that will be an important guidance to build a safer and resilient future Rapti City."

Ms. Sharada Kumari Chaudhary, Vice Chairperson, Gadhawa Rural Municipality

"I hope this 2-day workshop will provide worth input regarding how we can build our Rapti Valley a disaster resilient, strong, and beautiful city."

Mr. Pahalwan Chaudhary, Ward Chair and Spokesperson, Rapti Rural Municipality.

"Seeking your feedback, we will share digital maps during the workshop which will provide an opportunity to review and make necessary changes to the maps and policies. This is a very exciting moment, and we are looking forward to hearing what you think and taking part in a new discussion on your plan."

Dr. Max Hope, Leeds Beckett University, United Kingdom

"Community members are the ones who should decide on how their city be made. In this context, our urban planners have developed different scenarios based on the ideas and suggestions provided by community people and stakeholders. The main objective of this workshop is to share and hold discussions on those whether their opinions are truly reflected or not. From now onwards, we will sit with the elected representatives of the various municipalities and city planners, and then finalize the plan regarding how the future Rapti City should be."

Dr. Ramesh Guragain, DED, NSET and SMT Member, Tomorrow's Cities

After the Opening Session, there were 2 presentations; first, a quick recap to Works Package 1 (WP1) activities that was done by Dr. Dilli Poudel from SIAS who is a Senior Researcher for Tomorrow's Cities project, and, second, a brief presentation on Validation Workshop was made by Dr. Ramesh Guragain from NSET who is a Senior Management Team (SMT) Member and Capacity Strengthening Lead for Tomorrow's Cities project.

Dr. Dilli Poudel from SIAS and Dr. Ramesh Guragain from NSET presenting at the Visioning Scenario Validation Workshop held in Rapti on Sep 15, 2023, Photo: NSET/Tomorrow's Cities

The Closing Session was addressed by CEO Chhabiraj Pokhrel from Provincial Infrastructure Development Authority (PIDA), Dr. Max Hope and Dr. Ramesh Guragain from Tomorrow's Cities project. In his closing remarks, CEP Pokhrel appreciated the efforts of all stakeholders during this process and hoped to see the dream of making safer, better, inclusive and equitable new capital city come true soon.

Group Photo after the Closing of Visioning Scenario Validation Workshop held in Rapti on Sep 15, 2023, Photo: NSET/Tomorrow's Cities

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