


Municipal Adaptation Plan (MAP): An Approach to Localizing Adaptation Needs

Introduction

Climate Change is a recognized fact that is felt throughout the world (IPCC, 2014) and Nepal is no exception. Being one of the most vulnerable countries to the impacts of climate change (MoE, 2010), adaptation, despite its limitations, is our necessity rather than a choice. Nepal has taken a number of initiatives like the National Adaptation Programme of Action (NAPA), the National Framework on Local Adaptation Plan for Action (LAPA) and is in the process of formulating the National Adaptation Plan (NAP) to present the country's medium-and-long term adaptation needs. It is an undeniable fact that climate change pose severe threats across various sectors, communities and ecosystems; however the extent of their impact varies. Thus, adapting to changing climate is one way of anticipating the change and withstanding the stresses.



Figure: Launching of Municipal Adaptation Plan (MAP) in an event in Nepalgunj

The 3 P's (Policies, Plans and Programs) of the government have emphasized strengthening the adaptive capacity of local communities to achieve climate change adaptation and resilience. The NAPA as well as NAP has listed  'Urban Settlement and Infrastructures' as one of the six identified sectors that are vulnerable to climate change impacts.

As per the Constitution of Nepal 2015, the local governments are responsible for the overall planning and development of the community, including response for natural hazards at community level. The responsibility is further delegated to wards that are the smallest units of the local governments, their plans and programs have to be in-line with the mission and vision of the urban and rural municipalities. So, empowering municipalities is the most appropriate approach to enhance local adaptation and empower local stakeholders. Mainstreaming climate change adaptation in development planning and programs has been recognized as a good approach to enhance the adaptive capacity and resilience of the municipalities. The Municipal Adaptation Plan (MAP) has been formulated based on the findings of the Vulnerability and Risk Assessment and is thus marked as the benchmark for adaptation planning. It also estimates the adaptive capacities of the communities, wards and municipalities and suggests appropriate tools, technologies and skills to better equip and adapt to climate extremities and disasters. This briefing document highlights the MAP's preparation processes, including its opportunities and challenges.



Figure: MAP formulation encourages participation and inclusion of local communities and is a bottom-up approach

MAP Process

The entry point to formulation of MAP is a spatially varied vulnerability and risks assessment (VRA) which helps define the base line, both to identify the adaptation and mitigation needs to guide the program planning and to the budgeting of the municipality. The MAP preparation in Nepalgunj and Birendranagar constituted a rigorous process including climate change vulnerability assessment data collection through scientific approaches, development and prioritization of adaptation options and implementation of a roadmap (time, budget, authority and scale of activities). Climate Change vulnerability assessment was conducted based on the framework recommended by Nepal's National Adaptation Plan (NAP) formulation process. The process involved participation of all stakeholders: elected representatives and personnel in the urban government, civil society, urban residents and vulnerable groups, at all stages of MAP formulation, from the VRA process to decision making with regards to identification of adaptation options. The process was designed in such a way which also ensured the capacity enhancement of the local stakeholders.

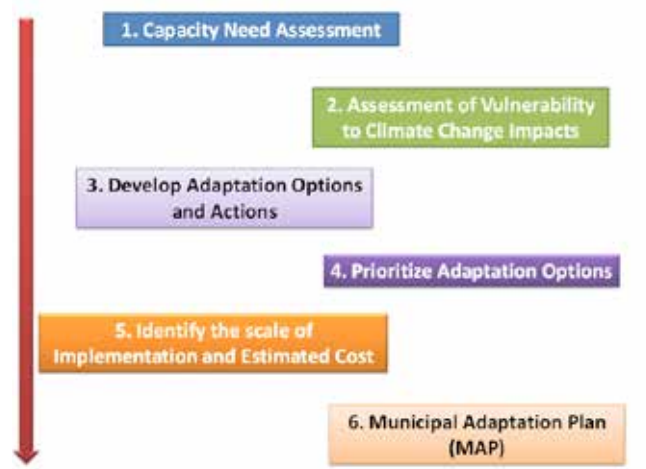


Figure: MAP preparation process

Challenges

A number of challenges were encountered in the MAP formulation process. But in general, such challenges can be overcome by the opportunities and co-benefits offered by an effective implementation of MAP.

Some of the challenges include:

- Deficiency of adequate and appropriate data and information on risks and vulnerabilities, past extreme events and their impact on livelihood and infrastructures.
- The orientation and mindset of decision makers that capital investment in infrastructure can solve all problems, including those from climate change
- Inadequate infrastructure and institutional framework to implement adaptation actions

"We never thought that urban centers were at risk of climate change; we thought that it was a rural concern. But the micro analysis of the vulnerability risk assessment has found out that an urban center is most vulnerable. So, climate change should be a concern of every urban center and not only for rural areas."

**Dr. Dhawal Shumsher Rana,
Mayor Nepalgunj SMC**

Opportunities of MAP

- It provides an opportunity to prepare holistic plan that addresses climate impacts, adaptation and mitigation needs, limits to adaptation, and resilient approach in the development process.
- As MAP involves the Vulnerability and Risk Assessment, it can facilitate disaster preparedness.
- Advance planning can help address climate induced loss and damages to some extent.
- MAP encourages and engages community participation that values indigenous knowledge and helps in capacity enhancement.
- The MAP process ensures the engagement and capacity building of local stakeholders.
- It provides opportunities for vulnerable communities to enhance economic safeguards through adoption of climate adaptive tools, techniques and businesses.

"This is the time to choose sustainable approaches rather than spending our time and resources on vicious cycle of construction. "

Mohan Maya Dhakal,

Deputy Mayor

Birendranagar Municipality

Conclusions and Way forward

The Municipal Adaptation Plan is a guideline that helps local municipal authorities to plan, prioritize and implement adaptation and mitigation actions towards climate adaptive and resilient urban centers. Therefore, it facilitates the development of appropriate activities for communities and vulnerable people, ranging from economic resilience to livelihood options. It provides an enabling environment for communities to withstand climate extremes and disasters and to benefit from the opportunities of adaptation actions in the long run.

Recommendations

The entry point to developing climate adaptive and resilient urban areas is climate friendly planning to guide physical, social, ecological and economic development to face the adverse impacts of abnormalities in climate. Thus, MAP should be the foundation for adaptive and resilient urban centers.

Mainstreaming of MAP in annual plans and programs of municipalities is crucial for successful adaptation and mitigation actions and enhancement of urban resilience.

Local units are suggested to establish CCA DRR committees equipped with required financial and technical resources, and to make them functional.

References

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