Science, technology and innovation for sustainable urban development in a post-pandemic world

Statement submitted by

H. E. Mr. Devendra Paudel
Minister of Education, Science and Technology
Nepal

DISCLAIMER: The views presented here are the contributors' and do not necessarily reflect the views and position of the United Nations or the United Nations Conference on Trade and Development.
I am honored and privileged, having opportunity to be a part of 25th session of the Commission on Science and Technology for Development. Nepal is rich in cultural and natural diversity. There are 10 natural and cultural heritage sites listed by UNESCO as world heritage sites in Nepal.

The total population of Nepal is around 30 million. People from different parts of the country with different languages, culture and creeds live in harmony here. Moreover, some of our cities are historic and the management of these cities are more sensitive and delicate. Politically Nepal is divided into 7 Provinces and 753 local governments. Out of them 6 are Metropolis, 11 are Sub metropolis and 276 are municipalities.

Before going to the components of urbanization status in Nepal, let me briefly talk about the impact of COVID-19. Till today, the number of total infections is around 1 million people and total deaths is around 12 thousand. The covid-19 crisis management coordination center (CCMC) is the apex body for response of COVID-19 in Nepal. The purpose of CCMC is to coordinate with the federal, provincial, local government and various other stakeholders to conduct the prevention, control, diagnosis and treatment of COVID-19 in an integrated and systematic manner. The major challenges addressed by CCMC are mass testing, hospital beds, hospital supplies, dead body management, quarantine management, travel management, decision of lockdown, rescue, and health workers management. I opine that the pandemic is subsided but not yet over.

The Ministry of Urban Development is an apex body having responsibility in urban planning whereas the Ministry of Education, Science and Technology has responsibility for uplifting Science, Technology and Innovation in the country. Since urban management is a cross-cutting issue, it is being managed by different line agencies.

Nepal Urbanization Plan is guided by the concept and policy of productivity, quality of life and sustainability. We are in process of resuming the implementation of our plan and policy in Urbanization with the emphasis on extended health and education infrastructure development along with more science and technology-based interventions as a strategic response to post-Covid-19 urban management.

Nepal is one of the fast urbanizing countries in South Asia, with an urban growth rate estimated at 6-8%. Kathmandu Valley is the largest urban center and most populated city of the country.

The Government of Nepal has developed Urban Development Strategy 2017 with a vision 2031: Balanced and Prosperous National Urban System. We have been investing heavily on around 30
smart and new cities. The Government of Nepal has prepared different Policies, Concept Papers, Strategy and Projects for planned urban development. For example, we have developed: Concept paper on Smart Cities 2016; National Urban Development Strategy 2017; and Integrated Urban Development Project (IUDP).

**Excellences**

I am pleased to share some achievements in Urban Development sectors. Nepal has acquired substantial progress in Electricity supply. Adjustment of load shedding from 18 hours in a day to surplus electricity status has made urban life better today.

A long awaited river diversion-based Melamchi water supply project is going to resume the water supply very soon. We have made notable progress in WASH sector as well. We have successfully implemented a wastewater treatment plant; and we are expanding it gradually.

Nepal is preparing a real time traffic Management System. It has initiated distribution of embossed number plates of vehicles. Nepal has developed Nepal Urban Road Standard 2076 (2020). The extension or improvement of the roads is an ongoing process. However, the improvements are not at the par with huge inflows of vehicles. Thus traffic congestion is a major issue in Kathmandu. Meanwhile, we have also proposed several Railway Projects for intra-city transportation.

Nepal is promoting Electric Vehicles by providing Tax Leverage on it and developing charging stations across the country. Similarly, we are also promoting electric cooking which reduces fossil fuel dependency.

With the kind support of the International Communities, WHO, and with our own effort we are now able to reach the population of more than 82% above the 18 years old in vaccination. We have extended vaccines storage capacity and acquired capacity of mass vaccination.

The urban air quality is also one of our challenging issues. We have installed real time air pollution monitoring stations in almost all major cities of Nepal. Kathmandu Valley Air Quality Management Action Plan 2076 (2020) is being implemented. Nepal has launched Clean Environment Mega Campaigning leading to massive greenery development.

National Disaster Risk Reduction and Management Authority has been established recently and National Disaster Risk Reduction Strategic Action Plan 2018-2030 is also being prepared and is under implementation. Together with this, Government of Nepal has issued new “Seismic Design Building Code (NBC 105) 2020”.

Government of Nepal has given highest priority to development of Health Infrastructure that includes addressing the problems of COVID dedicated hospitals, Oxygen Supply, arrangement of Ventilators. In this way, both private and public hospitals throughout the country have expanded their COVID Diagnostic capacity.
In the field of education, we have assigned local governments to administer schools. We have made investment in urban education via digital devices and IT including Digital Materials like Audio, Visual and Brochure. We have prioritized STEM based education from schools to Higher Education. The main focus is on linking curricular knowledge to skill development; skill to employment; and employment to prosperity. Some recent plans and policies in the education system like Education cluster Contingency plan 2020; Alternative Learning Facilitation Guidelines-2020; Emergency Action Plan for School Education-2020; School Health Safety and Sanitation Guidelines 2020; and School Reopening Framework 2020 are in place.

Although we have prioritized planned urban development from very past, still there are some issues we need to address. They are: inflation and cost of living; Internal migration; Fragmentation of land and unplanned housing; Traffic congestion because of influx of vehicles; Pollution in most of cities are affected by internal and external sources; Solid waste management etc.

**Excellences**

With this in mind, I would like to thank UNCTAD for giving me this opportunity to speak few words in this valuable session. Finally, I would appeal UNCTAD to facilitate and cooperate the developing country like ours in areas of: Open Data and Open Science, Science and Technology Evaluation Mechanism, Technology Transfer for Developing World, Strengthening Urban Medical Infrastructure, and Waste Management.

Thank you very much and good luck.

Hon'ble Devendra Paudel

Minister

Ministry of Education, Science and Technology