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

Statement submitted by

H. E. Mr. Srivari Chandrasekhar
Vice Minister of Science and Technology
India
Inputs for Secretary DST’s Remarks

Distinguished speakers,
Ladies and Gentleman,

• It is an honour to join this high-level round table at the 25th Session of the Commission on Science and Technology for Development on a topic as timely and pertinent as Leveraging Science, Technology and innovation for sustainable urban development in a post-Covid world.
• A global health crisis like the pandemic is uniquely pernicious to hit cities across the world at their Achilles heel. Sub-optimal housing and overcrowding, inadequate public transport, insufficient community healthcare, degraded environment – all these factors exacerbated the damage to socioeconomic strength of cities and urban conglomerations.
• The pandemic came on top of another worsening crisis – an even bigger challenge for humanity – Climate Change.
• The pandemic and worsening climate change have forced us to imagine a better future for our cities and their citizens.
• Recent reports on climate change make it clear that climate change is worsening, and that cities are its major contributors as well as worst affected. Given the increasing urban footprint and demands made on energy and resources in cities, urban and environmental phenomena go hand in hand, and will require combined policy solutions.
• It is imperative that to manage urbanisation well for citie, their full potential must be realized on three important fronts – liveability, economic-ability and sustainability. While services like urban mobility, affordable housing, water and waste-water management, sanitation and solid waste management, safety, health, and education respond to ‘liveability’; initiatives that enhance investment climate, increase jobs and breed innovation
affect the ‘economic-ability’; and at the heart is environmental ‘sustainability’ wherein everyday decisions on technology, infrastructure and investments balance both present and future concerns of society.

- To achieve this India revised its National Mission on Sustainable Habitat in 2021 to address the challenges of climate change and achieving the targets of SDG 11.
- The revised National Mission on Sustainable Habitat has identified five thematic areas, namely (i) Energy and Green Buildings, (ii) Urban Planning, Green Cover and Biodiversity (iii) Mobility and Air Quality, (iv) Water Management and (v) Waste Management. Key mitigation and adaptation strategies to facilitate the development of sustainable habitat have also been recommended under each thematic area.
- India’s unique set of opportunities and challenges need unique strategies leveraging data and technology to which being about a change on the ground. Allow me to share a few examples of this with you.
- Through the Smart Cities Mission - an ambitious urban development program launched in 2015, 100 cities have undertaken a pathbreaking journey to transform the way they provide core infrastructure and services, clean environment and better quality of life to their citizens. In the last seven years, the Mission has grown from strength to strength, implementing over 5,151 projects worth around USD26 million, that are positively impacting the lives of close to 100 million citizens.
- India launched the National Urban Digital Mission in 2021, to support urban governments and all other interested stakeholders in solving various urban problems. Partners in this initiative include industry associations, academia, civil society, leading global organisations, system integrators, start-ups, and MSMEs (Micro, Small and Medium Enterprises).
- Under the mission, shared digital infrastructure will be built in all urban centres of the country by the year 2024, and open and vendor-neutral APIs (Application Programming Interface), standards, specifications, and frameworks will be created for interoperability, which would allow for greater participation of stakeholders.
• The India Urban Data Exchange (IUDX) is an example of an open source software platform that is being developed in partnership between MoHUA and the Indian Institute of Science (IISc), Bengaluru to facilitate secure exchange and use of data. It will provide data on a wide range of urban indicators, including those related to service delivery and urban governance such as location of air quality/environment monitoring sensors and air quality levels, flood sensors, weather stations, physical location of city bike stations, smart streetlights, road audit information, public transit bus information (bus stops, routes), public transit real time information, water distribution network information, real time position of solid waste management vehicles etc.

• Another example of an upcoming data platform is the Smart Cities Open Data Portal. This is being created exclusively for making data available on 100 cities use by any person, municipal department, research institute, academia, and industry to generate insights, which would help in the development of suitable products and services/building solutions. Examples of indicators on which data would be available are zone, age, data on community health, water consumption, circle rates, digital access, housing etc.

• This full set of digital infrastructure and tools is to enable citizens easy access to government services and data, to enable more efficient governance, to increase the ease of living as well as doing business, in other words to empower all stakeholders.

• I am certain that today’s dialogue will guide us in making our cities more sustainable and resilient.

Thank you.