Data-driven Governance for Urban Resilience in Smart Cities

18th February, Friday, 1445 hrs (IST) | Duration: 90 minutes

(Virtual Platform)

About the World Sustainable Development Summit (WSDS)

The World Sustainable Development Summit (WSDS) is the annual flagship Track II initiative of The Energy and Resources Institute (TERI). Instituted in 2001, in 2021, the Summit series marked 20 years in its journey of making ‘sustainable development’ a globally shared goal. Over the past two decades, the Summit platform has pioneered conversations by bringing together governments, scholars, corporates, youth groups, thought leaders, and civil society representatives from across the world.

The present state of planetary health and humanitarian crises calls for revisiting the agenda around global action and equity. The 21st edition of the WSDS is being held under the umbrella theme of ‘Towards a Resilient Planet: Ensuring a Sustainable and Equitable Future’ from 16th to 18th February 2022 in a virtual format.

Background note

With more than half of today’s world population living in cities, cities have become the engines of economic, social, physical and cultural development. This share of urban population is expected to increase to almost 70% by 2050, as estimated by the United Nations. However, such rapid urbanization also brings along complex urban challenges for cities, such as increased demand for infrastructure, climate change induced extreme events, environmental degradation, poverty and inequality, and healthcare crisis. Indian cities are even more prone to these acute shocks and chronic stresses as they are highly underprepared for future urbanization. According to the World Meteorological Organisation (WMO), the Indian economy suffered a loss of $87 billion from extreme weather events (cyclones, floods, droughts) in 2020.
The COVID-19 pandemic has further exposed cities’ vulnerability to shocks, with substantial spillover effects on the economy and society. It has prompted a fundamental shift in urban management and governance in order to adapt to such disruptions and ensure long-term resilience in cities.

The smart city approach of urban governance with digital (ICT) advancements, data analytics, management and data-driven policies play an elemental role in improving urban resilience and dealing with future urban shocks more efficiently. Merits of data-driven management and governance are also evident in the last year itself during the COVID-19 crisis response. The pandemic highlights the importance of real time data as a strategic asset for effective decision-making by urban professionals and policymakers. Many of the crisis management initiatives utilized open data platforms which not only resulted in synergies from multi-stakeholder partnerships, but also contributed to governance transparency. Moreover, European cities such as Rotterdam and Helsinki are increasingly exploring ‘datahubs’ as tools to tackle various urban challenges (e.g. solid waste management, energy consumption, etc.) and optimize resource use. Simultaneously, the adoption of data-driven governance has been swift in India under the Smart Cities Mission, with many cities setting up Integrated Command and Control Centres (ICCC) to promote open data and data sharing, that have also proven to be instrumental during COVID management. While informed decision-making to avert shocks is enabled through data-driven governance, local stakeholders face a myriad of technical and operational challenges as well. These range from poor data quality, concerns regarding inclusivity, privacy and data storage to ownership of data. In a drive to address many of these challenges, the Ministry of Housing and Urban Affairs (MoHUA) has set up the National Urban Data Observatory and the India Urban Data Exchange (IUDX) for optimal utilization and sharing of the data collected by various stakeholders.

Against this background, and towards the objective of highlighting the role of data-driven governance in achieving urban resilience in cities, this session aims to provide a platform for diverse stakeholders leading the mainstreaming resilience effort in smart cities to share their experiences in integrating data-driven approaches in resilience planning as well as showcase their ongoing initiatives and results achieved so far. The session will also discuss the various challenges faced and provide an opportunity to discuss innovative ways to tackle them as a potential way forward.

Key questions:

- What is the role of data visualization and analytics in building urban resilience?
- How can open data and data sharing platforms enable city officials to strengthen urban resilience in cities?
- How can a data-driven governance approach factor in vulnerable communities and ensure inclusive urban resilience?
- What are the solutions to the numerous challenges of data collection, storage, privacy and ownership that come with a data-driven approach towards resilience?