Financing Resilient Infrastructure in an Urbanizing World

Climate change, today, manifests itself through weather anomalies and extreme weather events which pose direct physical risks to people, assets, and infrastructure. Countries across the globe are experiencing the growing intensity and frequency of extreme climate events, with catastrophic impacts on infrastructure. The impacts of climate change go way beyond these direct physical risks as the damage of infrastructure and property impacts economic growth. Climate change impacts a broad spectrum of functions, infrastructure, and services and is responsible for compounding and aggravating the existing non-climatic stresses, such as urbanization, migration, water demand, sanitation, etc. Considering the heavy cost implications associated with the damage of infrastructural services, it is imperative to establish climate resilient infrastructure. Existing literature suggests that climate proofing infrastructure will require additional financial costs. The price tag between 2010 and 2050 for adapting to an approximately 2 °C warmer world by 2050 will be in the range of $70 billion to $100 billion a year out of which, infrastructure sector, has accounted for the largest share of adaptation costs (World Bank, 2010).
Investing in climate resilient infrastructure makes good business sense as it prevents inefficiencies and cost of retrofitting infrastructure, while reducing the vulnerability of societies. Over the next 15 years, the world will require about US$90 trillion in new infrastructure to replace ageing infrastructure in advanced economies and to accommodate higher growth and structural change in emerging markets. This will require concerted efforts to systematically leverage all sources of finance, expertise, and solutions to support sustainable and resilient growth.

Against this background, TERI, with the support of the World Bank group is organizing a session at the WSDS 2019 to deliberate upon innovative approaches to maximize finance for resilient and sustainable infrastructure development, building on the outcomes of the International Workshop on Disaster Resilient Infrastructure organized by UNISDR and India's National Disaster Management Authority (NDMA) in January 2018 and International Workshop on Financing DRM organized by the World Bank in November 2018. The session will bring together leading experts and practitioners in the field of resilient infrastructure and finance to discuss:

Discussion Points:

1. Improving risk information and assessment for prioritizing infrastructure investment decisions;
2. Value-for-money innovative engineering practices including adaptive designs and nature-based solutions that can be adopted;
3. Need for a policy, legal, institutional, and fiscal frameworks for critical infrastructure service continuity;
4. Innovative financing arrangements for resilient infrastructure including risk transfer mechanisms;