

Working Session 10

Scaling up, scaling out and scaling deep: Innovations in Disaster Risk Management



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Urbanizing World

Increasing Disaster Risk

Climate Change Impact

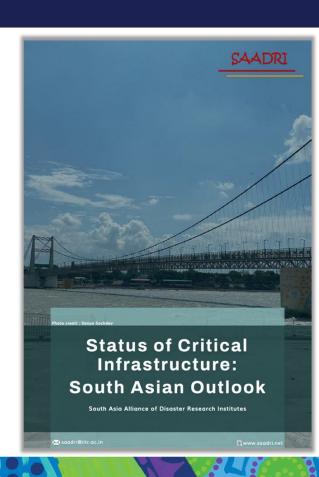
A Sense of Urgency to Upscale Innovation

Status of Critical Infrastructure: South Asian Outlook

South Asia Alliance of Disaster Research Institutes (SAADRI)

Essentials, Crucial and Important:

- Specific investment policy for critical infrastructure resilience
- Transboundary data sharing on hazards and risks
- Periodic updates of the CI database at the national and local levels
- Balance of gray, blue and green infra based on local socio-economic conditions & ecosystem
- Both hard and soft assets in CI in terms of priority.
- Research and innovation on CI, both at local and national, as well as regional levels



Monitoring of the Natural elements:

health, change in biota/soil/water, encroachment, stakeholders' interest etc.

(Technology & Social) Innovation & Start-ups in the field of in the field of Monitoring:

The Geospatial Mapping of Natural Ecosystem (**GeoSM-NatE**) Tool: Geospatial tools and Earth Observation data and image analysis technique

Evaluation:

Global re-recognition of value of the NbS AND evaluation of its ESS, process & assets in

- a) biophysical, eco-environmental terms like tons of carbon, and
- b) socio-economic terms like net present worth (NPV)

Establishing tangible and intangible impacts of NbS in B/W

(Technology & Social) **Innovation & Start-ups** in the field of Evaluation:

Natural Capital Project-Integrated Valuation of ESS & Trade-offs (InVest)

Traffic light Indicators

(Co) Design Ideation:

Physical and fiscal planning & Design;

Strategic Network design, Predictive modelling and simulations;

People-centric livelihood revitalization.

(Technology & Social) **Innovation & Start-ups** in the field of Design Ideation:

Palm-coir used for canal banks

Innovative floating toilets for water-based communities

Green highway (gray, blue & green).

Implementation:

Priority need for reconstruction/ restoration

Assistance in terms of Financial as well as skilled people and knowledge.

Regional scale without geo-political border, as promoted by SAADRI (<u>www.saadri.net</u>) and others

Conclusion:

Incentives- Acknowledgements like Ramsar List enlistment, Awards, Angel investors, Incubation

THANK YOU! Email: mahuafap@iitr.ac.in