



Integrated Research on Disaster Risk (IRDR)
International Centre of Excellence
**Resilient Communities &
Settlements**
(ICoE-RCS)



Visvesvaraya National Institute of Technology, Nagpur INDIA

About VNIT, Nagpur

Recognized as 'institute of national importance' by parliamentary act of the Government of India (GoI).

Positioned amongst top 5% of engineering institutions and ranked 6th amongst all 31 National Institutes of Technology across India (NIRF, 2017)

Actively engaged into research & academics with 19 International Universities and Institutions through exclusively signed Memorandum of Understanding



DRR @ VNIT, Nagpur

Climate Change and Disaster Risk Reduction is an integral part of course works for Masters and Ph.D. students

**Department of
Architecture & Planning**

**Departments of Civil
Engineering**

**Department of Applied
Mechanics**

Department of Humanities

**Land use planning for Disaster
Risk Reduction, Resilient
Communities & infrastructures,
Climate risk mitigation, Coastal
vulnerabilities, Socio-ecological
systems, Municipal capacity
building for CCA & DRR
Earthquake Engineering
Structural Mitigations
Human psychology & perception
studies**

DRR @ VNIT, Nagpur (**Projects**)

Framework for achieving Infrastructure Based Community Resilience in urban India

Framework for measuring sustainability of urban areas in India

Cool roof solution as a heat wave mitigation action for urban poor

Building resilience of remotely placed rural settlements

Integrated strategies for rural vulnerability reduction

Trainning programmes for masons and civil contractors were conducted for earthquake safe construction practices

Special education programme for school children on earthquake risk reduction

Development of software for web based Emergency Operation Center

About ICoE RCS

Plan of incorporating IRDR objectives into its own missions and its implementation

Establishing a better understanding of decision-making in changing risk contexts at local levels and towards gaining resilience through knowledge-based actions.

Establishing more advanced and scientific approaches to studies on policy and decision-making pertaining to risk reduction in central region of India.

Creating a synergy between different initiatives, address various cross-cutting issues in building resilience more comprehensively, and take the results from various projects beyond the doors of VNIT

Find new approaches by evolving multilateral collaborations with other prominent Institutions

About ICoE RCS

Vision to develop the IRDR ICoE



To be developed as a platform to bring together three crucial stakeholders viz., knowledge institutions, governing authorities & local communities in building disaster risk resilience at regional and local levels in Central India.



To facilitate bridging knowledge gaps, building new scientific pathways and enabling research exchange on disaster risk reduction and resilience



To act as a support center for the local governments to better understand their vulnerabilities through scientific as well as community based studies and prepare locally appropriate resilience strategies.



To enable building a knowledge base relevant for local stakeholders in the Central India region for making the integration of climate change mitigation and adaptation more feasible and effective in implementation

Some Ongoing Projects

“Towards New Paradigms in Urban-Rural Linkages: Fostering Innovations for Collective Resilience Through Multi-Sector Engagements”



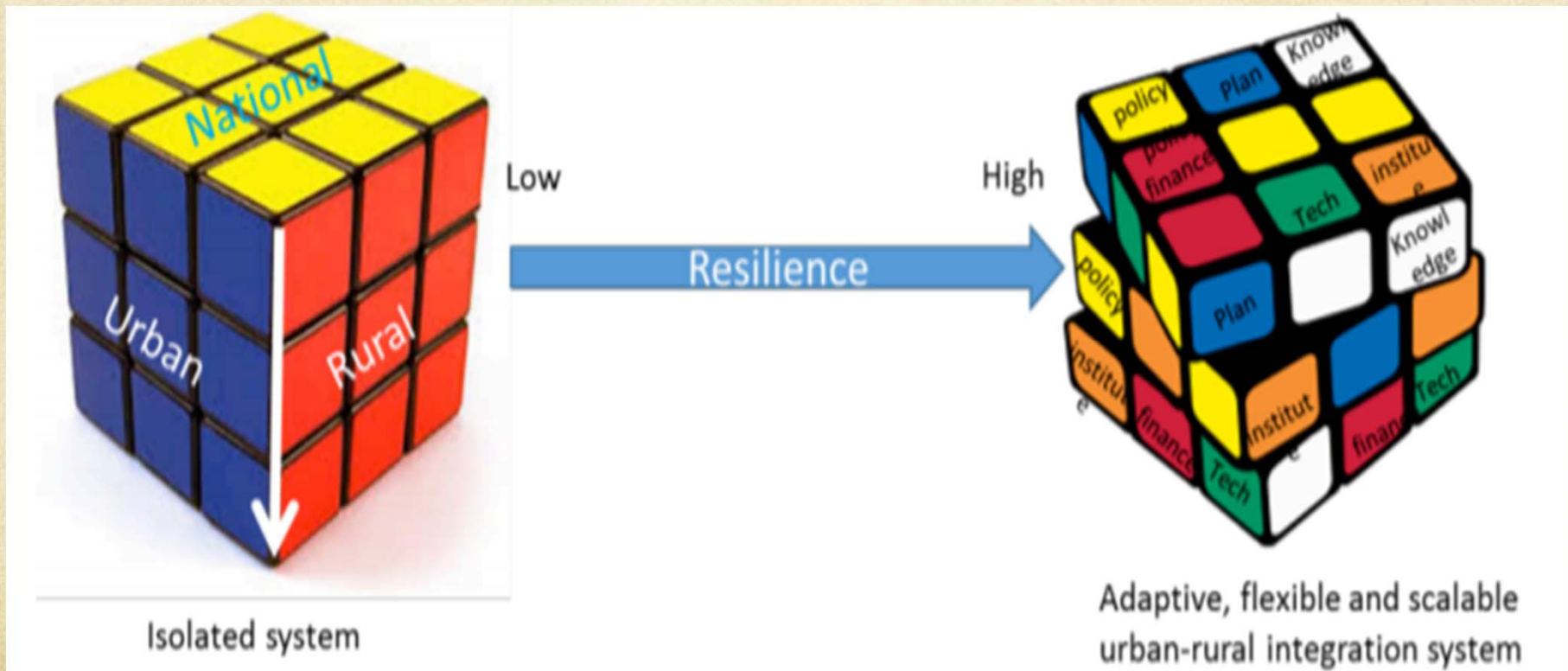
Dr. Sameer Deshkar

Indian Council for Social Science
Research Japan Society for Promotion of
Science



慶應義塾
Keio University

Dr. Rajib Shaw



Dr. Rajib Shaw

PROJECT OBJECTIVES

To find key sectors and role players in moving towards urban-rural continuum that could address a 'collective resilience' of cities and their rural counterparts.

To define the sectors and scales of innovations along with enabling mechanisms at various levels to encourage such innovations.

To search for an approach to make the participation of private sector more effective in risk reduction and gaining resilience of both urban and rural communities.

To derive lessons from existing engagements and develop a framework for adaptive, flexible and scalable decision support system for their applicability in both Japan and Indian context.

“Capacity building for climate change adaptation and mitigation with a special focus on Sustainable Habitat and Risk Management”

Human capacity building program of CCP-SPLICE,
Department of Science & Technology, Govt. of
India

Dr. Rajashree Kotharkar, Dr. Ratnesh Kumar, Dr. Sameer M. Deshkar



Capacity building by imparting training on Sustainable habitat with focus on various components like sustainable urban form, mixed land use, transportation, governance etc.,

Capacity building by imparting training on extreme events disaster risk reduction and Management with special focus on Heat waves, earthquakes, cyclones.

Capacity building by imparting training on socio-economic vulnerability and livelihood.

Writing of monograph on sustainable Habitat and disaster risk reduction and management.

“Coastal Communities Adaptive and Resilient at the Edge” (Coast-CARE)

BRICS STI Framework Programme for BRICS multilateral projects

Sameer Deshkar, Rajashree Kotharkar, R. Krishnamurthy, Anshu Sharma,
VNIT, Nagpur, University of Madras, Chennai, SEEDS India

To create new knowledge about coastal disaster risk based on transdisciplinary research involving coastal and disaster specialists and key risk governance actors.

To identify innovative ways to institutionalize practices which reduce risk and build adaptive capacity, resilience and sustainability.

Carlo Jaeger Beijing Normal university, China

Merle Sowman, University of Cape Town, South Africa

Carlos Eduardo de Rezende, Brazil

