UNDERSTANDING RISK DYNAMICS: A SYSTEMIC APPROACH TO ASSESSMENT OF SOCIAL VULNERABILITY
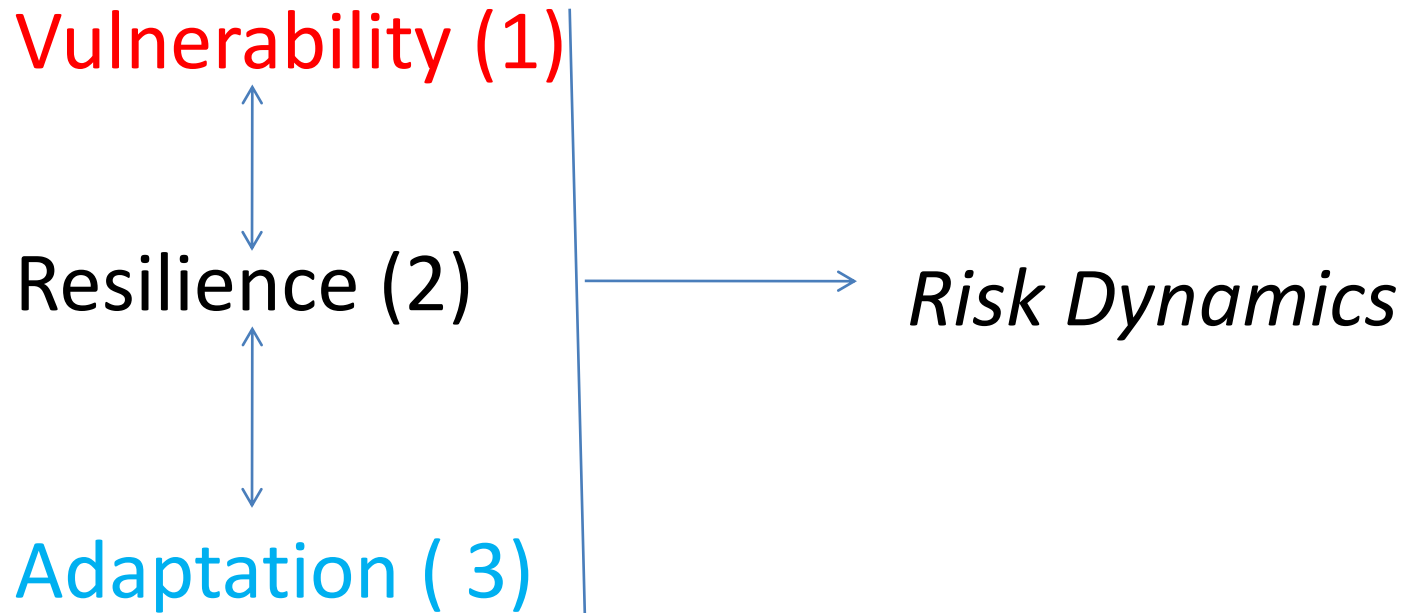
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Vulnerability (1)

Resilience (2) → *Risk Dynamics*

Adaptation (3)

Risk dynamics is manifestation of an interactive process between 1,2 & 3

Understanding Risk dynamics

Risk Assessment- Risk level, its spatial distribution and interdependencies

Risk Management- Reduction & mitigation

Risk Transfer- Shifting / distributing cost burden

Risk Taking- Coping with risk within mangeable cost

Social vulnerability directly impacts Risk level and Risk Reduction Options.

Reducing social vulnerability, therefore, directly reduces Risks.

Evolving conceptual approach

- From Disaster response (DR) to

    Disaster Management (DM) to

    Disaster Risk Management (DRM) to

now

    Integrated Disaster Risk Management (IDRiM).

Understanding IDRiM

IDRiM _ Approach

Multi-hazard , Inter-disciplinary & Multi-stakeholder

IDRiM is a management stream where success is achieved through **self revising** and **self evolving** and focus on **learning through doing**.

IDRiM aims contributing to the implementation of **success models for efficient and equitable disaster risk management options including <u>reduction of social vulnerability.</u>**

How do we move from concept to reality?

How do we move from lab to evidence based practice?

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Reducing social vulnerability

A Responsibility of the Government and the Civil Society.

However,   <u>a visible irony in reality.</u>

Government has technical expertise and finances required to provide social protection from hazards and disasters for socially vulnerable groups and also assist in enhancing their capabilities. BUT, governments do not have ADEQUATE KNOWLEDGE OF THE VULNERABLE GROUPS and do not enjoy their TRUST.

The Civil Society groups & NGOs have close knowledge of vulnerable groups and they have their TRUST.

Logically, a partnership between the two should serve the best interest for both. BUT,
The reality is different. How to make this happen? FIRST STEP IS TO FOCUS ON HOT SPOTS.

A systemic cognition approach to understanding social vulnerability

Required steps

1. Understanding social vulnerability as manifestation of recognizable system or system of systems.
2. Identification of each related system and their interrelationships.
3. Clear analysis of how a loss may unfold in neglecting or inadequately addressing risks where coverage is needed.
4. Systematic quantitative measurement of loss

Why a systemic approach is essential?

• It helps to comprehend social vulnerability in its totality.

• It helps better formulation of policies, bridging the gap between government and the civil society and better chance for implementation of IDRiM.

• It helps to formulate strategic model for action without being overwhelmed by infinite load of information.

Major factors that exacerbate social vulnerability

Family level
- Poverty
- Incidence of disease
- Loss of man days of work
- Indebtedness
- Inadequate education
- Access to information and awareness
- Poor asset formation
- Unstable shelter / housing
- Site vulnerability to risks

Major factors that exacerbate social vulnerability

Community level

• Weak or lack of organized community structure.

• Weak or absence of local leadership / champions

• Low education level and access to information.

• High ethnic, religious and occupational fragmentation

• Lack of common problem ownership and absence of interactive processes of involvement / participation.

• Neglect or sidelining by the city authorities.

• LACK OF TRUST

A progressive approach toward improving conventional disaster risk management (DRM)

Conventional DRM

- Focus on post-facto response to disaster.

- Isolated approach to different disasters.

- High dependence on external help.

- Poor use of local resources and capabilities.

- Prescriptive style with dominance of only hardcore engineering solutions.

IDRiM based Resilient Civil Society

- Explicit resiliency with demonstrated capability for adaptation.

- Focus on pro-active risk reduction and mitigation within a multi-hazard frame.

- Less dependence on external help.

- High use of local resources and capabilities.

- High demonstration impact using quantifiable outcomes as measured benchmarks.

A progressive approach toward improving conventional disaster risk management (DRM), Mumbai

Critical action

- Adopt systematic understanding of social vulnerability.

- Prepare participatory risk mapping particularly for the HOT SPOTS.

- Restore, promote and sustain TRUST between the local communities and the government through participatory vulnerability reduction projects demonstrating ' government cares'.

- Promote appropriate network among all stakeholders with the view to create common ownership of IDRiM issues and create common platform for collective action.

- Promote building community organizations and local champions.

Responsibility

- Government

- Government, Civil Society & NGOs

- Government

- Government

- NGOs, Civil Society & Government

Suggested structure of preparing Strategic Plan / Down to Action at Hot-spot level

Components

🟩	Strategic Plan
🟨	Action Plans
🟨	Evaluate Progress

Mission — *Pro-active Risk management*

Vision — *To be resilient and Prepared*

Goals — *Set Benchmarks to measure progress*

Objectives — O1 — O2 — *Specific outcomes expressed in measurable terms (NOT activities)*

Initiatives — AI1 — AI2 — AI3 — *Planned Actions to Achieve each Objective*

Measures — M1 — M2 — M3 — *Indicators and Monitors of success*

Targets — T1 — T1 — T1 — *Desired level of performance and timelines*