# Why do we not mitigate urban flood risk even though we have a scientific understanding and technological capability to do so?

Floods in cities are an increasingly frequent phenomenon across the world, especially in coastal urban areas. However even well governed, well-equipped, well-financed urban governance institutions, disaster management agencies, and municipal bodies are unable to either reduce flood related disaster risk, or mitigate the risk of flooding. Despite the availability of high-tech equipment, simulation and prediction models, and research inputs from scientists and social scientists, this continues to be the situation whether in Asia, Europe or North America. Our ongoing collaborative research with partners in India, Singapore, United States, Germany, and other countries, point to lack of effective disaster governance as a key problem in addressing flood risk. Specific problems include:

- The failure of decentralised and participatory disaster governance
- The inability and unwillingness to address problems of inequality and justice in disaster mitigation and management strategies
- The reluctance to evolve community based solutions
- Problems of balkanisation and pluralisation of diverse urban governance institutions, such that integrated approaches to flood risk management are not effectively designed
- Lack of coordination between solid waste, pollution control, disaster management, municipal, urban planning, hydrological, and forest, and other institutions
- Large scale failure to protect ecosystems that provide flood protections services, and the tendency of the government to ignore research based planning models in urban development, coastal management, and sustainable urbanism

The research has contributed significantly to the understanding of the role of institutions in flood risk management, and has come up with recommendations to diverse institutions to evolve and redesign their organisational and functional aspects from a disaster mitigation perspective.

**Disaster Governance vis a vis Disaster Management: the role of Institutions**

| Urban Planning and Municipal Governance | Environmental Management and Governance | Disaster Management |
|---|---|---|
| •MMRDA<br>•BMC<br>•UDD | •MPCB<br>•MCZMA<br>•Forest Department<br>•Urban planning and municipal bodies | •NDMA<br>•Municipal and urban planning bodies<br>•Security forces<br>•CSOs/NGOs/Emergent groups |

Direct / Indirect involvement / non-involvement in disaster governance (mitigation, management, relief an d recovery): implications for quality of disaster governance

***BALKANISATION***

**Special Planning Authorities: Port Trust, Industrial complexes, nuclear facilities, slum authority, SEZ, Railways, Airports**

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