Mapping Vulnerabilities

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Vulnerability as a concept, indicates the extent of effects or consequences of environmental hazards on land and waterbodies, and population groups as well. The use of local knowledge is crucial in hazard management taking into consideration the heterogeneous characteristics and implications of vulnerability. The notion of vulnerability is divergent and embedded in a number of ways in adaptation, resilience and capacity to recover from dislocation, and either the shocks of sudden changes or interruptions in environment and living, or the slow, gradual deterioration of environmental setting, dwindling resources and health. The components of vulnerability like exposure, susceptibility or sensitivity, and resilience in the forms of coping mechanisms and adaptive capacities, play integral role in urban planning and the formulation of legal and administrative frameworks for a specific site, a settlement, an administrative unit or a larger region. Environmental threshold, urban built-up space, as well as people's capacity to cope and adapt to sudden disruptions wreaked in by hazards, largely controls the magnitude of vulnerability and the potential to recover from structural damages, protect human lives and conserve environment, in addition to the dependent economic activities and social processes. Participatory and bottom-up approaches to reducing vulnerability often contribute by engaging local knowledge and resources in-situ; vulnerability assessment is another procedure that helps to understand the level of risk that a particular place or community is faced with. Dimensions, temporality, and scales of hazards are equally important in determining the means that help to incorporate and integrate plans and programmes and the interdependence of infrastructural growth, directed towards sustainable development, especially for fragile ecosystems. It is also important to consider how conditions of vulnerability are either environmentally created or are social constructs of anthropogenic processes. Pollution, environmental degradation, hotspots of hazards, exposure and ability to recover may be considered as significant elements in mapping approach, along with ecological consequences, demographic indicators and economic and social dimensions. The frequency and magnitude of hazards, elements at risk due to exposure to hazard, susceptibility and magnitude of damage, adaptation capacities and recovery from risk, in terms of environmental rupture and hazards in mine areas, river pollution, floods and risk management in cities, are some of the aspects that this research will focus on.

This Workshop endeavours to possibly put together nature of environmental hazards, consequences, and the approaches to mitigation, through the documentation of environmental hazards, owing to their interface with fragile ecology and topography, namely river front, extractive economy and life in the mines, the systems and sequences of development in cities, and the instances of hazards such as floods, droughts, etc.