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Enhancing Institutional and Community Resilience to Climate Change Impacts in the Jodhpur City

Water Stress

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Introduction

The increasing urbanization is posing a threat not only to natural resources but also exacerbating the risks arising out of climate change. The climate change impact that is affecting cities the most is the concerns over water stress. Water as a vital human need is very critical and should be the prime consideration for all decisions related to spatial planning of cities.

The water scarcity and flooding have now become a common phenomenon in cities across India. Water stress in the arid and semi-arid climatic zones of India is getting aggravated with time and need to be looked from the perspective of enhancing community and institutional resilience.

Towards development of a resilient city, with regard to the ability to manage water stress more effectively a historic city Jodhpur, located in the semi-arid climatic zone has been selected. Jodhpur, known for its traditional water harvesting systems is confronting water stress arising out of decaying traditional water systems as well as the abundance of groundwater in the city core and water scarcity in the peripheral wards

Objective

A comparative study of 'communities' managing water stress in core city wards with the peripheral wards was conducted and is assessed for the sensitivity, adaptive capacity and coping mechanism of communities to water stress for arriving at spatial planning strategies to enhance resilience. Institutional arrangements to cope up with the stresses at various levels was also analysed to suggest suitable mechanism for enhancing institutional resilience for informed decision making.

Preliminary Findings

- Water stress within the city is not being felt by the citizens
- The rising groundwater level is one of the main concerns in city core in addition to non-usage of the traditional water system
- Few sacred wells are still being used for drinking and ceremonial purposes. In such localities water from wells is preferred over municipal supply for drinking purpose
- Water bodies all over the city, however, have degraded due to poor solid and wastewater management
- Lack of willingness in citizens to change their habits
- Lack of public participation at community level
- Reluctant to take initiative

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