Climate resilience must be built into infrastructure and social and political systems

By Sahil Mathew

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Every year, we seem to break another weather-related record, with "hottest temperature," "unprecedented drought," "wettest monsoon" and other such superlatives becoming a mainstay of headlines.

Hypothetically, even if the entire world could completely cut emissions to zero immediately, we would still have to endure climate change impacts caused by historical emissions – as the atmosphere retains emitted carbon for as many as 1,000 years. This means that a greater capacity to recover from, adapt to, and cope with climate impacts including floods, heatwaves, and droughts needs to be ingrained in the built environment and ecological systems. This capacity must also be a prominent part of economic, social, and political systems – including in the form of a political will to fund and facilitate climate action.

Though climate change manifests in physical ways, its social impacts are substantial. That means climate policies, especially in the Global South, should be multi-dimensional. Any climate policy should concurrently enhance environmental and socio-economic resilience.

In India, for example, the Mahatma Gandhi National Rural Employment Guarantee Act, a massive public works programme, focuses on livelihood generation while dedicating 65% of its budget to natural-resource conservation. The programme helps build adaptive capacities for beneficiaries by increasing incomes, especially for women and in marginalized communities. It relies on sustainable local natural resources, and creating livelihood-specific assets.

Any development programme can foster climate adaptation and mitigation benefits; it must also, however, feature self-reflection and system assessments. The renowned ecologist C.S. Holling, who brought resilient thinking to the forefront of socio-ecological studies, asserted that systems must evolve while they build resilience. If the baseline system itself is fundamentally unjust and unsustainable, then evolving to a new system is preferable to belatedly attempting to add resilience. Cultivating flexibility therefore requires a manifold approach engaging multiple stakeholders, and solutions that account for the individual characteristics of specific systems.