



World Resource Institute India (WRI)

Kochi, India

## Nature-based solutions for cooling Kochi city

Cities4Forests is a worldwide initiative which aims to integrate forest management into urban planning. WRI is a supporting partner of this approach. The initiative promotes a participatory citizen-led engagement supporting cities to move towards a more inclusive and resilient environment. Through Cities4Forests, we encourage Nature-Based Solutions (NBS) as a long-term mitigation and adaptation strategy. The mitigation strategy aims to identify the potential for landscape restoration and tree-based interventions to address urban heat island risks and reduce local surface temperature through improved tree cover. It is estimated that in India a loss of 118 billion hours or 39% of work hours in 2019 was due to heat. The Climate Risk and Response report estimated that the impact of global heating on outdoor work, and the resultant loss in productivity, could put 2.5% to 4.5% of India's GDP at risk annually.

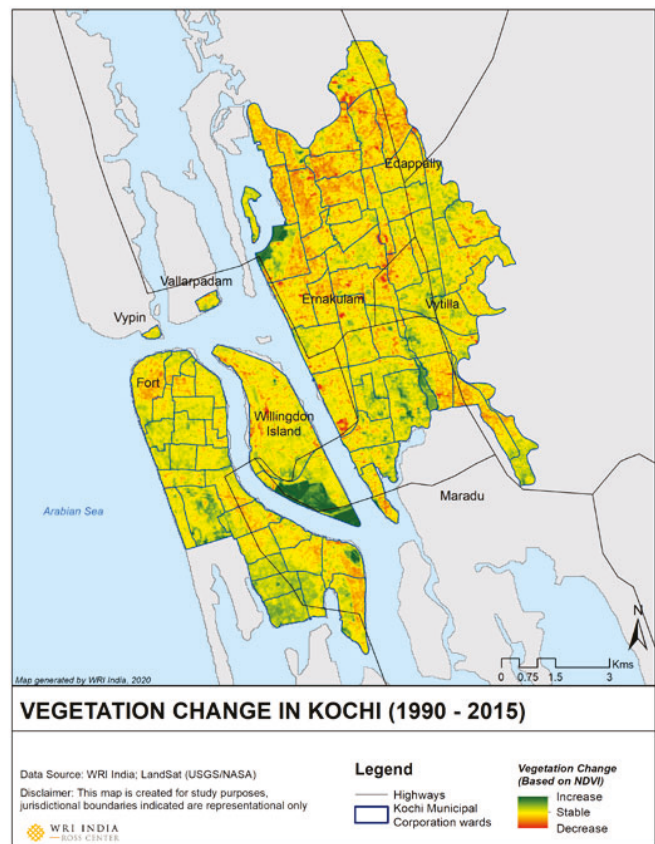
Below: Cities4Forests helps cities around the world to connect with and invest in forests at three different scales, inspire political action and engagement, provide technical assistance, capacity building, and facilitate finance and investment.



Kochi is one of the fastest-growing cities in India, where rapid unplanned urbanisation has led to a decrease in green cover and increasing heat risks. There is a tremendous opportunity to promote NBS, an underused climate adaptation and mitigation strategy to build a resilient Kochi. We are engaging with Kochi Municipal Corporation, local community-based organisations, institutions and citizens in promoting NBS at the neighbourhood and city level. Our goal would be to influence the city to look at NBS as a long-term cooling and heat resilience strategy, and to build capacities in the state and community-based institutions to promote and support NBS planning and implementation.

The focus of our work in Kochi:

- Promote green infrastructure for long-term resilience
- Pilot community-led neighborhood-scale green interventions
- Engage with communities to assess their resilience capacities
- Strengthen community preparedness by building capacities for local interventions among multiple stakeholders
- Encourage data-led planning for long-term resilience
- Formulate a guidance document to support the city in developing its city disaster management plan



Top: The change in the vegetation map shows a significant decrease in vegetation in the mainland, and in parts of the Willingdon and Fort Kochi islands. This is an opportunity to assess these trends over time and create an evidence base for greater policy and institutional support to promote NBS for long-term city resilience.

Bottom: Participatory mapping exercise: city representatives and students engaged in identifying potential areas for restoration in Kochi.



Submitting organisation



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