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*Parks, people, planet:
inspiring solutions*

Challenges of an MPA within a sprawling mega city in India

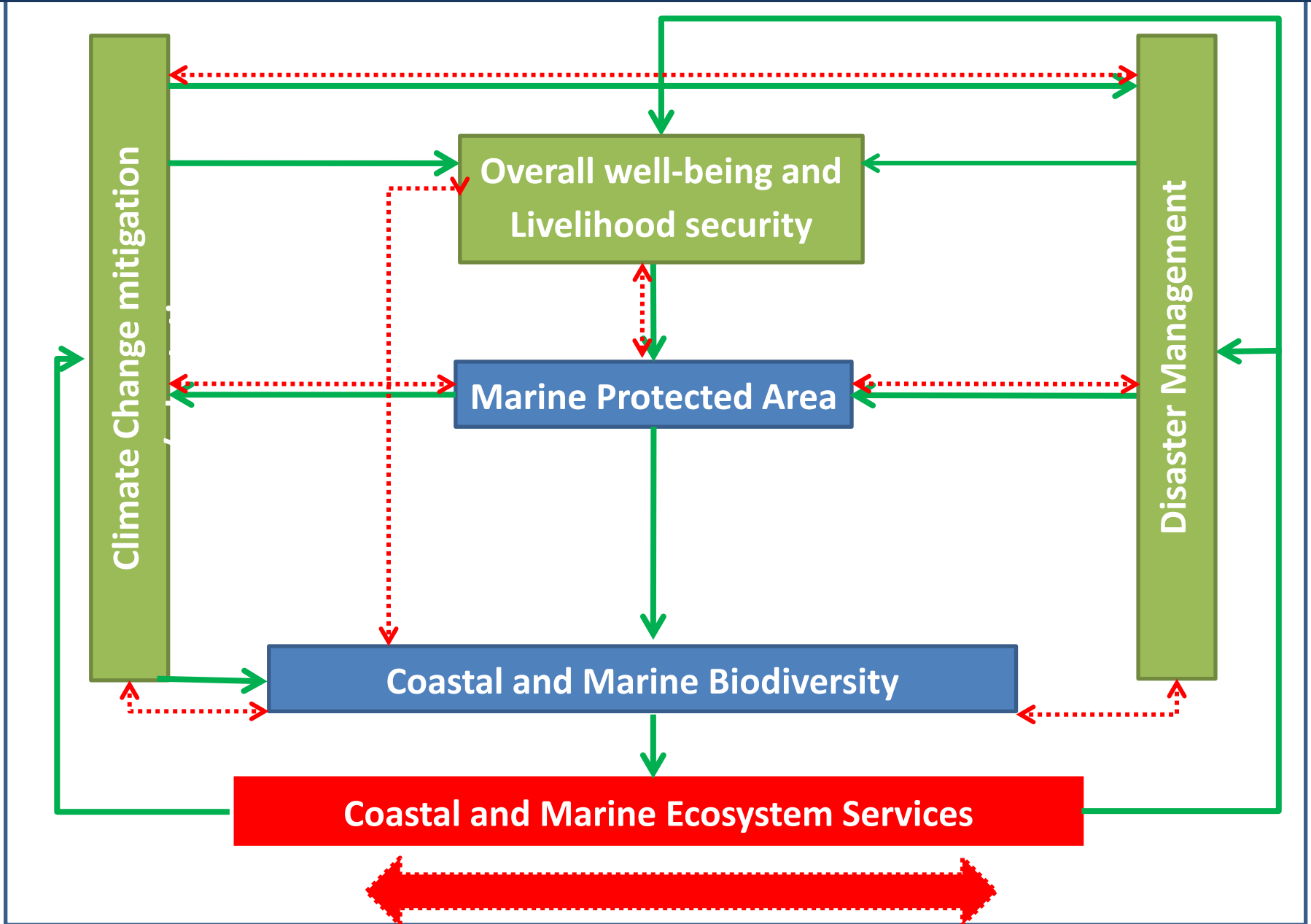
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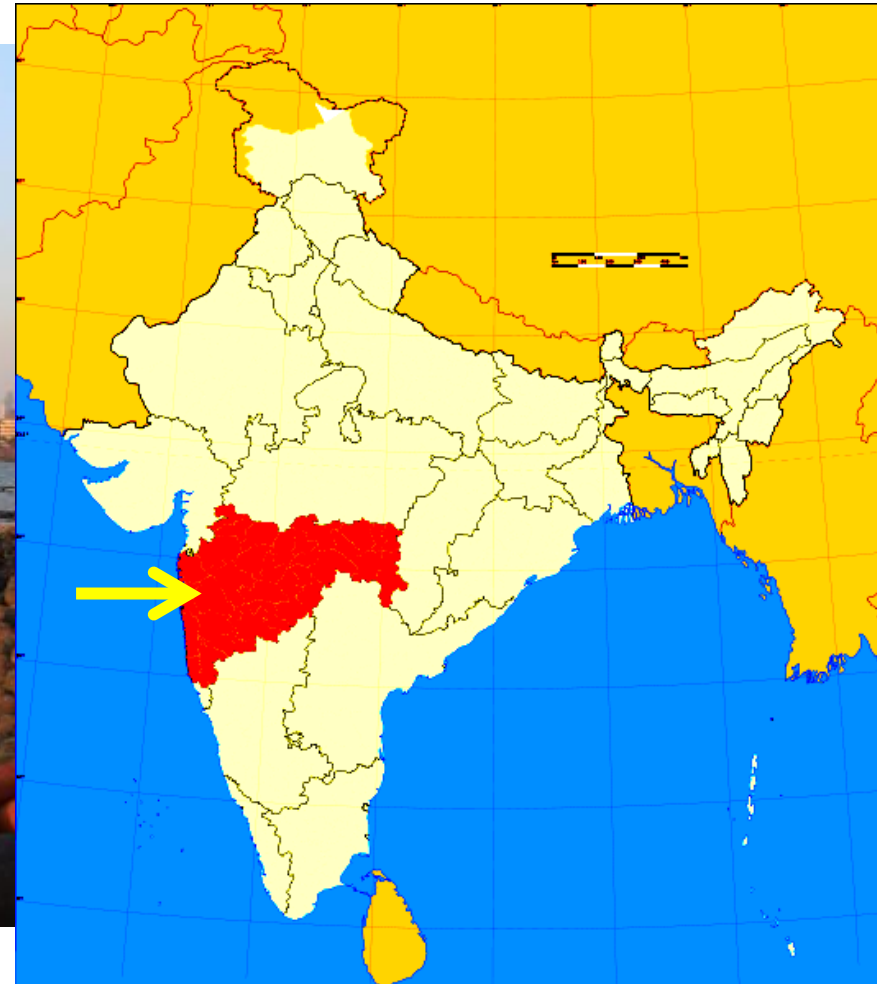
Building Resilience and Adaptation in Marine Ecosystems - Case Studies” session at the World Parks Congress. Sydney
November, 2014

An Urban MPA : Protected Area for Ecosystem Services and not only for species diversity



Overview

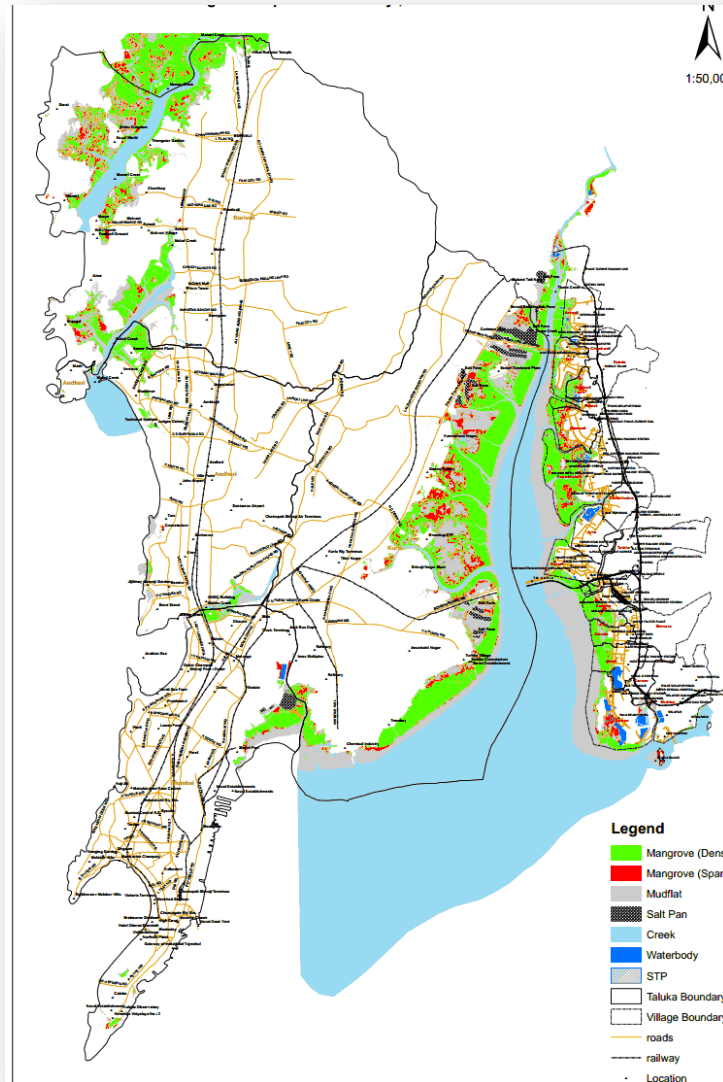
- Mumbai:
 - business capital,
 - extremely high population density
 - pressure on natural resources



Current and emerging challenges

- Mumbai is vulnerable to the impacts of climate change, as well as to 'slow disasters'
- Three way threat to the mangroves:
 - Mumbai has lost about 40% of its mangroves between 1995 and 2005 for infrastructure, and due to pollutions and solid waste
 - Greenspaces and open spaces are at least priority, adding to the stress on the coast and mangrove from solid waste and pollution
 - A look at rainfall patterns over the last century shows that the number of heavy-rainfall days in Mumbai is certainly increasing
 - Flamingos at the coast, though surviving now, may face challenges in near future due to toxic waste
 - Key issue at the root is an absence of awareness among the decision-makers on the relevance of mangroves, and coordination between different agencies
 - A strategic assessment of the situation and possible solutions urgently required

Thane Creek: Proposed MPA



1697.63 ha
~ 17 sq Km

~9 mangrove
~ 8 creeks



Mangrove Crab Stocking



How MPA design and implementation is adapting to support resilience to current and emerging challenges

- Delineation to facilitate sustainable use of the area
 - Crab culture on the eastern bank
 - Passage to boats from the eastern side creek waters
- Engaging all the key sectors and stakeholders in planning and designing the MPA
- Engaging with the business sector to facilitate dialogue and sense of ownership, as well as conservation finance
- Increasing the mangrove cover through afforestation and assisted natural regeneration
- Policy and legal framework governing mangrove conservation to be revisited.
- Augmenting funding to the sector through businesses, Central and State govt. schemes, PPP, Multilateral funding agencies etc.
- Awareness generation among decision-makers

What worked well and what you would change

Components that lead to success

- Strong support within the sector department
- A specialized mangrove cell within the State Government led to focussed approach
- Bringing in technical expertise from outside is helping in management planning with a participatory approach
- Mumbai an ideal case for developing models for protecting coastal and marine habitats in the urban areas with the multiple purposes, such as:
 - Adaptation to climate change
 - Disaster risk reduction
 - Securing health and well-being of the citizens, and
 - Sensitization and participation of decision-makers and key stakeholders



Photo by: Neeraj Khara