

Climate Change Vulnerability Assessment of Mangroves

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Background

CP.9/7: 'Developing and supporting implementation of projects..

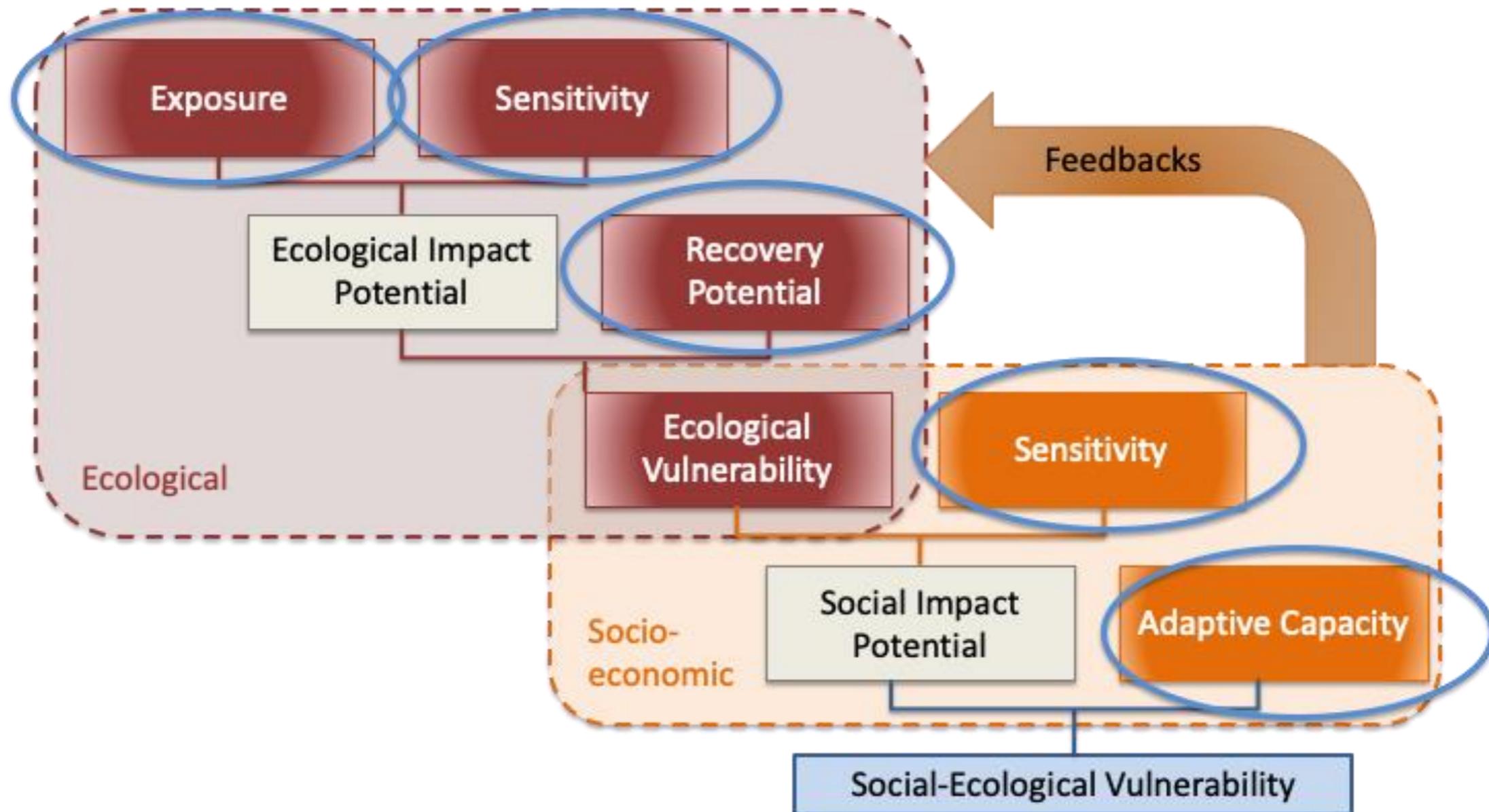
Part (g): Implementation of the Climate Change Strategy for the Marine and Coastal Environment of the Nairobi Convention; and WIOSAP Component A (Sustainable Management of Critical Habitats and vulnerability assessment of critical habitats to climate change')

Background

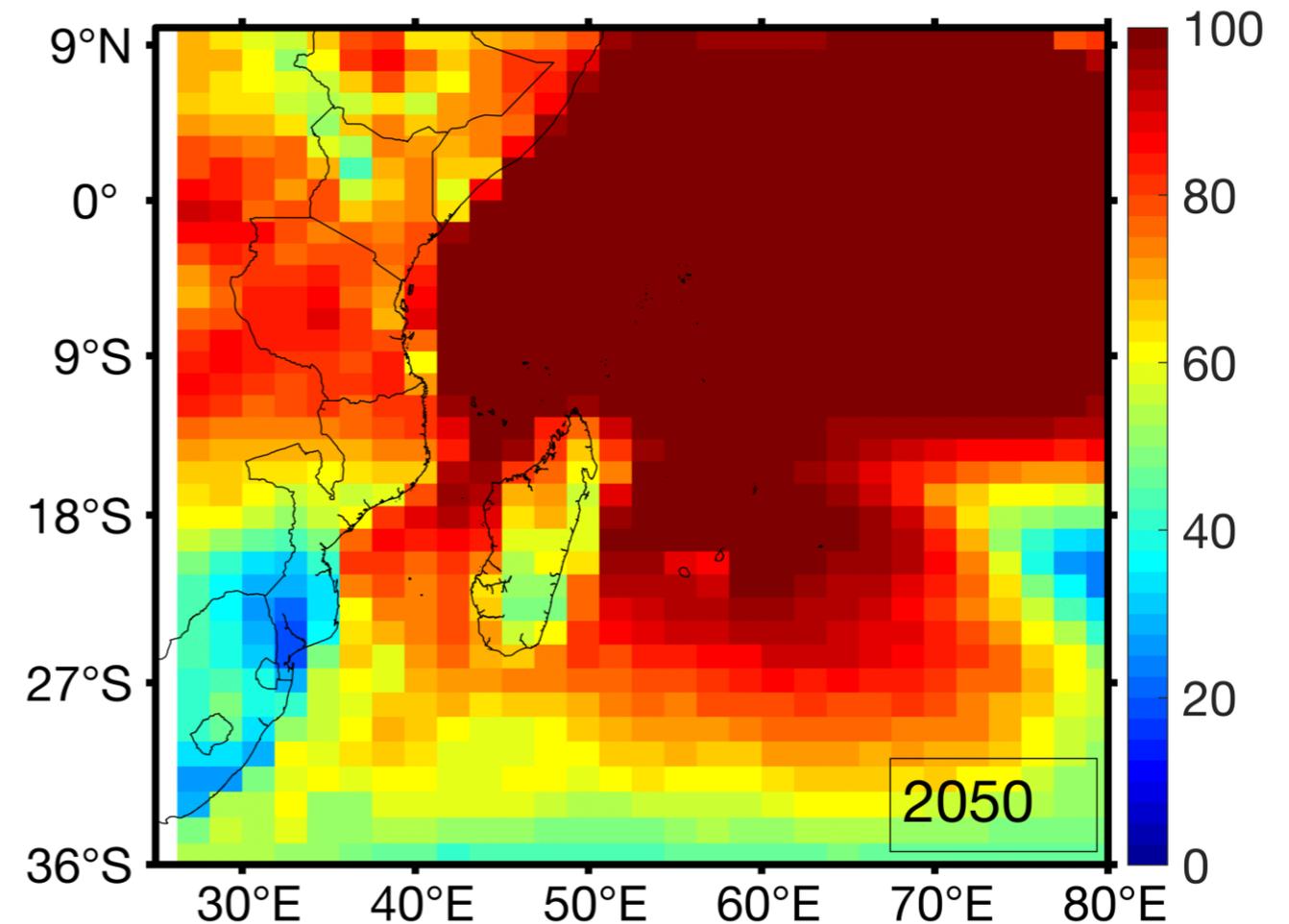
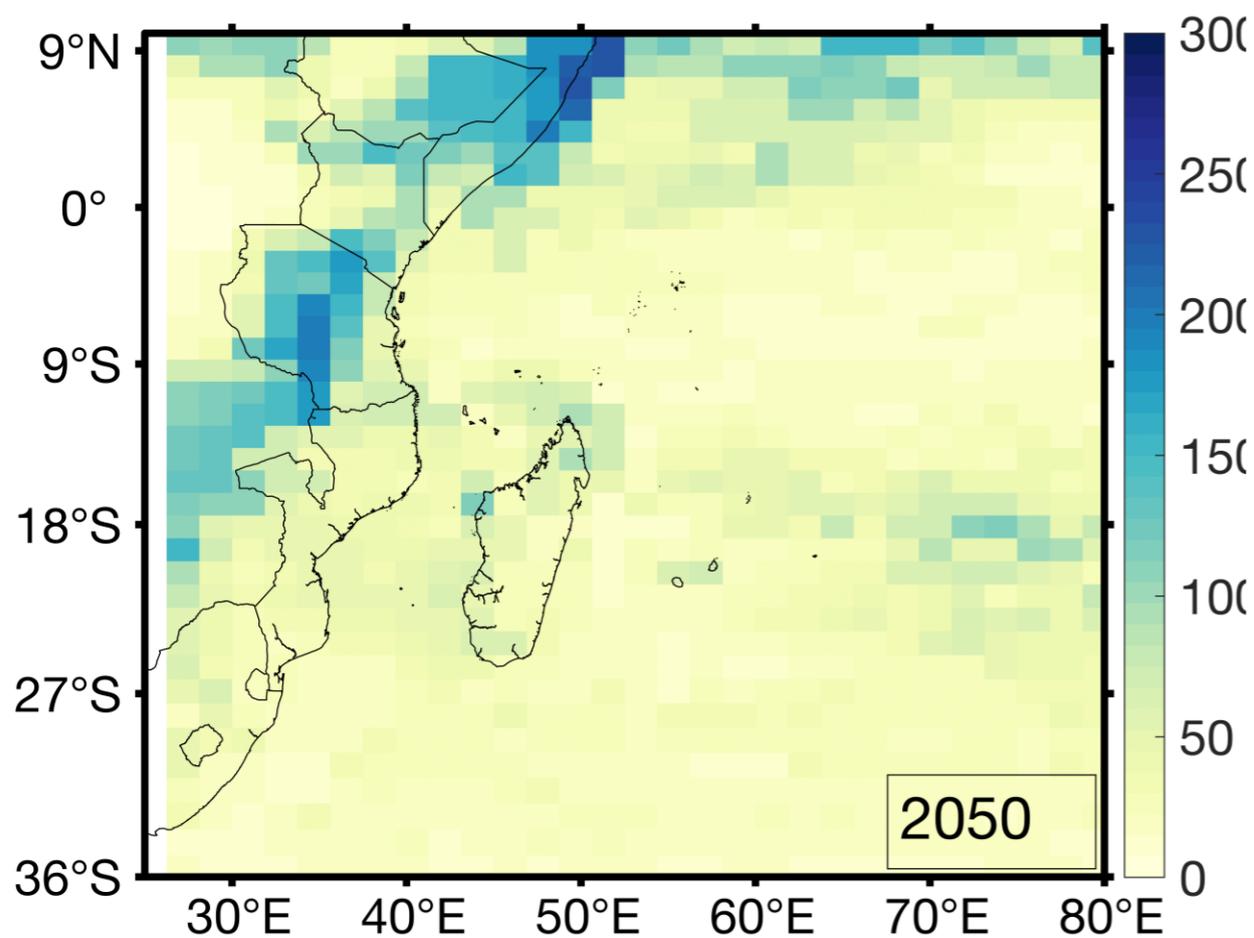
Goal: to assess vulnerability of mangroves to inform management priorities for their conservation



General vulnerability framework



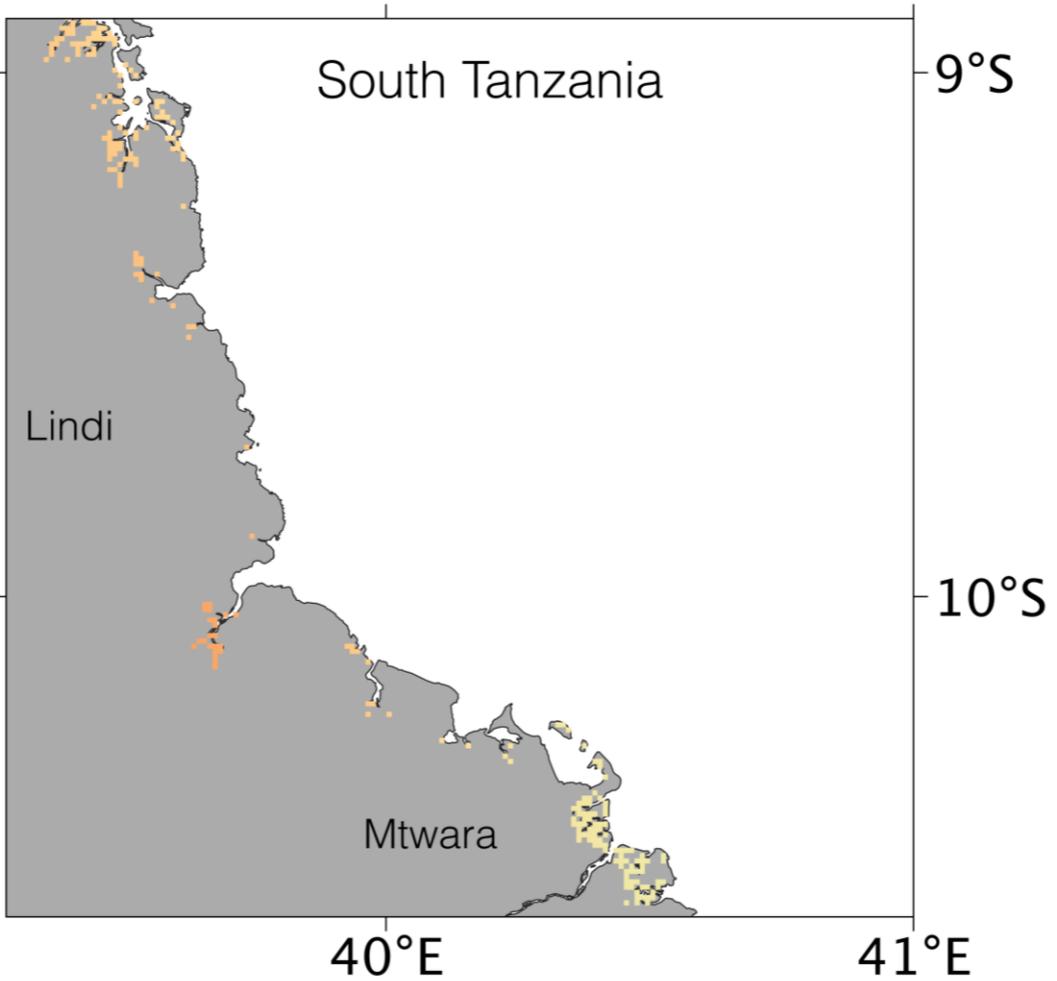
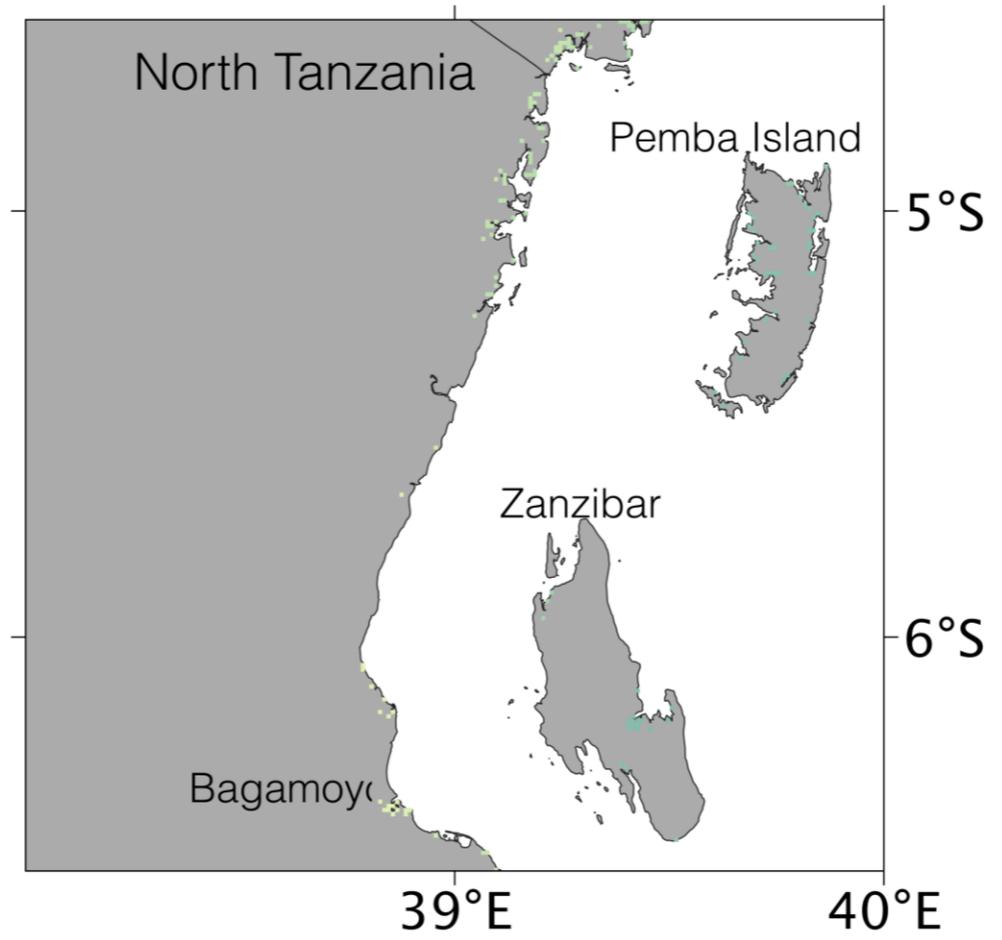
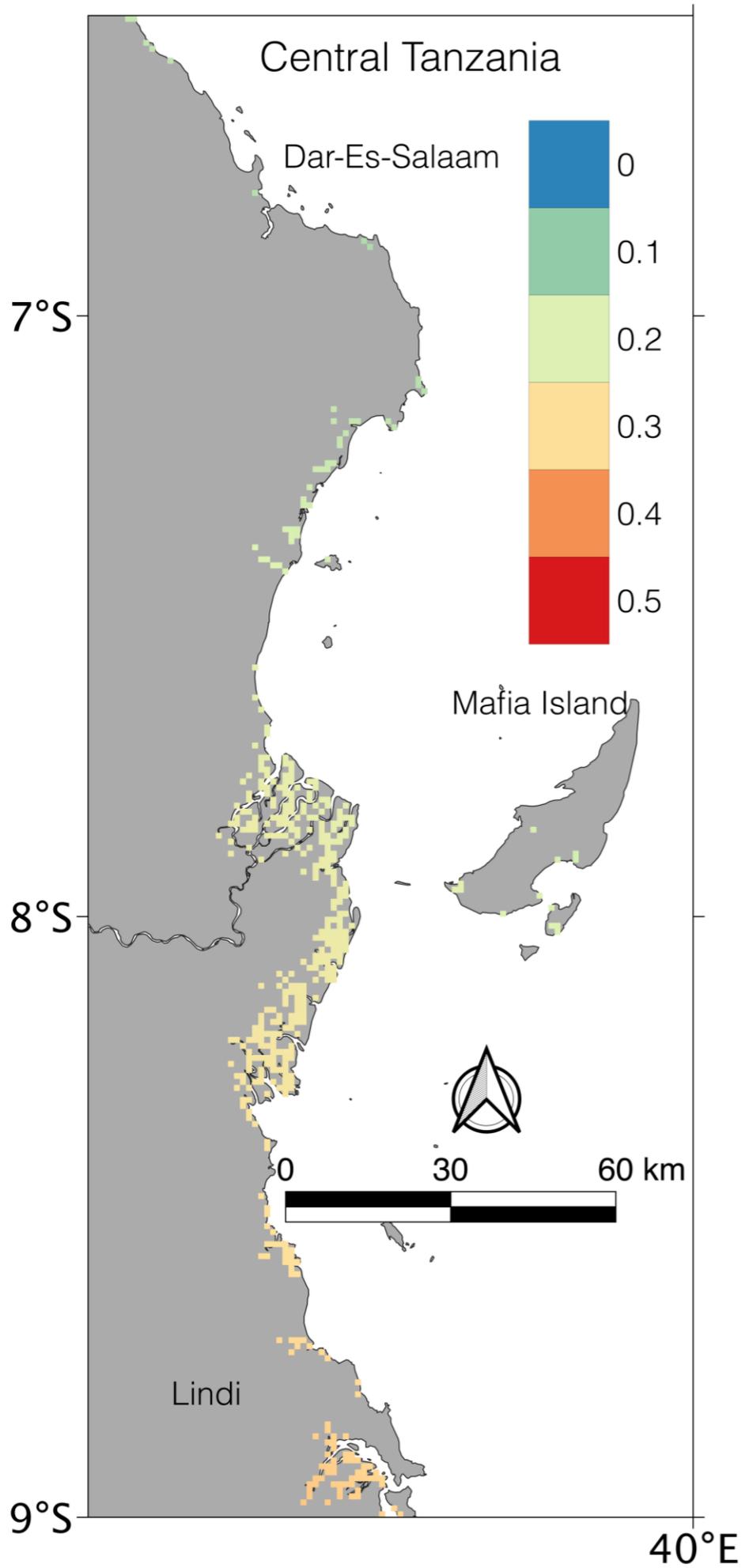
Climate Change: Relative Frequency of Extreme Events

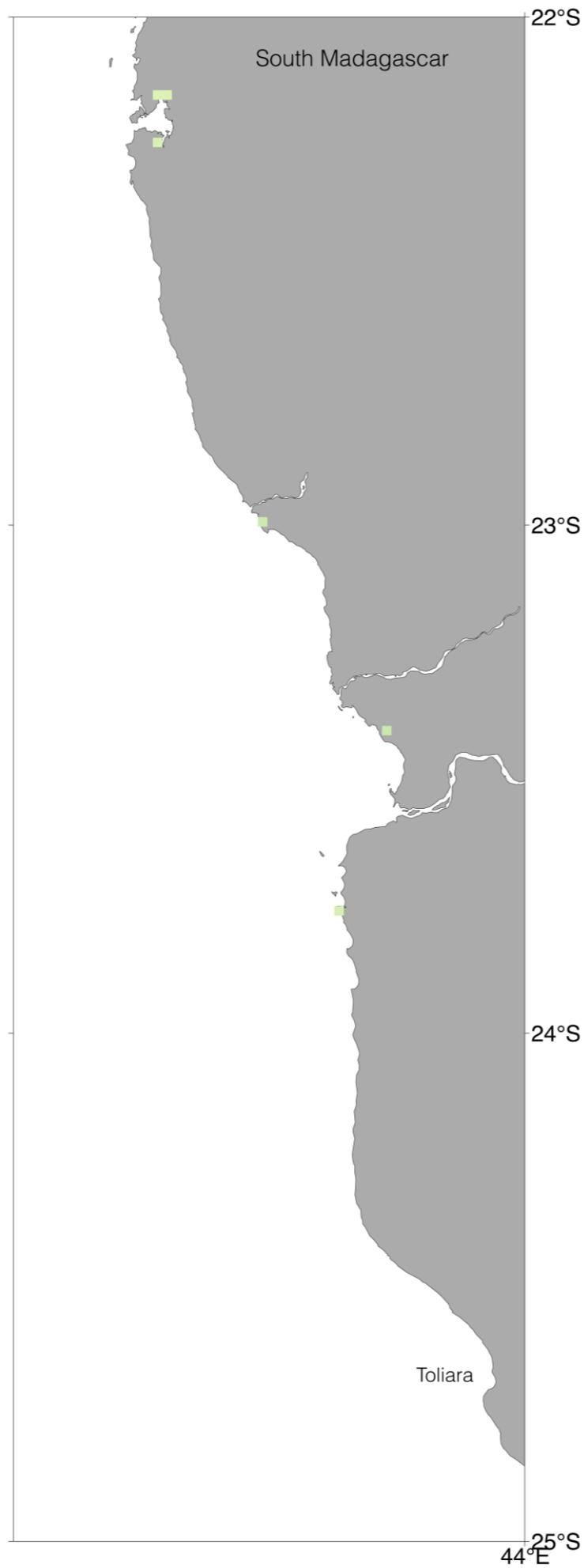
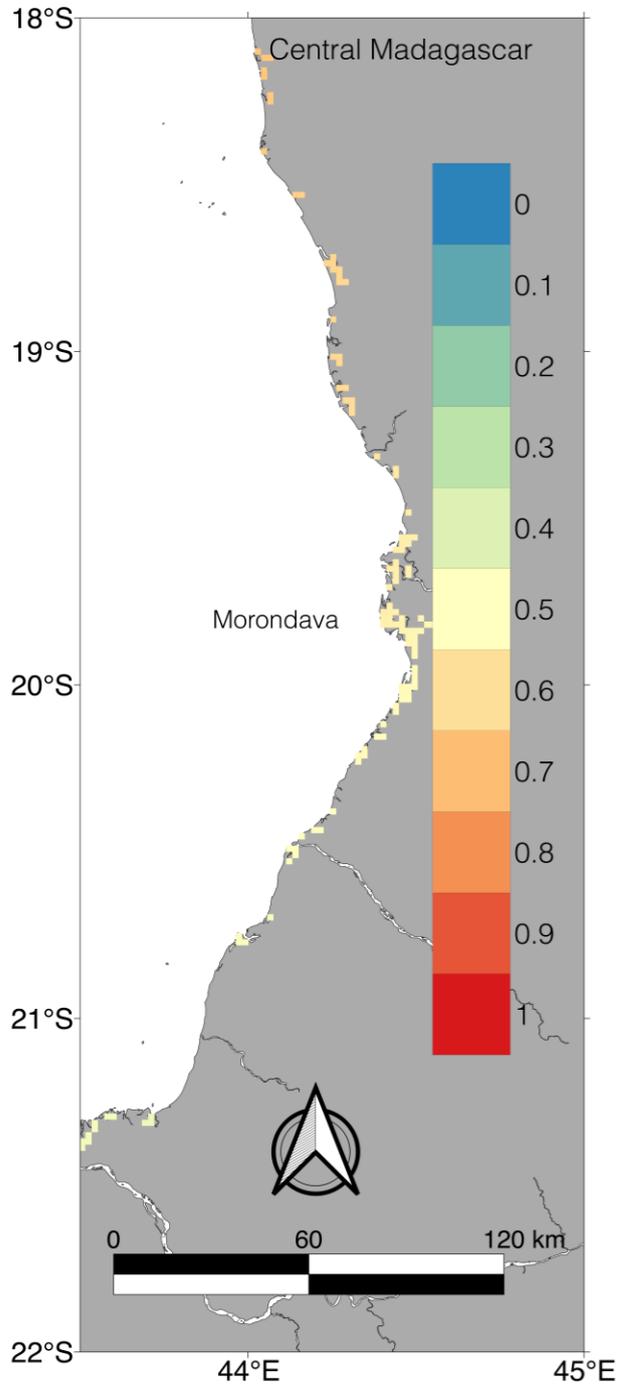
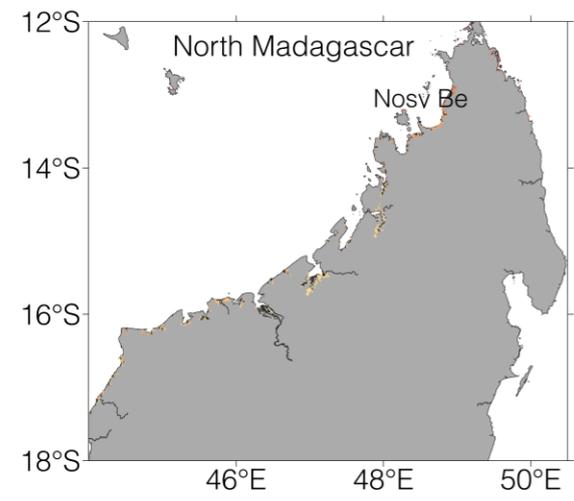


- Cumulative Dry Days, 2050-2060 (RCP 8.0 emission scenario)

- Percentage of days when daily maximum temperature > 90th percentile (heatwaves)

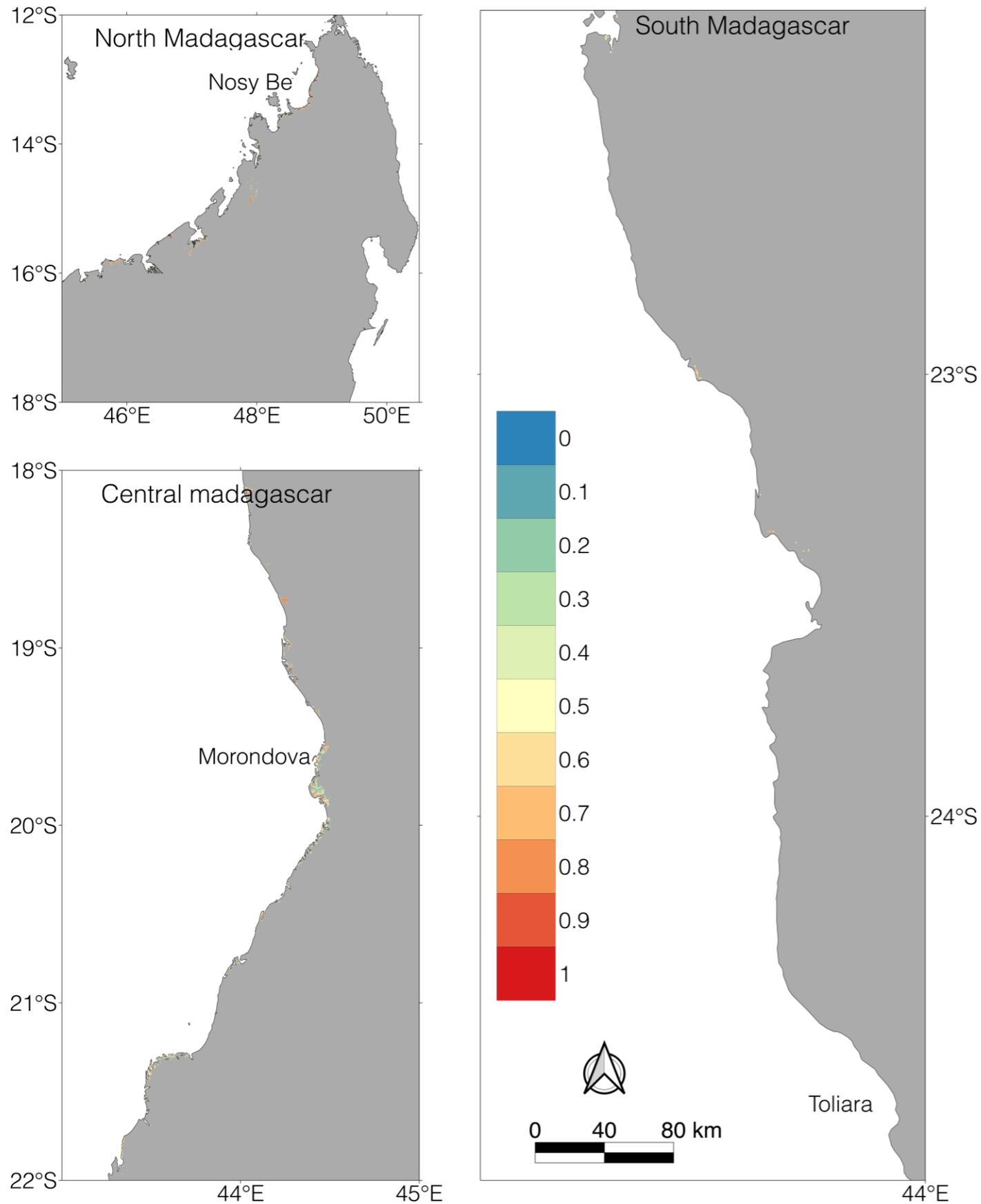
Relative impact of length of dry spell on mangroves - Tanzania





Relative impact of heatwaves on mangroves - Madagascar

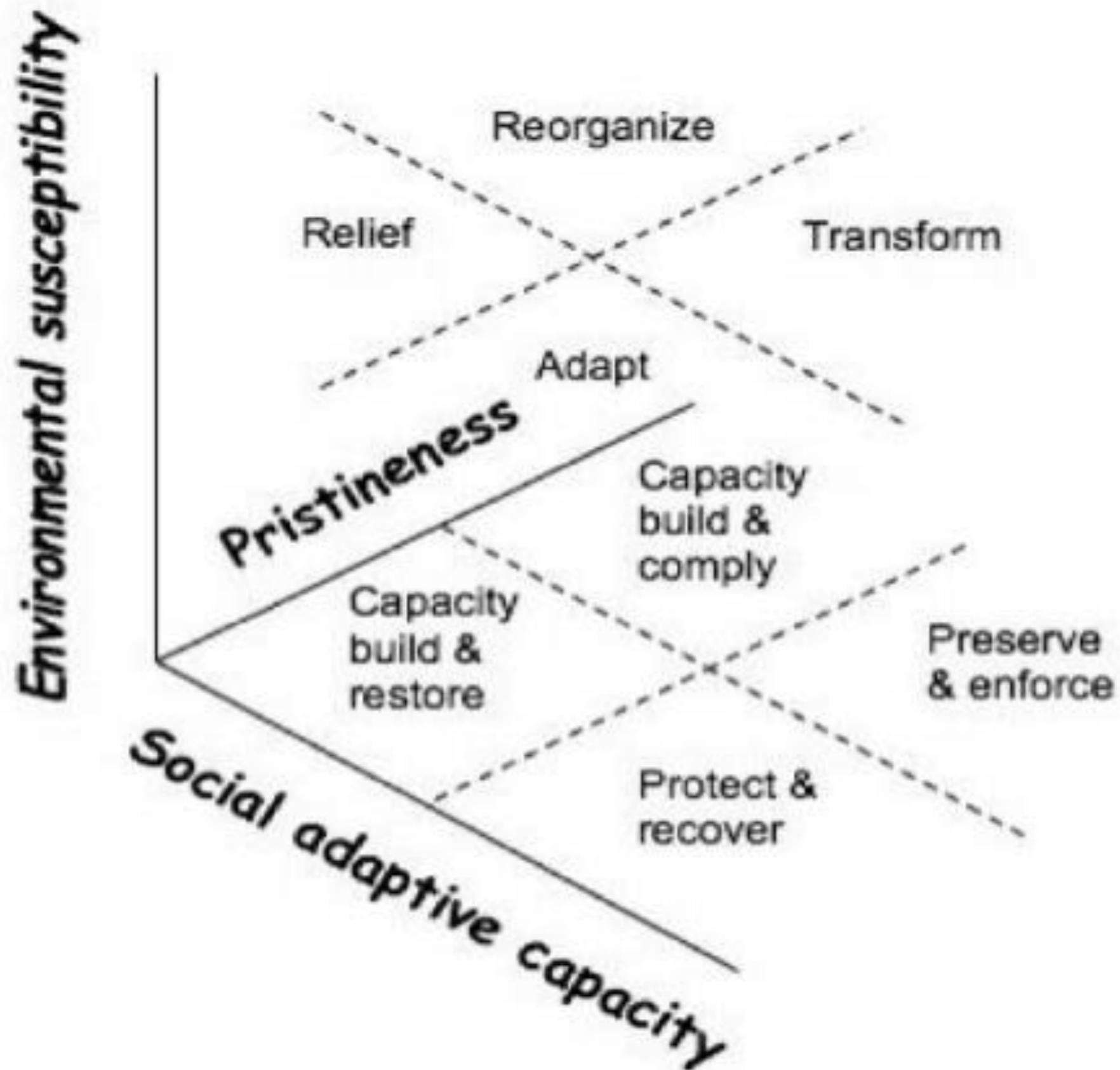
Vulnerability Index



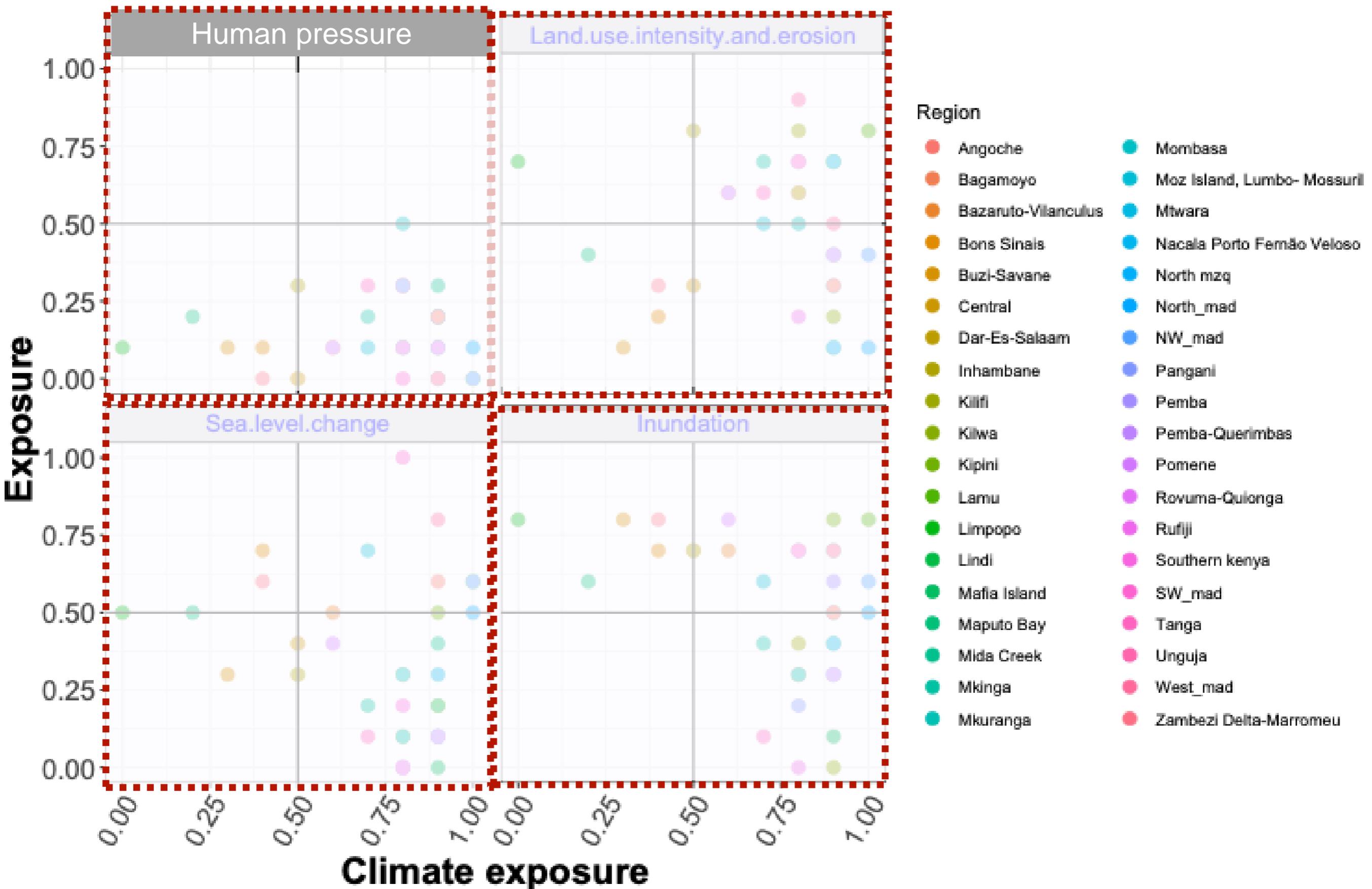
Key threats identified

- Climate change extreme events
- Sea level changes
- Land use intensity and watershed erosion
- Inundation

Potential policy actions



Quadrants of differing conservation priorities



Recommendations

Policy recommendations: The secretariat as part of implementing the Convention climate change strategy, work with partners to fill the existing significant data gaps on the distribution of key ecosystems - coral reefs, mangroves and seagrass beds.

Policy recommendations: The Secretariat as part of implementing the Convention climate change strategy, work with partners to produce a climate change vulnerability assessment toolkit for major ecosystems (coral reefs, mangroves and seagrass beds) in the region.

Recommendations

Policy recommendations: The Secretariat as part of implementing the Convention climate change strategy, work with partners to build capacity on climate change vulnerability assessment on socio-ecological systems (coral reefs, mangroves and seagrass beds) in the region.

Policy recommendations: The Secretariat as part of implementing the Convention climate change strategy, work with partners to develop social and environmental vulnerability assessments to facilitate climate change adaptation strategies

Thank you