## THE COASTAL CONUNDRUM

### Conservation-development conflicts in rapidly developing tropical islands

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UNIQUE

#### TROPICAL ISLANDS

- Complex social-ecological systems with unique biodiversity, high human dependence on nature & multifaceted challenges for conservation & development (Figure 1)
- 'Living laboratories' that epitomise global sustainability challenges
- Conservation-development conflicts are expected to worsen with future uncertainties
- A comprehensive understanding of both social & ecological dimensions is critical

Figure 1: Illustration depicting some of the factors influencing the sustainable development of tropical islands

# AND SPACE CHANGE **IMPACTS BIODIVERSITY** ERRER PRACTA

LIMITED RESOURCES

RAPID TOURISM DEVELOPMENT

MULTIPLE STAKEHOLDERS

**INCREASED IMMIGRATION** 

LAND USE

SUSCEPTIBILITY TO NATURAL DISASTERS

CLIMATE CHANGE

#### STUDY OBJECTIVE & APPROACH

#### AIM:

To analyse & manage conservationdevelopment conflicts by co-constructing possible & desirable futures in tropical islands through participatory approaches

#### FRAMEWORK:

The Policy Arrangement Approach (PAA) is characterised by 4 interlinked dimensions i.e. actors, resources, discourses & rules

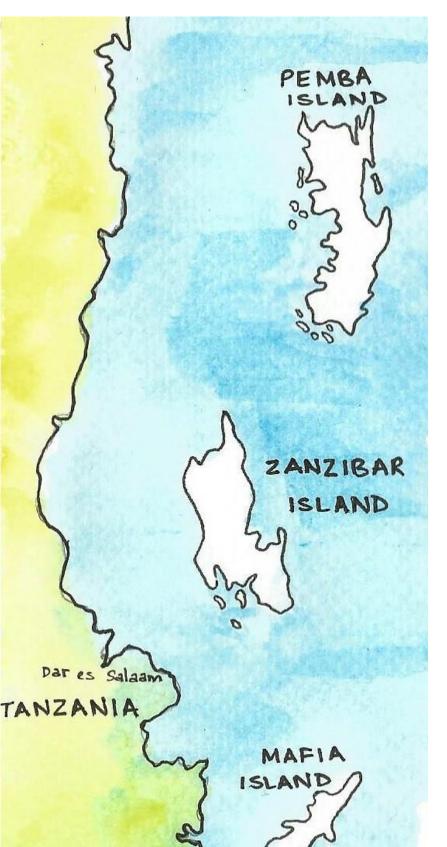
PAA sets a structure to build the knowledge base (through RO1, RO2 & RO3) to further contribute to scenario development (RO4) (Figure 3)

#### STUDY SITES

#### Zanzibar Archipelago (TANZANIA)

- Western Indian Ocean
- Mainland Tanzania: <40km
- 8 protected areas
- Semi-autonomous state
- Predominantly Islamic community
- Higher population density
- Large scale land-use change for tourism & agriculture

(Levine 2004)



Andaman & Nicobar Islands (INDIA)

- Eastern Indian Ocean
- Mainland India: <1300km
- 105 protected areas
- Centralised federal administration
- Diverse community indigenous tribes & settlers
- Lower population density
- Large-scale tourism development

(Bijoor et al. 2018)

& NICOBAR

NICOBAR

ISLANDS

Figure 2: Two rapidly developing archipelagos in the Indian Ocean, differing in management regime and context. Zanzibar (left) and Andaman & Nicobar Islands (right)

of future uncertainties

#### ACTORS - RO1 Mapping the actors & coalitions **RESOURCES** – R01 Mapping the power & amounts of influence between actors **RULES** – R03 DISCOURSES – RO2 Eliciting views & narratives Analysing the formal of actors & coalitions & informal rules

# MOENCE

SCENARIO

EXPLORATION

**SCENARIO EXPLORATION** – RO4

Foresight exercise to develop scenarios in the light

Integrates social & ecological considerations

Multi-stakeholder participatory workshops

Figure 3: Policy Arrangement Approach with four interlinked research objectives (RO) (actors, resources, discourses & rules) that contribute to exploring possible & preferable futures through multi-stakeholder workshops (RO4). Abbreviations: 'RO' = research objective (Adapted from Liefferink 2006)

#### References:

Islands: two case studies. Dakshin Foundation, Bangalore. Levine (2004). Local responses to marine conservation in Zanzibar, Tanzania. Journal of International Wildlife Law & Policy 7(3),183-202.

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Liefferink (2006). The dynamics of policy arrangements: turning round the tetrahedron. Springer, Dordrecht.

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