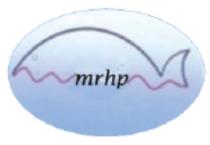


Kevern Cochrane
Rhodes University and
LPI: GLORIA



Workshop Partners

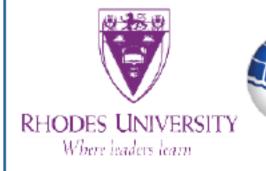
























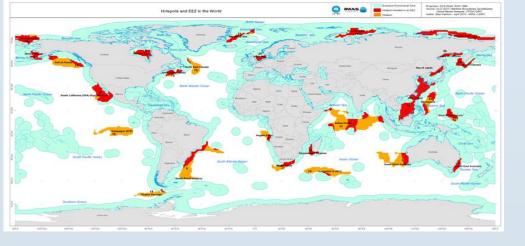




Goal of the overall project

The workshop aims to bring together scientific and traditional understanding and knowledge of the changes taking place in marine and coastal ecosystems in Madagascar and the benefits that are obtained from them, as well as experiences from changes happening in other marine regions of the world also undergoing rapid change.

By combining this knowledge and experience from different sources, the project should add to the existing knowledge and capacity in Madagascar to understand and adapt to change, as well providing examples and approaches for other comparable countries and regions around the world.



Why Madagascar?

Madagascar and the Mozambique Channel is one of the world's marine hotspot regions, where ocean warming and social change are happening most rapidly.

The region is therefore part of a global project on 'Global learning for local solutions: Reducing vulnerability of marine-dependent coastal communities', together with Australia, Brazil, India and South Africa.

The ecological diversity and vulnerability of Madagascar's marine ecosystems together with the high dependence of coastal communities on marine and coastal resources present particular challenges to adaptation for Madagascar and require unique solutions. GLORIA, working with the local partners at this workshop hopes to contribute to identifying some of those solutions

Objectives for Workshop

- 1. To <u>identify major challenges caused by climate change facing coastal communities</u> that depend on the sea, by bringing together a multi-disciplinary group of international experts, local scientists, community representatives and other stakeholders;
- 2. To help to <u>identify options for adaptation to the climate challenges</u> by using best approaches to combine and integrate global and regional scientific information with local knowledge;
- 3. To develop effective communication strategies to ensure that suggested adaptation options are valid and acceptable to stakeholders;
- 4. To develop <u>recommendations for an action plan</u> for effective use of limited public resources to facilitate adaptation;
- 5. Collectively to <u>make recommendations for priorities for future research</u> on marine hotspots.

What is Vulnerability

(from 'Methods for assessing the vulnerability of traditional fisheries to climate change' by WWF/BV)

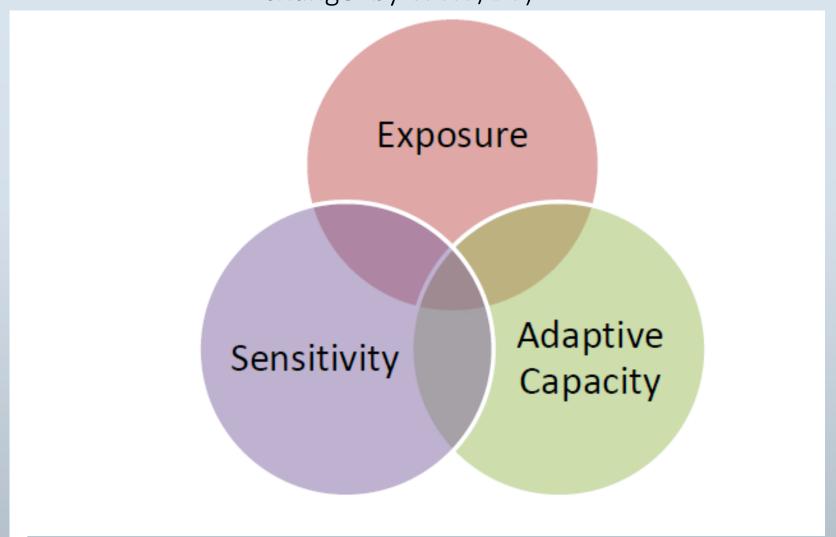
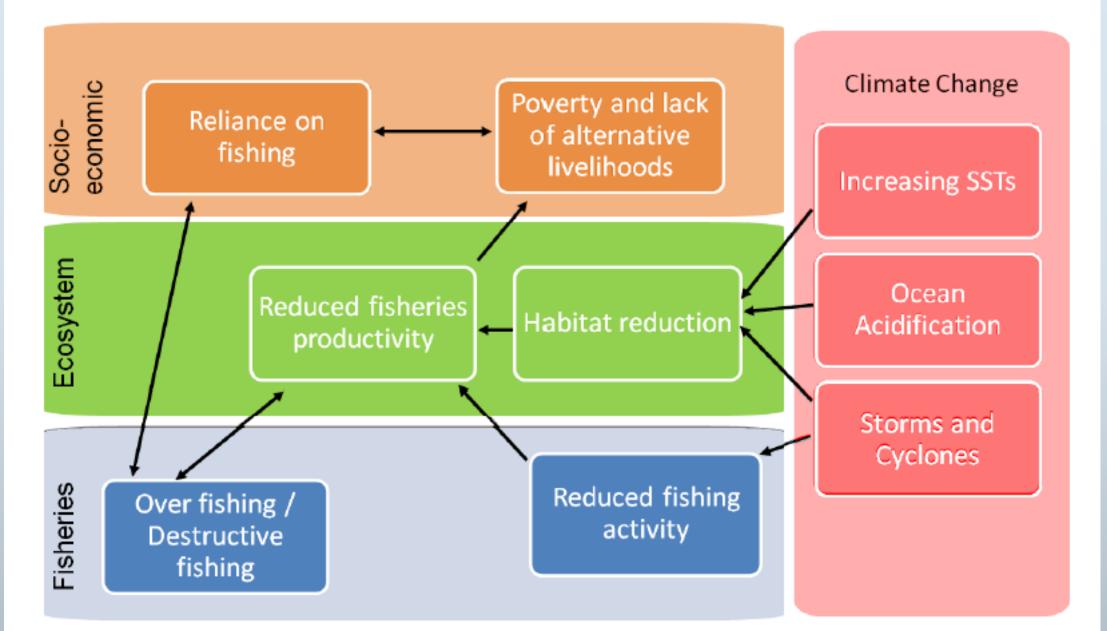


Figure 5 Vulnerability is comprised of three components: Exposure, Sensitivity and Adaptive Canacity

Climate change and vulnerability (WWF/BV)



Workshop Activities

- Activity 2: Climate change projections ('Climate change')
 - Recent advances in climate change modelling, most recent projections of key ocean characteristics
- Activity 3: Ecological sensitivity assessment ('Ecosystem').
 - Highlight species and fisheries that may be most vulnerable to climate change.
- Activity 4: Key ecological assets ('Ecosystem' and 'Fisheries')
 - Current ecosystem modelling, develop conceptual models of the system.
- Activity 5 & 6: Vulnerability assessment, poverty and vulnerability, coping strategies and adaptation options ('Fisheries' and 'Socio-economic')
 - To determine perceptions of risks to livelihoods, to identify current and potential coping strategies, and to identify adaptation options and opportunities;

Workshop Activities (cont.)

- Activity 7+8: Assessing perceptions of change and participatory mapping (Perceptions from Fig 5).
 - Working together using GIS and other technical tools to capture and map spatial information on communities and resources, and analyse the dynamics and characteristics of poverty
- Activity 9: Education and outreach Toliara
 - The activity will provide tools that can strengthen awareness and knowledge of the oceans through effective teaching.

The Outcomes

Recognizing and building on existing knowledge in Madagascar and the region:

- Review and identification of the biggest challenges to coastal communities caused by climate;
- Review and add to existing knowledge and awareness of possible options for adaptation to climate change and other stresses, ensuring that adaptation options are valid and acceptable to stakeholders;
- Recommendations for an action plan to facilitate building resilience and adaptation amongst coastal communities;
- Recommendations for priorities for future research on marine hotspots.

