



The Western Indian Ocean:
Resilient ecosystems for
sustainable livelihoods,
adaptation, and human security

**Marine Conservation Planning
in the Western Indian Ocean
Marine Ecoregion (WIOMER)**

Rémi RATSIMBAZAFY, WWF MWIOPO

October 20th, 2010



Institutional Background

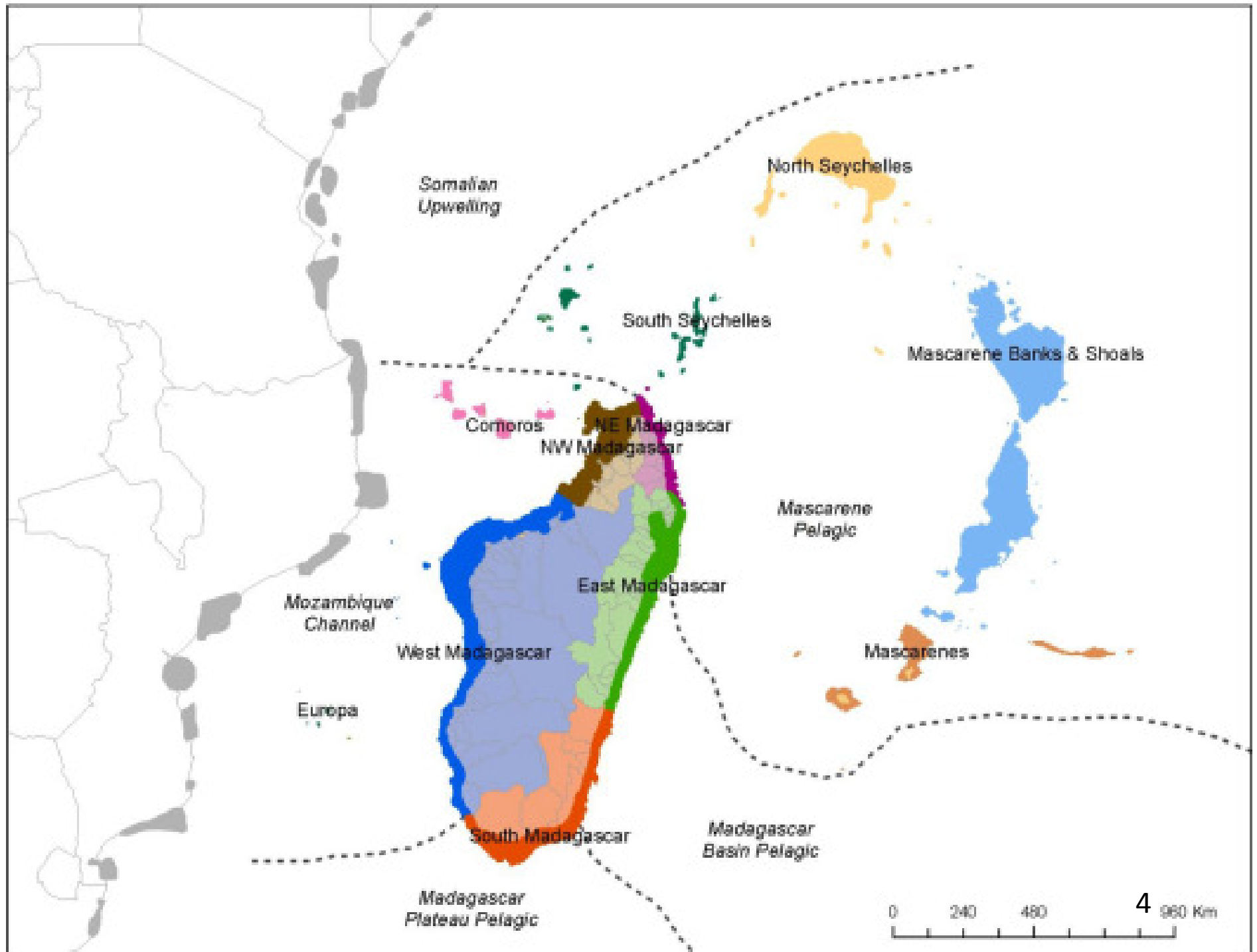
- “Marine Protected Area Network Project”: a Programme of the Indian Ocean Commission, implemented by WWF Madagascar & West Indian Ocean Programme Office (WWF MWIOPO).
- Financial Partners: Fonds Français pour l’Environnement Mondial (FFEM), WWF, Ministry of Foreign Affairs of France, Conservation International.
- Participant Countries: Comoros, France/Reunion, Madagascar, Mauritius and Seychelles.
- Project Duration: March 2006 – December 2010.
- Objective: sustain marine and coastal biodiversity and resources through the creation of a coherent MPA network.

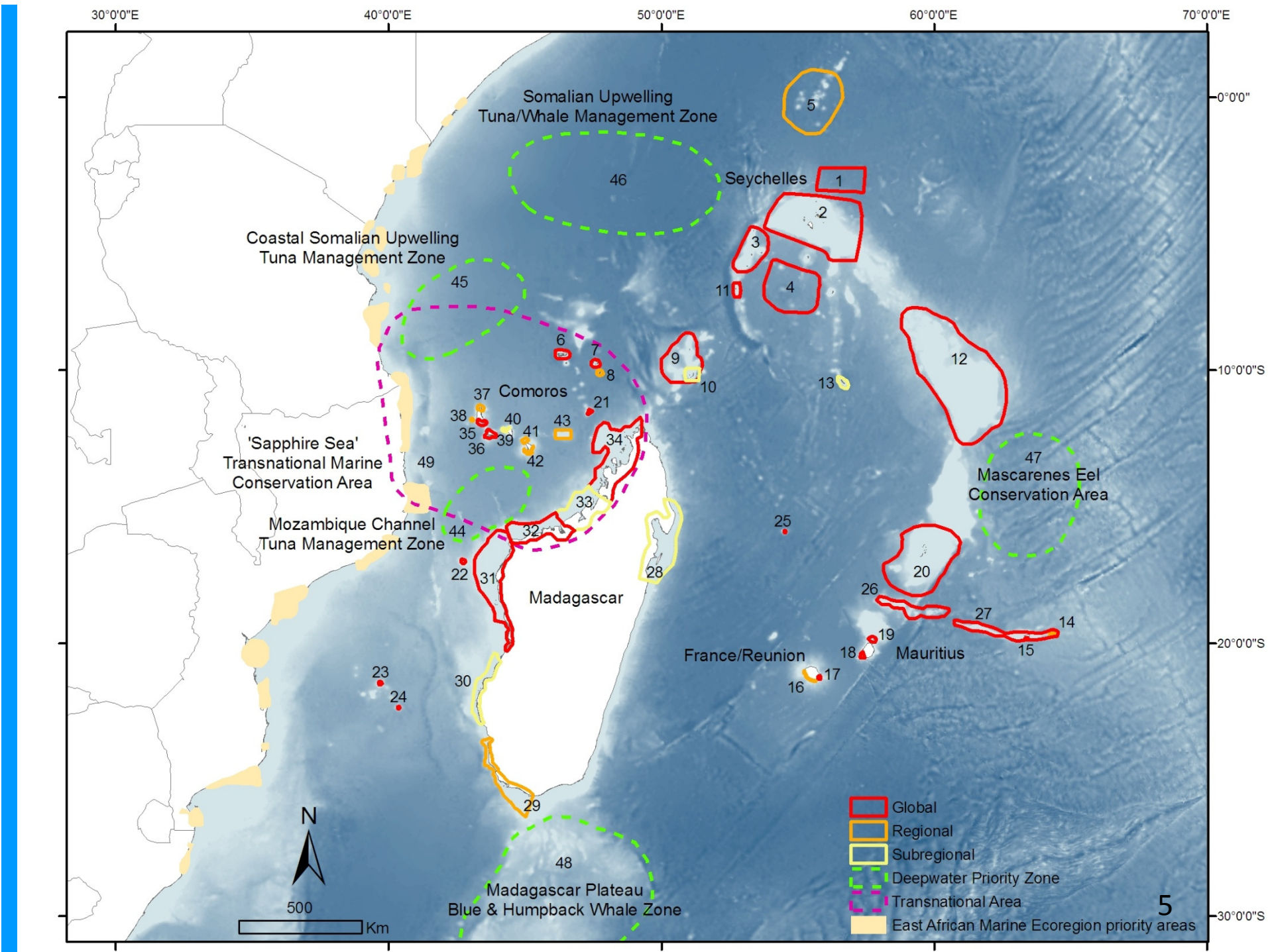
Marine Conservation Planning

- Representation of habitat and species range: how much should be protected to ensure viability?
- Persistence of biodiversity: select ecological processes and functionality, select sites for resilience to climate change.
- Combining modelling tools and expert knowledge.
- Modelling tools which provide quantitative and objective information.
- Allows better involvement of stakeholders and better quality of the data input.
- Outcomes: identify a network of seascapes and sites of significant importance for biodiversity and fisheries conservation.

Process Adopted

- Georeferenced data collection of environmental, biological and ecological features at regional scale.
- Two expert and stakeholder workshops were organized to identify the regional focal species and identify priority areas based on criteria used by the Convention for Biological Diversity.
- Identification, quantification and mapping of marine ecosystems Drivers of Change based on anthropogenic threats.
- Identification of 05 subunits based on biophysical data through clustering analysis process (GDM).
- Marxan analysis which helped the experts in identifying priority seascape areas and sites of special significance using targets of 30% for marine habitats.





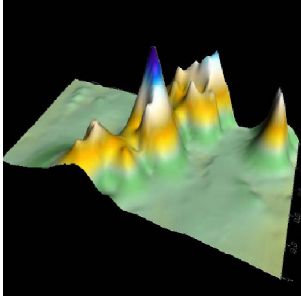
Proposed Regional Strategy for Marine Ecosystems & Fisheries

- A VISION for biodiversity & fisheries.
- 49 priority Seascapes & Sites of global, regional and national significance.
- 07 key regional initiatives related to artisanal fisheries and offshore fisheries ; network of MPA; Wide-ranging species & species of special concern; Oil & gas development; Adapting marine protected areas and fisheries to CC; Critical gaps in knowledge for effective management.

Next Steps...

- Supporting the development of WIOMER strategy DRAFT DOCUMENT through intensive consultation process towards government institutions and scientific communities.

Outstanding Values



- WIOMER is a World Class Marine Ecoregion.
- Different types of islands with diverse tropical marine habitats supporting a wealth of marine biodiversity, many of which are found nowhere else.
- One of the world's largest seagrass beds and reef banks (Mascarene Plateau).
- Oceanic islands with a granitic continental core that are fringed with an ancient and distinctive reef fauna.
- A global hotspot for coral reef fish and invertebrates endemism, with a particularly foci of local endemism in the Mascarenes.
- Some of the healthiest populations of blue, humpback, and sperm whales.
- Globally outstanding aggregations of seabirds and marine turtles on feeding grounds and islands.
- An extraordinarily productive seamount (north of the Seychelles).
- A relatively intact population and migration of catadromous eels.
- Population of dugong and famous coelacanth.