



PROTECTING DUGONGS
CONSERVING SEAGRASS
CHANGE FOR COMMUNITIES



MADAGASCAR

INCEPTION WORKSHOP
THE GEF DUGONG AND SEAGRASS CONSERVATION PROJECT
20-21 October 2015
Colombo, Sri Lanka



MADAGASCAR PROFILE

Full name	Republic of Madagascar
Location	Long : 43°14 - 50°27 E ; Lat : 11°57 - 25°29 S
Total Country Area	587,040 km ²
Total population	22,585,517 inhabitants
Population below poverty line	92% (WB, 2013)
Gross Domestic Product per inhabitant	465 USD in 2011 (WB,2013)
Human Development Index	0,480 (year 2011), Rank: 143
22 Regions, 112 districts, 1395 communes, 17454 fokontany	
92% of the population living under poverty (2 USD)	

TOP 5 Conservation Facts

- Madagascar's accomplishment of the Durban Declaration commitments: Protected Area coverage increasing from 1.7 million hectares to 6 million hectares over the past decade.
- PRM's commitment to establishing legal and regulatory frameworks for community management of marine and coastal resources, in addition to tripling the extent of Madagascar's marine protected areas by 2020 [Sydney Promise].
- Marine Protected Areas covering 926,952 ha.

Knowns and unknowns of dugongs and sea grasses

- K- Dugong's status, historical and anecdotal occurrence and threats
- K- Dugong social and cultural value for Malagasy communities
- U- Seagrass ecosystem distribution
- U- Seagrass biomass and productivity, roles as carbon sink, connectivity and interaction with adjacent ecosystems
- U- Dugong's abundance and distribution, viability, population, migration, status
- U – Interaction with artisanal and industrial fisheries, maritime transport
- U – Ecology, behavior, connectivity and genetics

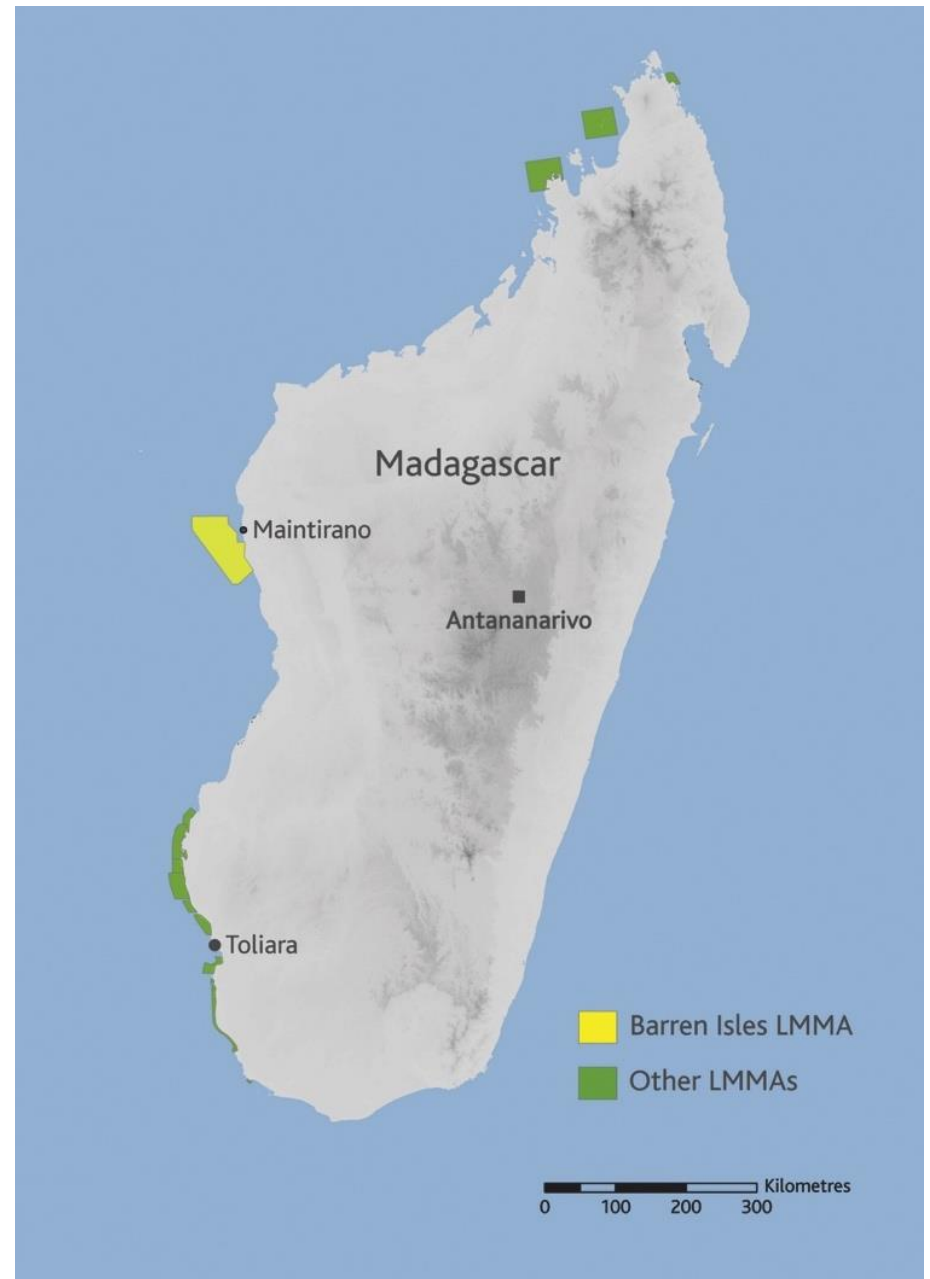
The Biggest Challenges and Issues

- Food insecurity
- Law enforcement
- Local communities ownership and commitment
- Synergy and coordination with other conservation and sectoral initiatives
- Interaction with other sectors such as industrial fisheries, oil and gas development, tourism (infrastructure), maritime navigation
- Remoteness of intervention areas
- Science based information

MG1 - Building a model for long-term community based conservation of seagrass-dependent biodiversity in Madagascar

Barren Isles

- 9 islands located off west coast
- 4,000 km²
- Home to some of Madagascar's healthiest reefs
- 4,000 traditional fishers
- Threatened by destructive fishing, illegal fishing and commercial mining
- Aim to secure local livelihoods through empowering community to manage their marine resources – and creation of a protected area.



Outputs

- Implement community-based seagrass management.
- Create a blueprint for local seagrass stewardship to feed into MIHARI network.
- Secure rights-based fisheries management.
- Reduce destructive fishing methods.

MG2 - Fisher knowledge, awareness and behaviour change for the conservation of dugongs and seagrass using the MIHARI network of LMMAS





MIHARI

Locally-Managed Marine Area –
Madagascar Network

Overview:

- 150+ community organizations
- 100+ LMMAs
- 10+ supporting NGOs

Aims:

- Making fishers' voices heard
- Building local leadership
- Sharing best practices
- Securing financial sustainability

Main outputs

- Increased knowledge on status and importance of seagrass and dugong populations in Madagascar through network.
- Identification and support for improved conservation and management at priority sites.
- Support for development of LMMAs at priority sites.

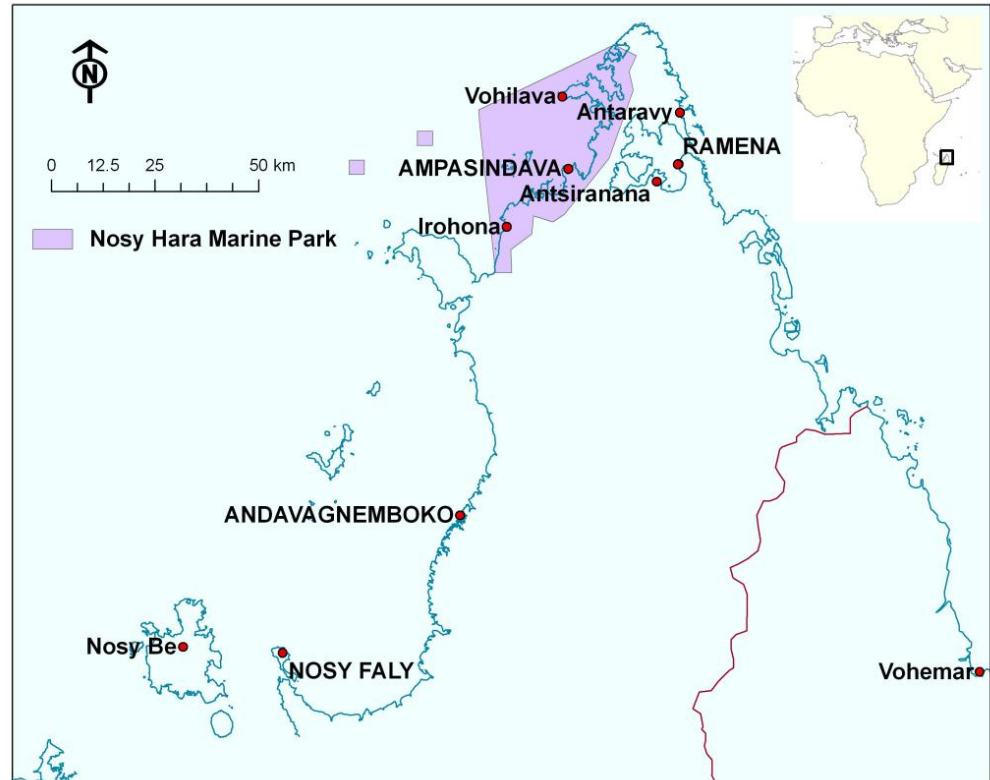


MG3 - Using incentivized Environmental Stewardship to conserve dugongs and seagrass habitat at an identified national hotspot



Why Nosy Hara?

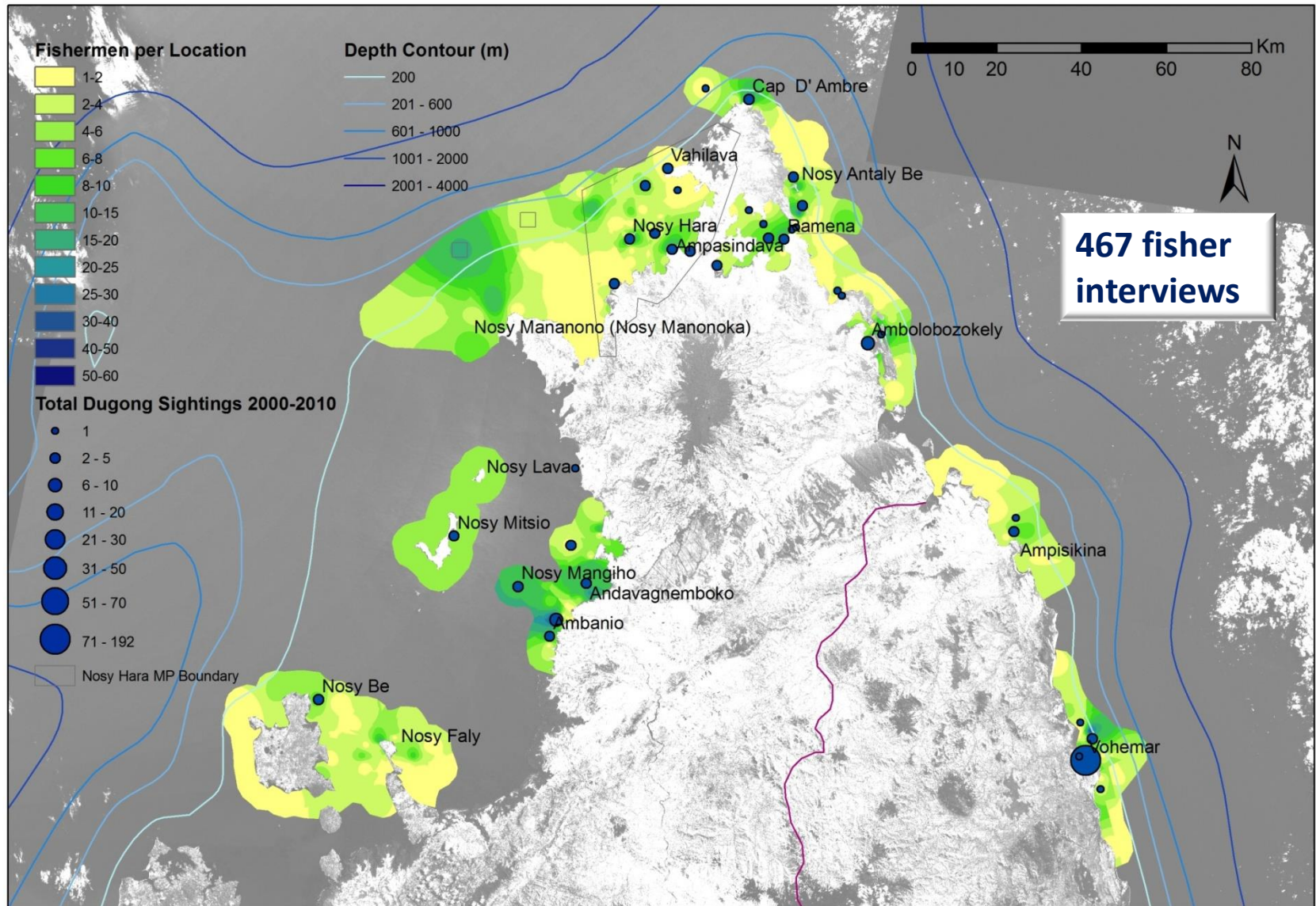
- Internationally significant for marine biodiversity, 20 small coral islands, reefs, mangroves, seagrass, beaches
- Key national site for dugongs & seagrasses
- Government and community co-management
- C3 & WWF supporting Park activities



Why Nosy Hara?

- Cows with calves regularly seen especially around the islets
- Culturally important and hunted for ceremonial slaughter
- Entanglement in gillnets
- Seagrass threatened from run-off (deforestation & erosion)

Dugong sightings & fishing intensity 2010-11



Extensive community outreach

- Since 2009 bi-monthly across the Park
- Junior Ecoguard network (11-16yrs)
- Conservation Ambassadors (adults)
- High awareness of status, threats and conservation measures (>90%)
- Info boards in Sakalava
- Theatre, film, ecology classes & field survey skills



Community dugong monitoring

- Sightings reported by fishers to reps of Local Park Management Committee, meets bi-monthly
- Database updated bi-monthly
- Reviewed quarterly



Community seagrass monitoring

- Annual Seagrass Watch surveys by Conservation Ambassadors & Junior Ecoguards with C3 staff
- Annual mangrove monitoring, replanting and outreach



Community incentives for conservation

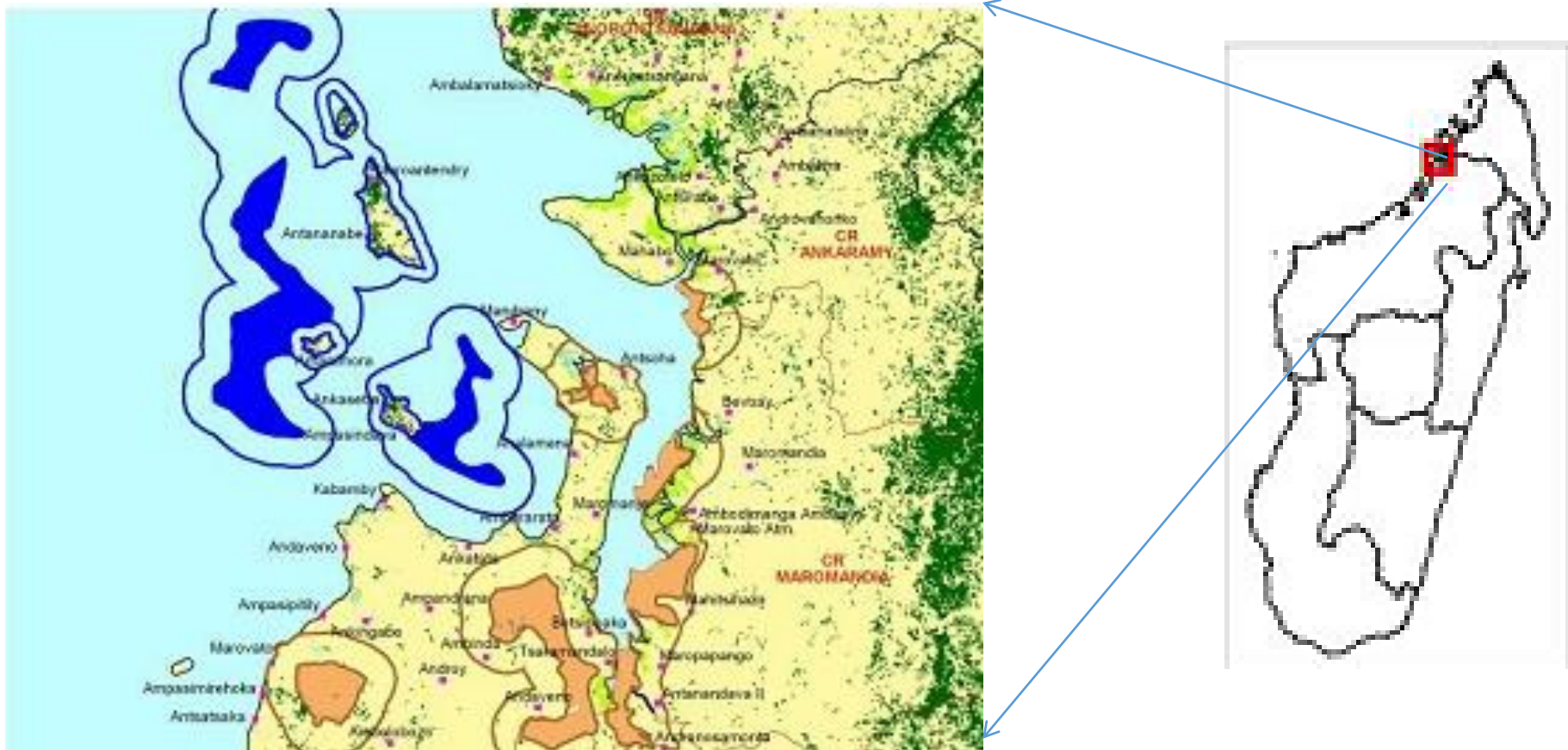
- Women's eco-lodge & café
- Poultry farm
- Handicrafts
- School renovations
- New wells



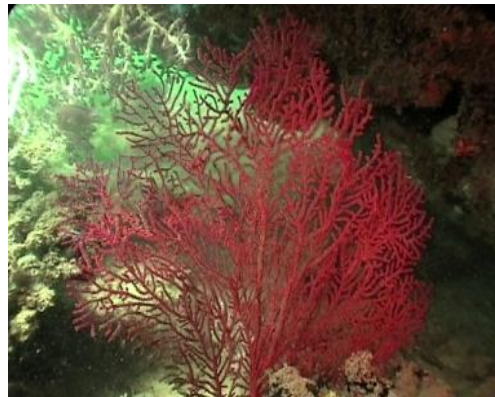
Future activities supported by GEF

- Trials to prevent by-catch e.g. weak links sound light devices
- 3 business enterprises created and run by fishers
- 2 new wells for drinking water
- Junior Ecoguard Toolkit produced and Teacher Training Conference for province of Diana
- Capacity building communities & MNP in rescue, monitoring, outreach and conservation

MG4 - Integrated approaches to enhance the conservation dugongs and seagrass ecosystems in Sahamalaza areas



Sahamalaza National Marine and Coastal Park



Activities

- Strengthening the capacity of COSAP members
- Developing an awareness Programme related to Dugong and seagrass conservation
- Developing monitoring programme on dugong sightings and catches
- Developing a participatory Seagrass mapping with the COSAP members
- Developing income generating activities opportunities around agriculture and increasing tourism

Key Outcomes



- Capacity development of the existing platform COSAP, involved in the management of the Sahamalaza National Park 's natural resources
- Development and implementation of a local Management Plan to ensure the protection of dugongs and seagrass habitat in the Sahamalaza National Park

MG5 - National Steering Committee for the GEF Dugong and Seagrass Conservation Project

Objectives

- Build the National project Facilitating Committee (NFC) at country level
- Ensure the relevance and coherence of Dugong and seagrass conservation Projects to the Government priorities

Activities

- Implementation of an effective coordination mechanism
- Development of legal framework and conservation planning
- Building capacity among partners through the establishment of a national exchange platform for ensuring the sustainability of conservation of dugongs and seagrass
- Ensuring the integration of Dugong and seagrass conservation considerations within relevant national level environmental policy, planning, and regulatory frameworks
- Ensuring that the Dugong and seagrass conservation project brings concrete socioeconomic benefits to local population
- Establishment of exchange opportunities at regional level

MG6 - Dugong and Seagrass Conservation in North West Madagascar



Key Outcomes

- Information on critical dugong habitat, population distribution and threats throughout NW Madagascar through:
 - seagrass habitat mapping
 - passive acoustic monitoring surveys
 - community surveys
- Identify and test conservation strategies in pilot sites to reduce identified threats and develop replicable conservation actions
- Developed in collaboration with other partners that have been implementing strategies in the NW for over 5 years



PROTECTING DUGONGS
CONSERVING SEAGRASS
CHANGE FOR COMMUNITIES



Thank you for your attention!

Rémi RATSIMBAZAFY

Director for Oceans and Coastal Zones Preservation
Ministry of Environment, Ecology, Oceans and Forestry

rratsimbazafy@gmail.com

www.ecologie.gov.mg