

## AN OVERVIEW OF WCS MADAGASCAR MARINE PROGRAM



### INTRODUCTION

With a marine zone of over 1 million square kilometers, Madagascar supports greater total marine biodiversity than any other Western Indian Ocean country. This island nation is among the top 15 countries harboring the largest area of coral reefs and mangroves in the world. Its marine areas house 159 species of fish – 66% of them are endemic to the country.

Fifty percent of Malagasy population, including over 100,000 artisanal fishers, live near the coast and rely on marine and coastal ecosystems for food, revenue and livelihoods. Threats to marine and coastal ecosystems have increased dramatically in recent years. Heavy fishing pressure and illegal fishing, depletion of mangrove forests, sedimentation from terrestrial runoff, and petroleum industry exploration and production are among the most pressing threats. Current threats are likely to be compounded by demographic pressures, with a projected doubling of the population in the coming 25 years, and climate change, which will result in increasingly intense and frequent extreme weather events, among other impacts. If unchecked, the high levels of current and projected threats will lead to the decline of coastal resources, create long-term social and economic hardship for some of the poorest coastal communities in the world, and will result in forgone development opportunities.

### WCS'S ACTIVITIES

The Wildlife Conservation Society (WCS) is a leading actor in marine research and conservation in Madagascar. For over two decades, WCS has been investing in ocean protection, sustainable coastal fisheries, and marine species conservation across the waters of Madagascar. With twenty marine scientists and conservationists on staff, and long-term strategic alliances and partnerships forged with local communities, private sector, government and other institutions working in environmental and development sectors, WCS develops and leads science-based, community-driven field conservation and capacity building programs in three priority seascapes: Toliara in the southwest, Antongil Bay in the northeast and Nosy Be in the northwest. Together these seascapes harbor the greatest stands of coral reefs in the country, some of highest concentrations of humpback whales, whale sharks, sawfish, dugongs, and some the most diverse cetacean communities of the Western Indian Ocean. Due to their outstanding universal values, two of these three seascapes – Antongil Bay and Nosy Be - have been recently identified by UNESCO as potential future marine World Heritage Sites.

### OUR GOAL

#### INTERVENTION SITES

- Toliara Seascape in the southwest
- Antongil Bay Seascape in the northeast
- Nosy Be Seascape in the northwest

#### DIRECT BENEFICIARIES

- Local communities in the three seascapes
- National researchers and stakeholders working in the marine sector

#### OUR PARTNERS

- **National and local authorities:** Ministry of Environment, Ecology, and Forests (MEEF) and the Direction of the Protected Areas System (DSAP), Ministry of Marine Resources and Fisheries (MRHP), Ministry of Higher Education and Scientific Research (MESupReS), and National Office of Environment (ONE)
- **National and international research centers:** Institut Halieutique et des Sciences Marines (IHSM) Madagascar, Centre National de la Recherche Océanographique (CNRO), Université de Montpellier
- **Non-governmental organizations and private sector:** Conservation International (CI), Blue Ventures (BV), World Wildlife Fund (WWF), and MIHARI Network, Ocean Farmers; Indian Ocean Trepanng (IOT), Compagnie de Pêche Frigorifique de Toliara (COPEFRITO)
- **Local communities in the seascapes,** including 26 community-managers of Antongil Bay LMMAs, Association Soariake, Association Ankivonjy, Association Ankarea

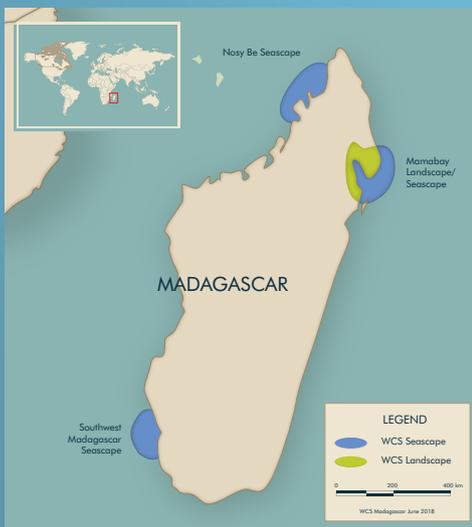
WCS's marine conservation program aims to promote marine conservation in Madagascar by developing and leading science-based, community-driven field conservation in the three priority seascapes. Actions focus on priority species, sustainable fisheries management, and adaptive management to face climate change. Through its on-the-ground, long-term investments WCS builds trust and empowers local communities in these priority areas to manage their natural resources, thus laying a strong foundation for long-term success. These site-based initiatives serve as models for effective marine conservation to inform national ocean conservation and the strategic development of sustainable coastal fisheries.

## OUR APPROACH

- Scientific research to inform conservation
- Community-based fisheries management
- Creation of MPAs that are co-managed by WCS with local communities on behalf of the Government
- Restoration of depleted fish stocks (reserves, regulation of destructive fishing practices)
- Working with Government to secure legal protection and local management rights
- Innovative local marine enforcement system by empowering local communities as local marine rangers and eco-guards
- Local communities empowerment through capacity building, establishing local-level institutions, networking communities, and communication and awareness-raising campaigns
- Livelihoods diversification through agriculture, aquaculture, fish processing, and ecotourism
- Capacity building in marine resource conservation and sustainable management
- Marine spatial planning

## Project milestones

- **1993 – 2003:**
  - Contributing to the creation of
    - Masoala National Park marine areas (10,000 hectares)
    - Sahamalaza National Park marine areas (18,492 hectares, including mangroves)
    - Velondriake Marine Protected Area (68,502 hectares)
- **2015:** Creation of MPAs co-managed by WCS and local communities:
  - Ankivonjy MPA (139,409 hectares) in the Nosy Be Seascope
  - Ankarea MPA (135,556 hectares) in the Nosy Be Seascope
  - Soariake MPA (38,293 hectares) in the Toliara Seascope
- **2017:**
  - Finalization of the creation of 26 Locally-Managed Marine Areas (LMMAs) in Antongil Bay
  - Marine spatial planning to develop a Marine Conservation Plan to identify potential future MPAs in Madagascar
- **2018:**
  - New fisheries management plan for the BATAN zone (Bays of Ampasindava, Tsimipaika, Ambaro, and the archipelago of Nosy Be)



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## OUR MAIN DONORS

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