MDG 15: Marine Turtle Hatching Success

Keywords: Marine Turtles, sea level, ocean winds, ocean waves, climate change

Primary actors

Madagascar: CNRO (Leonel Jaofeno)
UK: SatOC (David Cotton)

Stakeholders / End Users

CNRO (National Oceanographic Research Institute), IHSM, WWF, Conservation International, Madagascar National Parks,

Introduction / Statement of the Problem

Green turtles and other species nest in Ambodivahibe and Nosy Hara on low lying sand. Nest sites are likely to be vulnerable to rising sea level.

Case study description

- Objective is to investigate any relationship between nesting time and hatching success with the seasonal changes in sea level (tidal and non-tidal effects).
- Collate and summarise knowledge on Marine Turtle hatching success.
- Analyses historical information on sea level change including what is known on storm surges .
- Does the nesting time vary from year to year.
- Is sea level affecting hatching success?
- Are storm surges a bigger issue than sea level?
- Output for C-RISe will be a report on the use of satellite data in this research.

Expected Impacts

Long Term Primary Impact: After end of Project (> 2020)
This is part of an ongoing research programme, which will continue beyond the duration of the Use Case. Thus any impacts beneficial to the management of Marine Turtles will be in the long term. Marine Turtle hatching success is important in its own right from an ecological perspective, but also from the financial perspective in terms of tourist income.

Secondary Impact: CRISE Case study report March 2019, CNRO research activity in this area will continue into subsequent years.
Short term impact directly to CNRO will be experience in gaining access to, and working with, satellite data.

SDG 14.2, 14.3