


MDG 16: Impact of Coastal Climate Change on Shrimp Fisheries	
Keywords: shrimp fisheries, marine living resources, climate change impacts	
Primary actors	
Madagascar: CNRO (Hajanirina Razafindrainibe) UK: NOC (Val Byfield)	
Stakeholders / End Users	
CNRO, DGM, Fisheries Ministry, Fisheries companies, traditional fishers, Ministry of Environment, Secretary of State for the Sea	
Introduction / Statement of the Problem	
<p>Shrimp fisheries are an important economic resource at local and national levels. Recruitment to the fisheries are affected by variability/change in environmental parameter (rainfall, salinity currents, temperature). Understanding the relationship between the physical environment and abundance of shrimp species is important for effective management of the fishery.</p>	
Case study description	
<p>The case study will involve the following activities:</p> <ul style="list-style-type: none"> • Analysis of shrimp catch data in the light of existing knowledge of individual species. • Analysis of rainfall data, sea level and tidal variability (MDG3) and wind/wave climate variability (MDG4) from DGM. • Develop conceptual / analytical models to understand potential impacts of these parameters on the abundance of different shrimp species. • Development of a report on the relationship between shrimp abundance and the physical marine environment for different shrimp species. 	
Expected Impacts	
<p><i>Long Term Primary Impact:</i> After end of Project (> 2020) The fisheries ministry, ministry of environment and Secretary of State for the sea will benefit from the information provided to support decision making in marine resource management environmental protection, and planning of measures for climate change resilience.</p> <p>Fishing companies and traditional fishers will benefit from improved management of the shrimp fisheries and assessment of potential future climate impacts on fisheries for different shrimp species.</p> <p><i>Secondary Impact:</i> CRISE Case study report March 2019, CNRO research activity in this area will continue into subsequent years. CNRO will benefit from improved ability to analysis satellite data and apply this to assessing recruitment to stocks of economically important shrimp species.</p>	
SDG 14.2, 14.3	