



SPINY LOBSTERS AND SHRIMPS OF THE SOUTH WEST INDIAN OCEAN: SHARING NETWORKS, SURVEYS AT SEA AND STRATEGIES FOR STOCK MANAGEMENT

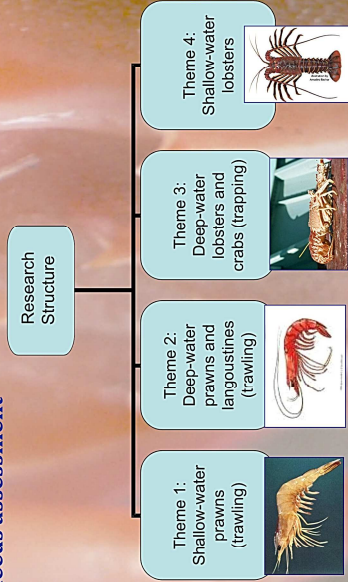
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INTRODUCTION

- Artisanal and industrial fisheries for shrimps (prawns), spiny lobsters, langoustines and crabs are ever-present along the margins of the South West Indian Ocean, extending from eastern South Africa to Kenya, and around Madagascar
- The largest quantities are reported from Mozambique and Madagascar shallow-water fisheries, however industrial deep-water trap and trawl fisheries are important off South Africa and Mozambique.
- The South West Indian Ocean Fisheries Project (SWIOFP) supports a multi-national collaborative approach for assessment of regional fisheries potential
- The results from this project are expected to indicate whether various fished crustacean stocks are shared between countries (a regional resource) or are localized (national resources)
- Based on this information, regional or national fisheries management strategies will be developed

MATERIALS AND METHODS

- Four research themes were developed, based on existing fisheries and needs assessment



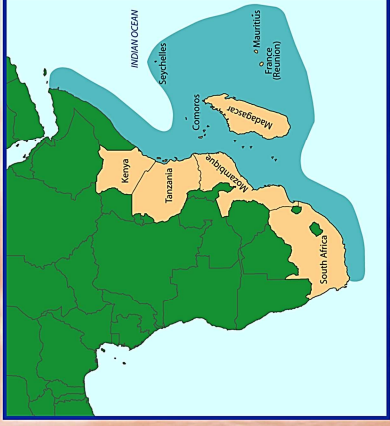
- In each theme, research objectives were set to provide information on historical trends (retrospective analyses); distribution and species composition; life history and biology; and genetic population structure

Research Objectives	Methods used
Retrospective analyses	Historical data on fishing effort and catches sourced from governments and private sector, and compiled in retrospective analyses to identify data gaps and historical trends. Consultants were used.
Distribution & species composition	Surveys at sea and deployment of fisheries observers on commercial vessels to collect new data on species distribution, composition and abundance
Life-history & biology	*Dedicated research projects on priority species using historical and new survey data
Genetic population structure	*Dedicated research projects on priority trans-boundary species using historical and new survey data

* MSc projects and ad hoc research projects at Universities

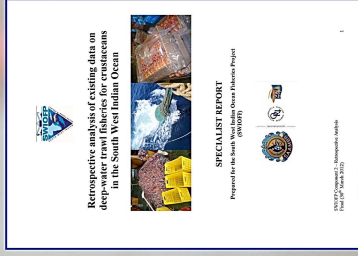
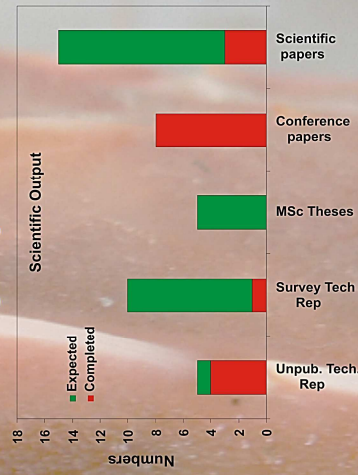
- Workshops were held in which scientists from all the participant countries collaborated in developing a series of research projects, based on the data and biological / genetic samples to be collected during surveys at sea

- As a scientific capacity building initiative, five Masters Degree students were funded and supported with survey information, to conduct research on priority issues



RESULTS

- Retrospective analyses showing historical fisheries trends in the SWIO region published as FAO Fisheries Circulars
- Survey data, biological, genetic and physical samples and technical reports produced for SWIOFP research projects
- Genetic studies to indicate whether fished stocks are trans-boundary (i.e. shared regionally) or local (not shared)
- Fisheries management information provided at national and regional levels
- Scientific capacity building boosted through the MSc programme and collaborative research projects; institutional capacity building and improved infrastructure for fisheries research
- Contribution towards TDA / SAP development for the Agulhas & Somali Current LME Programme
- Scientific output in peer-reviewed literature and at conferences



- Strong, enduring networks formed among scientists of the region, to cope with the large geographical scale and multi-national nature of the research.

