

Agulhas Somali Currents Large Marine Ecosystems (ASCLMEs)




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David La Roche
Steering Committee



Programmatic approach and partnerships.




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France
Remote sensing
Stable isotopes

SWIOFP

WIO-LaB

WWF Ecoregions

ASCLME

ACEP



Common Programme Goal



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Ensure the long-term sustainability of the living resources of the Agulhas and Somali Current Large Marine Ecosystems for the benefit of humankind



Biggest challenge

Developing appreciation of value of off-shore research in the face of poverty



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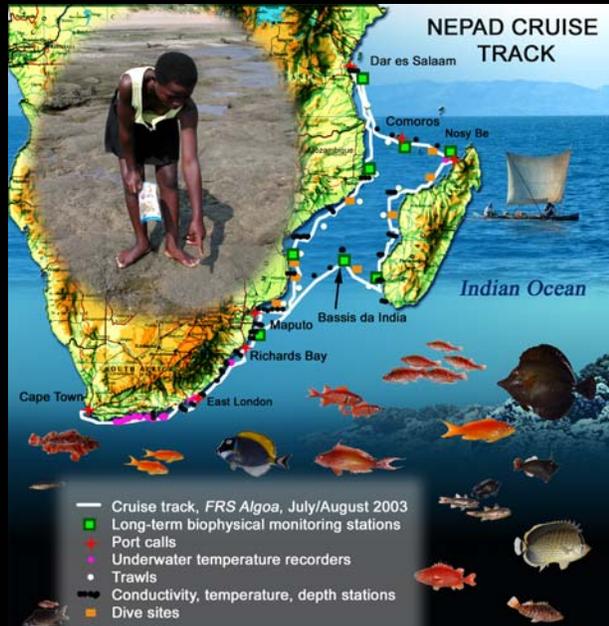
ASCLMEs PROJECT GOALS

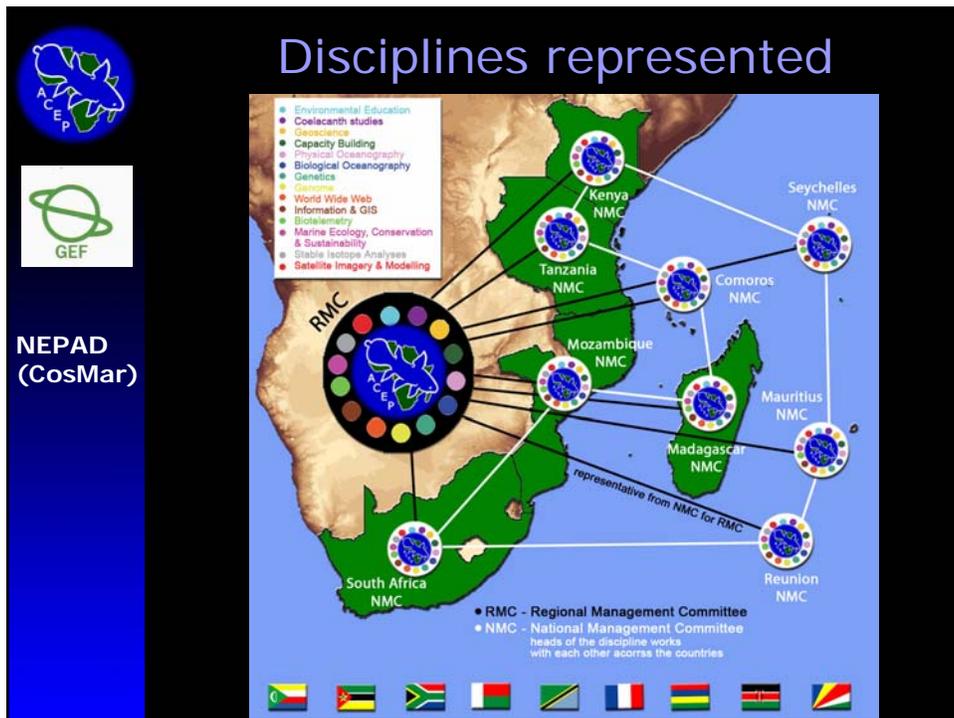
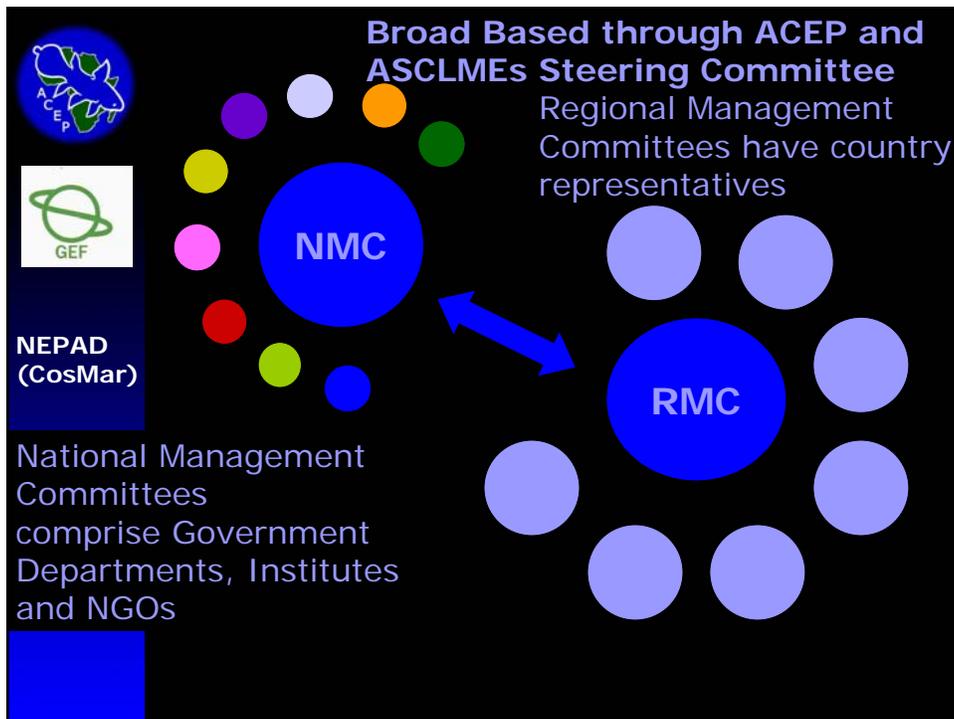
- Develop the knowledge necessary to better manage the fisheries and biodiversity through capacity building and ecosystem studies.
- Understand the processes that drive the energy and economies of the western Indian Ocean.
- MDGs (help countries achieve Millennium Development Goals)
- TDA (Transboundary Diagnostic Analysis for Programme)
- SAP (Strategic Action Plan for Programme)

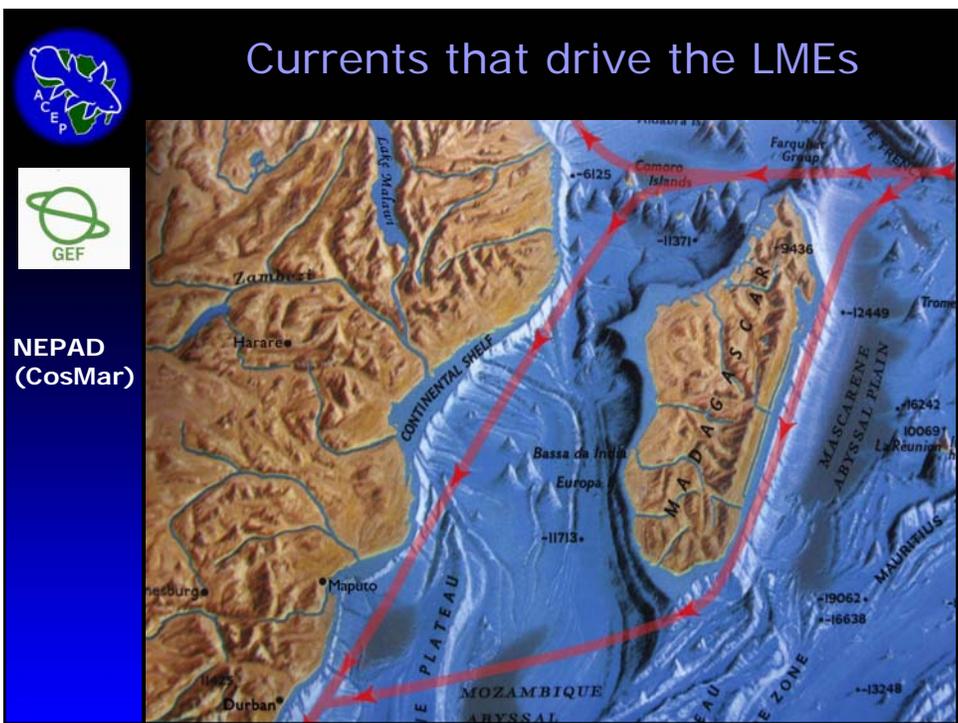


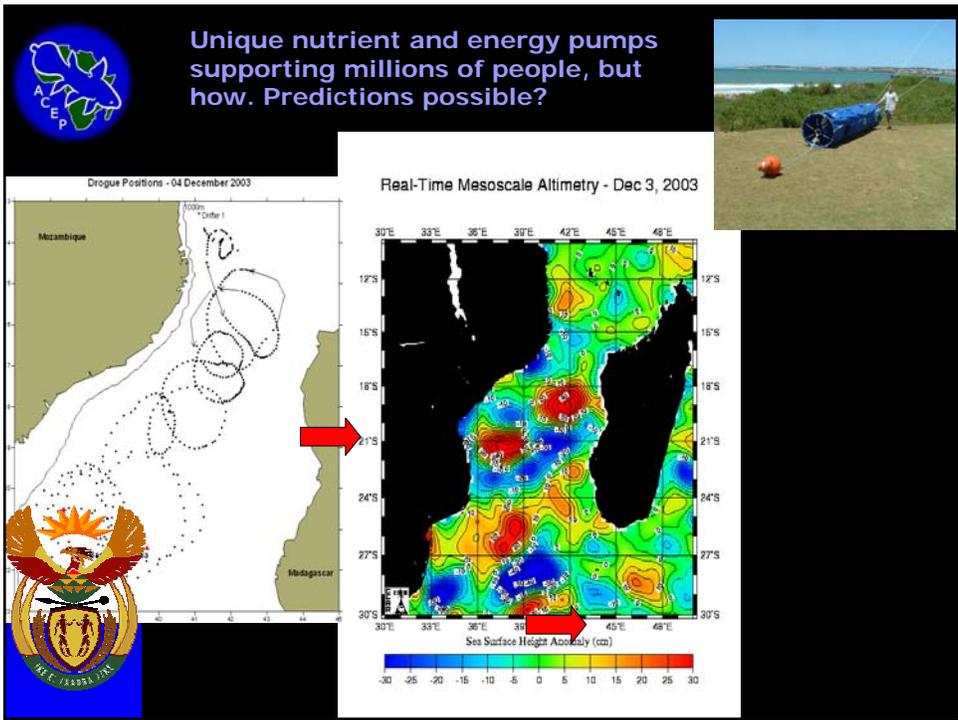
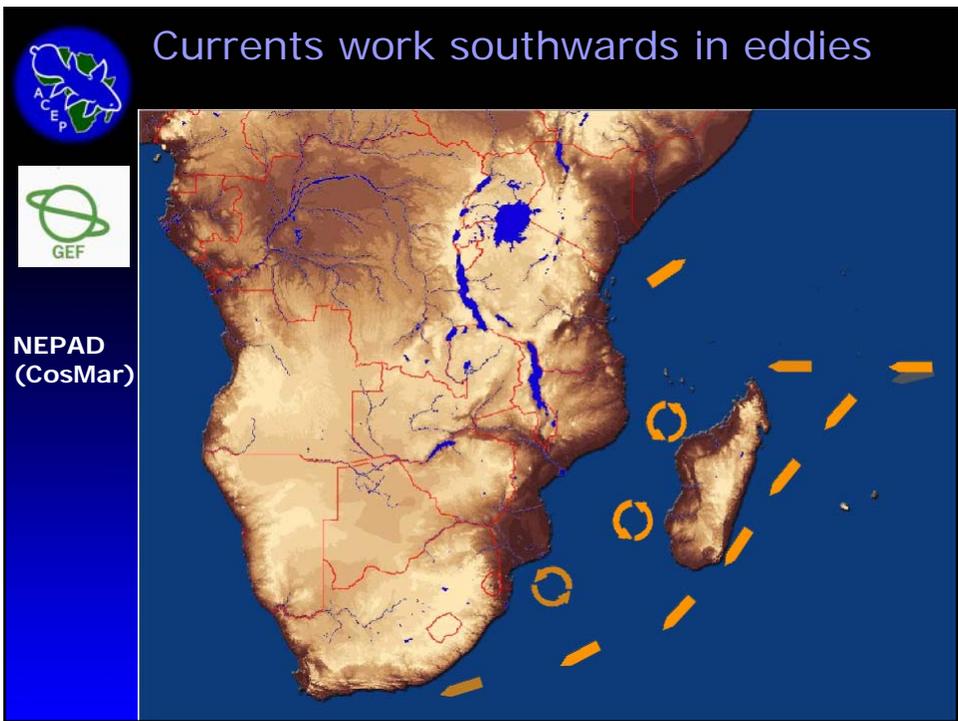
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NEPAD a wonderful new opportunity for conservation in Africa



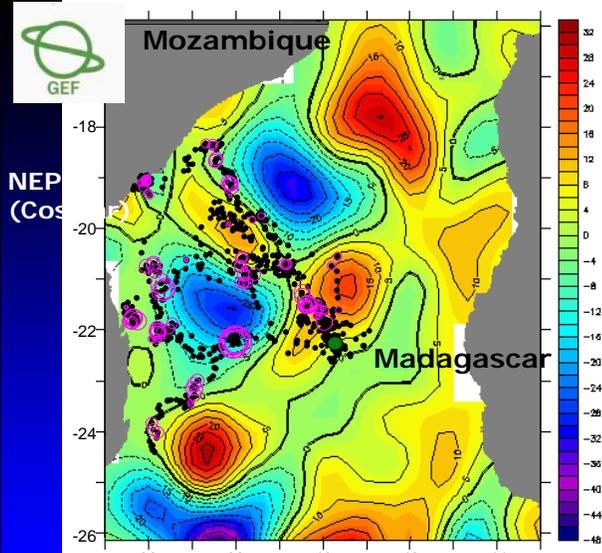








Unique oceanographic patterns and processes



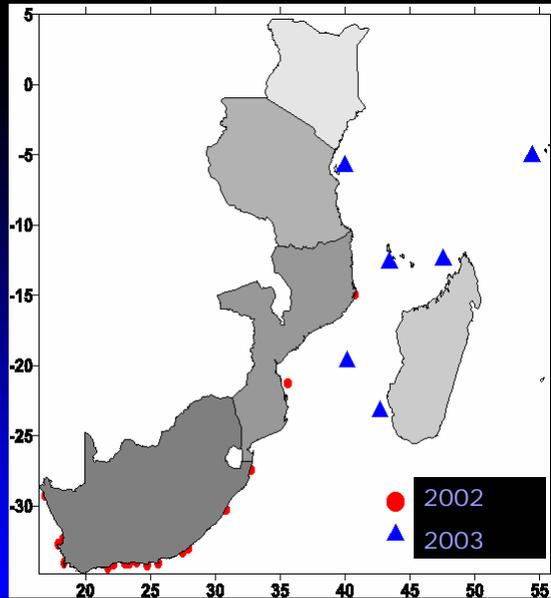
Great frigates tagged with electronic sensors to describe and understand foraging movements

Result : Birds forage in nutrient rich areas (purple circles).

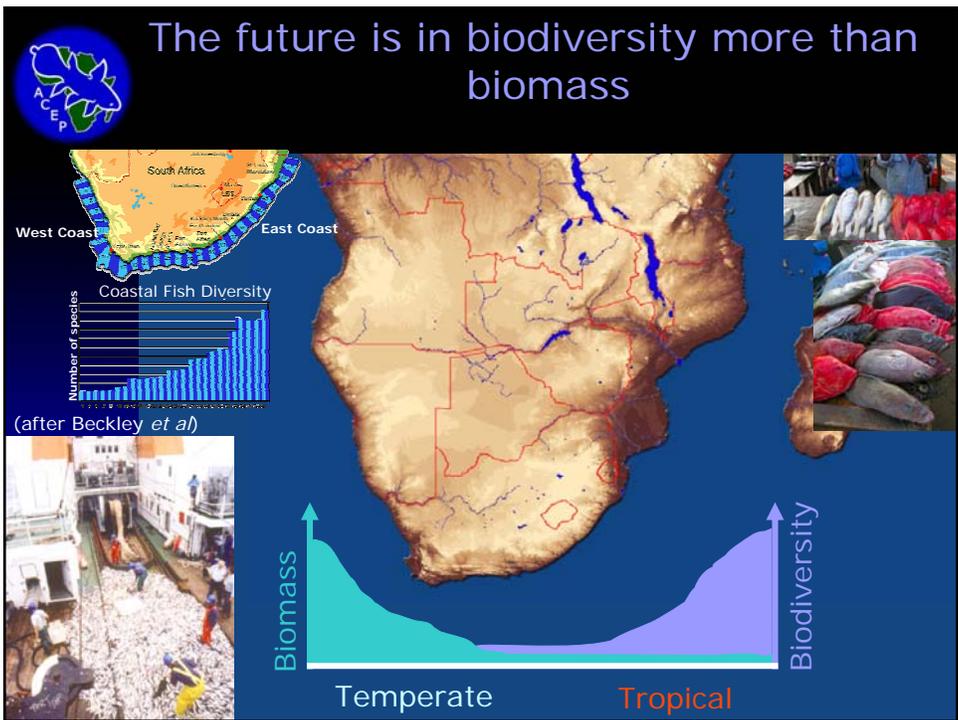
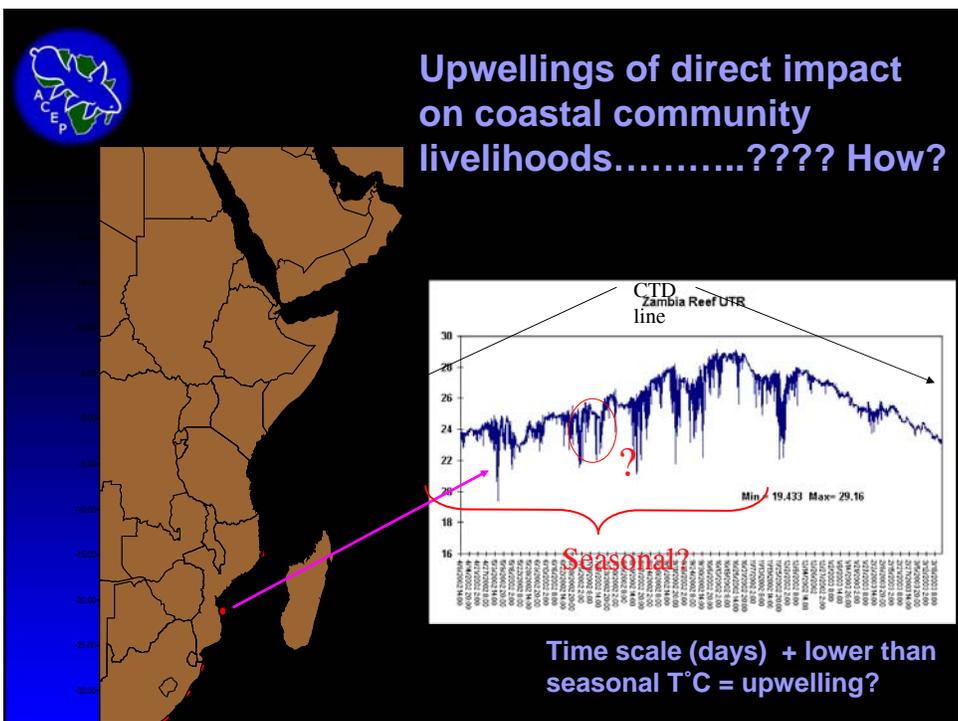
ACEP and Frances Marsac (France)



Long-term underwater biophysical monitoring stations



By end of 2003 all sites were operational






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African Coelacanth Ecosystem Programme opening the door to the future: Inspiring an understanding of our seas.



Typical trawl data

- 1.5kg 8 species
- 14kg 61 species
- 6kg 17 species
- Our best 600kg 52 species

From our own and other sampling cruises.

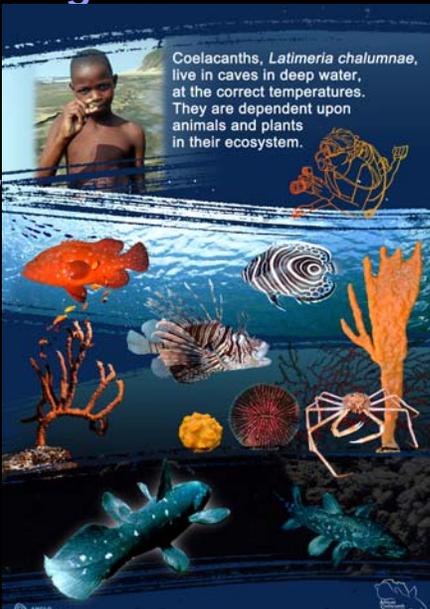



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Relying on investments in fisheries is short sighted

Economic growth should focus on rich biodiversity, MPAs and sustainability.

Trawling shows that trawling should not take place



Coelacanths, *Latimeria chalumnae*, live in caves in deep water, at the correct temperatures. They are dependent upon animals and plants in their ecosystem.



Developing a Sustainable Economy for those who Depend upon the Sea

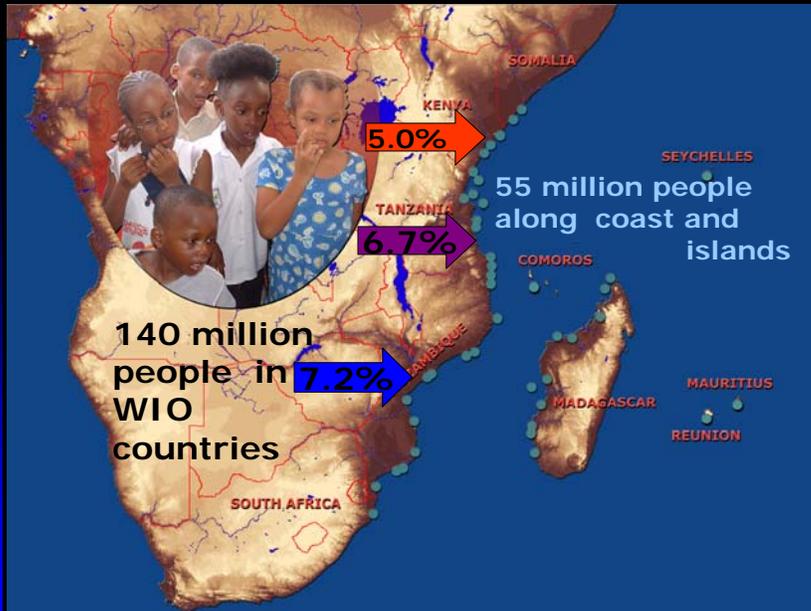


Just as the economy on land is based on conservation of natural life, so too the economy for those who depend on the sea must be based on wise management and use of the marine ecosystem. We are building the capacity to develop the management strategies for a sustainable economy.



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World's biggest transfrontier natural resource management/conservation area. **URGENCY!!!!**





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Social sciences and education



Socio-economics and indigenous knowledge



Capacity building and teacher training



Learner programs, education & public awareness



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Capacity building takes centre stage

- Four imperatives of capacity building: attain, train, retain, sustain.





At each port the ship is open to children, students and teachers







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A wonderful new opportunity for sustainability in Africa

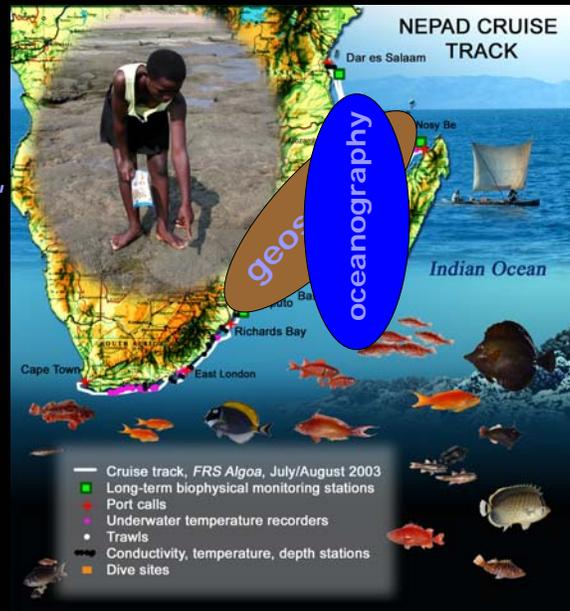
Virtual institution and centre of excellence in geosciences



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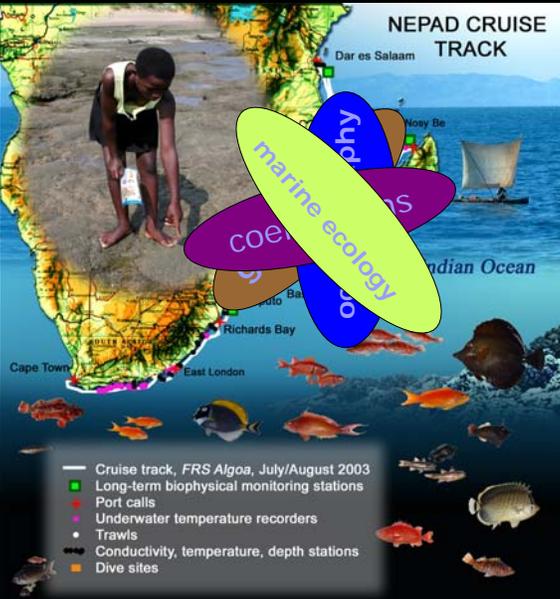


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NEPAD CRUISE TRACK

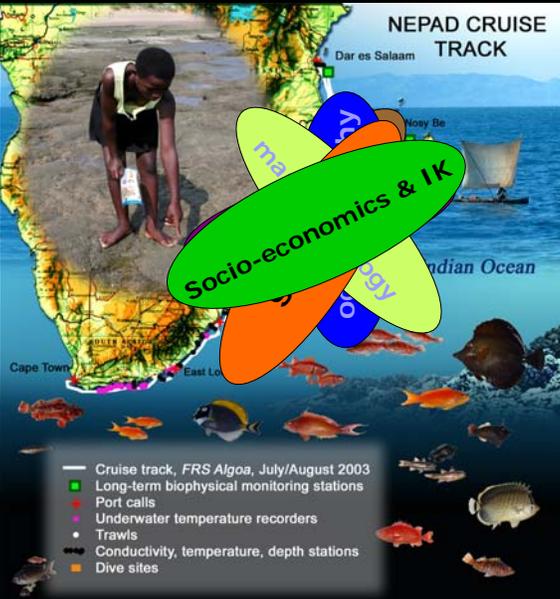
- Cruise track, FRS Algoa, July/August 2003
- Long-term biophysical monitoring stations
- Port calls
- Underwater temperature recorders
- Trawls
- Conductivity, temperature, depth stations
- Dive sites

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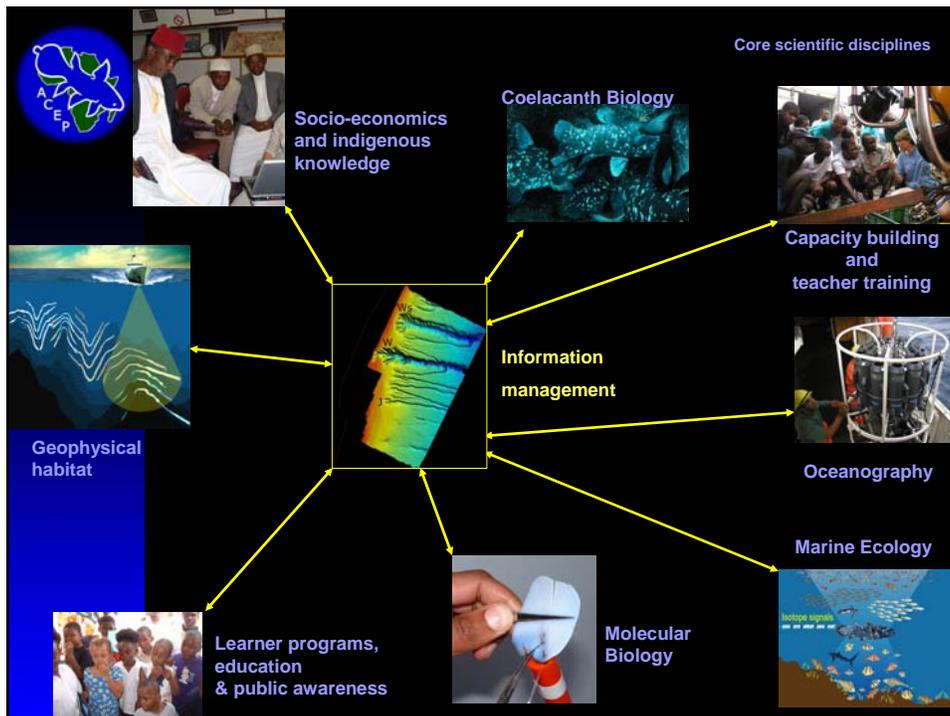
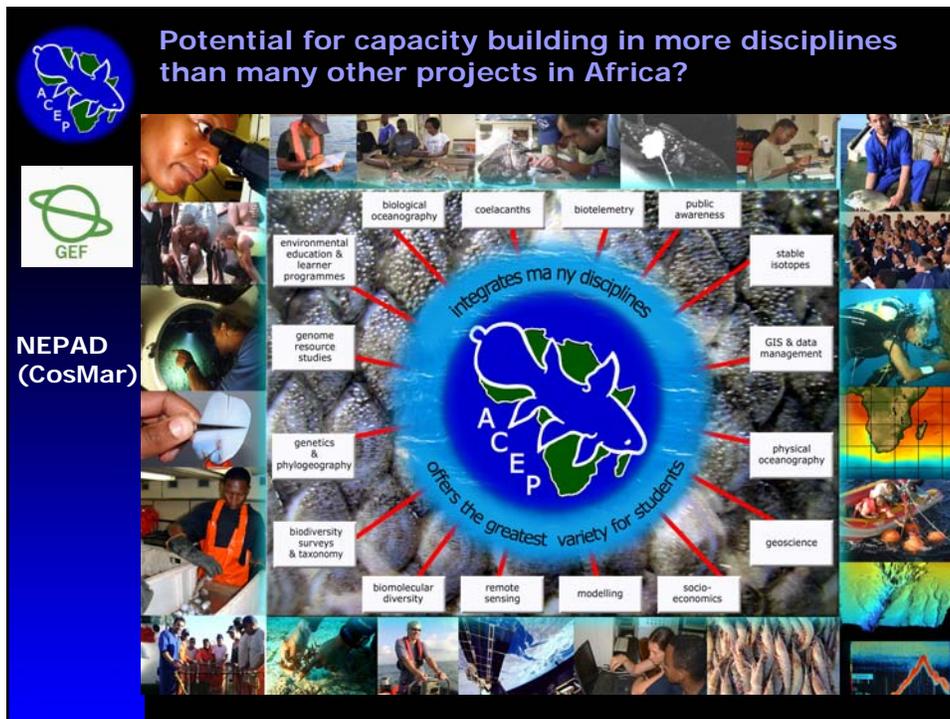


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Value of data



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INVESTMENT

ACEP has a huge investment in acquiring data



ACEP has a huge investment in data analysis

RETURN

Information must be made available to sponsors, partners, scientists and decision-makers, to facilitate better management and improved knowledge of the Western Indian Ocean region



ACEP Information Strategy

Databases Publications

Geographic Information System



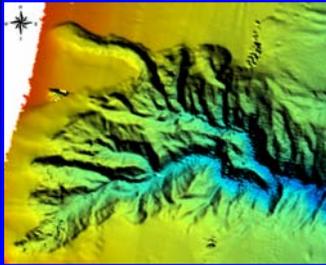
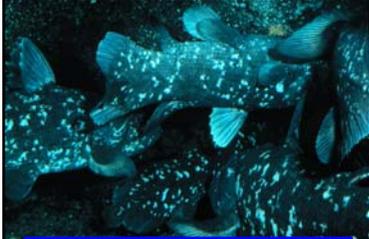

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Lessons from past projects





Principles



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Challenges

- A large study area and complex data environment
- Many data and metadata formats and standards
- Limited / slow Internet access
- Insufficient human capacity to meet our responsibilities
- Lack of long-term funding security to undertake several activities (including supporting students and interns)

Solutions

- Develop a long-term regional vision
- Work within current constraints to the best of our ability through shared effort, making the best use of data and currently available technologies
- Consolidate data management
- Select priority short-term projects to achieve goals



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The Future

- Integrate multidisciplinary information to answer fundamental questions about coelacanths and WIO ecosystem processes
- Use the GIS as an integrated tool for multidisciplinary ecosystem research, management and decision-making in the western Indian Ocean
 - access to verified scientific information in a useable form will provide a tool for **informed management decisions**
 - Good management of natural resources together with a well-designed network of MPAs will **support the persistence of marine ecosystem processes** on which coastal people depend



Through:

- Securing **funding** for sustainability of information systems
- Securing a **sustainable** support for students
- Pioneering **new systems** with international partners
- Meeting out **national data provision** responsibilities
- Meeting our **regional and global responsibilities** – dissemination of information that is critical to the region



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Together we
can do more

