

ASCLME Regional Meeting of Technical Coordination Groups

29 September – 1 October 2008

La Plantation, Mauritius

Proceedings



Contents

DAY ONE

1. Opening session	1
2. Introduction to the ASCLME Project	2
3. Session 1. Review of national requirements for input into the ASCLME Project	4
4. Session 2. ASCLME cruises	5

DAY TWO

5. Session 3: Capacity building and training	9
6. Session 4: Data and information management	10

DAY THREE

7. Update	14
8. Breakaway group work	15
9. Session 5: Marine Ecosystem Diagnostic Analysis (MEDA) Structure	19
10. Session 6: Discussion of individual projects	20
11. Next steps	21

ANNEX I: Provisional agenda for the workshop	23
---	-----------

ANNEX II: List of Participants	26
---------------------------------------	-----------

ANNEX III: List of Acronyms	28
------------------------------------	-----------

Proceedings**DAY ONE****29 September 2008**

Opening at 9:15 am**1. Opening Session**

Dr David Vousden (Director, ASCLME Project) welcomed the Honorable Lormus Bundhoo (Minister of Environment and National Development), Dr Mitrasen Bhikajee (Director of the Mauritius Oceanographic Institute), Mr Roland Alcindor (Head of Environment Programme, UNDP Mauritius) and participants from eight countries, to the first regional meeting for the Technical Coordination Groups of the Agulhas and Somali Current Large Marine Ecosystem Project (ASCLME).

Dr Mitrasen Bhikajee welcomed all members present. He acknowledged the amount of work that the steering committee had put into the formulation of this project to its realisation within a short period of time. He highlighted the lack of scientific information within the Western Indian Ocean region needed to advise the proper management of marine ecosystems.

Mr Alcindor highlighted the importance of the ASCLME project and this first meeting of the Technical Coordination Groups for the project. Understanding current systems is important for the people living in the coastal areas, especially for activities such as fishing. Less than 50% of the species in the large marine ecosystems have been documented and the long-term sustainability of these resources is also uncharted. The ASCLME project therefore aims to acquire scientific data to support ecosystem-based management. The organised cruises on the U.N. Flagged Research Vessel, *Dr Fridtjof Nansen*, would provide information for a Transboundary Diagnostic Analysis that would help raise critical issues that will require joint actions by the governments of the region. He highlighted that this project would provide opportunities for the scientists from the countries in the region to participate in cruises.

The Honorable Lormus Bundhoo welcomed the representatives of UNDP, Director of the Mauritius Oceanography Institute, ASCLME PCU members and all participants to the 1st regional meeting for the Technical Coordination Groups of the ASCLME Project. He strongly encouraged this regional effort and thanked all the delegates. He highlighted the importance of this event where delegates from eight countries are meeting to discuss the implementation of this project. He mentioned that the data collected from the Dr Fridtjof Nansen cruises and those data compiled during the TDA processes would establish a good baseline. He wished the participants effective delivery of results. The 64 identified Large Marine Ecosystems (LMEs) of the world's oceans have sizable fisheries (94% of the world's total), and perform other important ecosystem functions such as nursery sites for economically important fish species. About 160 million people residing in the countries of the Western Indian Ocean Region are directly affected by what happens in these LMEs as they depend on resources from the sea. They are not spared from environmental concerns, especially important for the Small Island Developing States (SIDS) and their fisheries resources. With regards to food security, the Honorable Minister emphasised that more than 50% of protein sources in countries like the Seychelles and Comoros come from fisheries. The Convention on Biological Diversity (CBD) has also adopted an ecosystem approach – an important aspect of LMEs. Implementation of LME principles to sustainably tap our natural marine resources is considered pivotal to further sustainable development. The vision of Mauritius was clearly spelt out as adopting an ecosystem-based approach for sustainable development, and thus, there is a dire need to know what we have as a baseline. With these

observations, the Honorable Lormus Bundhoo declared the first ASCLME Regional Meeting of Technical Coordination Groups open.

Dr Vousden expressed his special thanks to the Honorable Minister for his time and presence. This is a clear demonstration of Mauritian determination and understanding of the objectives of the Project on which the participants have embarked. He mentioned that this project would build the foundation for decision-making and management of LMEs in the African region, including the island states. Dr Vousden introduced the objectives of this meeting, which are to familiarise the Technical Coordination Groups (COGs) with the ASCLME Project, and establish a shared understanding of the critical role of the COGs in ASCLME Project activities, towards the development of national Marine Ecosystem Diagnostic Analyses, a Transboundary Diagnostic Analysis and Strategic Action Programme for the region.

Nomination and adoption of chair

Dr Magnus Ngoile was nominated as the Chair of the workshop and invited the members to introduce themselves.

Dr Ngoile briefed the delegates on the agenda for Day 1 to 3 as follows:

- Day 1 – Introduction to the project and detailed discussion of cruise coordination
- Day 2 – Detailed discussion of Data and Information management and capacity building
- Day 3 – Marine ecosystem diagnostic analyses and logistics

It was noted that:

1. Tomorrow at lunch time a group photo would be taken.
2. One representative from Seychelles would join the workshop later.
3. One representative from Tanzania would join the workshop tomorrow.

Further, Dr Ngoile provided a brief history of the preparations and development of the project and acknowledged Dr David Laroche for his exceptional input and commitment.

2. Introduction to the ASCLME project

Presentation by Dr Vousden; a review of the objectives and an update on ASCLME Project implementation. [LINK TO THE PRESENTATION ON ASCLME.ORG](#) [4.3 Megabytes]

The main project details were noted as follows:

PARTICIPATING COUNTRIES: Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, Tanzania (plus Somalia where possible)
FUNDING: GEF = US\$12.2 Million.
Co-funding = US\$20 Million
TIMEFRAME: 5 Years, until mid-2012

The project objective is to undertake an environmental baseline assessment of the Agulhas and Somali Current Large Marine Ecosystems with a view to developing a Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP).

The four main outcomes of the project were noted as follows:

1. Information captured for development of the Transboundary Diagnostic Analysis (TDA).
2. Long-term data collection, management and distribution mechanisms established.
3. A Strategic Action Programme (SAP) and associated sustainability mechanisms adopted for an LME approach.
4. LME coordination, communication and participation mechanisms established.

He further highlighted the progress made to date:

- Set up of PCU (Grahamstown – linked to SAIAB/ACEP)
- Recruitment of Administrative and Technical Staff/Consultants
- Rationalisation of Project Components and Activities
- Organisation of the Inception/Steering Committee meetings, which inter alia
 - i) Adopted/approved the realigned Components and Activities of the ASCLME Project
 - ii) Adopted/approved the updated Budget and Work-plans
 - iii) Confirmed field-work priorities
- Launch of ASCLME website (in 3 languages)
- Update of ASCLME Chapters on LME website
- Implementation of ASCLME National Mechanisms (National launches of the ASCLME and nomination of COG members)
- Successful completion of 1st Training Programme on cruise activities (Agulhas countries)
- First cruise (East Madagascar) on-going and first leg (near completion)

Dr Vousden also highlighted the project's national and regional structure:

- Each of the countries has an ASCLME National Focal Point
- Each country has set up a national Coordination Group (COG) consisting of:
 - Cruise coordinator
 - Data and Information Coordinator
 - Capacity Building Coordinator
- The National Coordination Groups have Terms of Reference to guide them

He then summarised the principal national COG inputs to ASCLME Project delivery as follows:

- Coordinate with the ASCLME Project and other Projects at the national level on:
 - Research Cruise Planning & Implementation
 - Capacity Building & Training
 - Data & Information Management
- Coordinate the development of a national Marine Ecosystem Diagnostic Analysis (MEDA)
- Participate in the development of the TDA and SAP

Discussion

Reference was made to the fact that the 2008 cruise schedule was proceeding well and that the first Ecosystem Assessment training session was held in Cape Town in mid-2008, which was noted to be a success.

Responding to a query, it was clarified that the development of the TDAs and SAPs, and the associated structures and mechanisms necessary to achieve this are not part of a prescriptive process; that representatives have to feel that the project belongs to them, and they should tell the committee how best they can coordinate the project in their respective countries. He further added that the role of the Project Coordination Unit (PCU) is to provide guidance in all matters pertaining to Project delivery and not to enforce specific requirements. He emphasised that a GEF Project of this nature is not 'written in stone' and needs to be dynamic in its actions and deliveries in order to specifically achieve some of the more general requirements stated in the Project Document. In this context, the Project need not restrict itself to addressing the TDA rigidly in terms of the 5 modules (Fish and Fisheries; Productivity; Ecosystem Health and Pollution; Socioeconomics; Management and Governance) as identified in the terms of reference for the National COGs but that they should use these for guidance. The Project will attempt to present a TDA and SAP for each of the LMEs in a modular manner wherever possible but it is clear that the first three modules tend to deal more with the science of the ecosystem (i.e. the TDA) whereas the second two are more related to its management and governance needs and thus to the SAP.

The Chairman suggested that it depended on the delegates to fine-tune the logistics for the collection of the data/information on the 5 identified modules of the LMEs. He further requested that by the end of this meeting, delegates should have a good understanding of the project.

3. Session 1: Review of national requirements for input into the ASCLME Project

Lucy Scott presented a review of national requirements for input into the ASCLME Project including country structures and an overview of the Marine Ecosystem Diagnostic Analysis (MEDA), Transboundary Diagnostic Analysis (TDA) and Strategic Action Programme (SAP)

[LINK TO THE PRESENTATION ON ASCLME.ORG](#) [5.6 Megabytes]

Ms Scott highlighted the requirements for the implementation of the Large Marine Ecosystem Approach through a GEF-Funded Project:

- Development of a TDA (Transboundary Diagnostic Analysis focusing on the Ecosystem Approach)
- Negotiation and adoption of a SAP (Strategic Action Programme) that includes Adaptive Management practices

Ms Scott elaborated on the structure of the national MEDA, as well as the regional TDA and SAP along with the linkages between them.

The in-country inputs to the Marine Ecosystem Diagnostic Analyses (MEDA) will require the following steps:

- Regional Meeting of COG representatives to discuss & agree on MEDA structure and development process
- In-country contractual and administrative arrangements
- Capture of existing data on Productivity, Fish and Fisheries and Ecosystem Health and Pollution status (into a Causal Chain Analysis and Prioritisation) as well as inputs from the cruise data
- Assessment of existing Socioeconomic concerns and Governance Mechanisms (Root Causes to Solutions)
- Annexes (Indicator & Monitoring Work Programme; Capacity Building and Training Work Programme)
- Assistance and input to additional project studies
- Draft and Adoption of MEDA at National Level

Ms Scott further made reference to the administration and logistics of MEDA development – a subject which will be presented for discussion later in the programme of events.

Discussion

Responding to a query on what would be a country's needs in terms of finance to deliver MEDA, the Chairman advised that it would be better to discuss and adopt all of the scientific endeavours and requirements through broad thinking and then narrow these down based on priorities and budget available.

Dr Vousden pointed out that he would be giving a more specific presentation on national budgets and support from the PCU for delivery of the MEDA and for national support to the TDA process.

The discussions that emerged highlighted the need to continue with the monitoring and assessment as established by national and regional programmes in support of the SAP even after the initial MEDA and TDA process were implemented and complete, as these would need to be updated regularly in support of adaptive management and governance mechanisms and policy reviews.

4. Session 2: ASCLME Cruises

The following main features of the ASCLME cruises, presented by Dr Bornman, were noted:

[LINK TO THE PRESENTATION ON ASCLME.ORG \[7.6 Megabytes\]](#)

- Cruise plans 2008; 2009; 2010
- Scientific activities & participation
- Outcomes and deliverables
- Training and capacity building
- Cruise planning requirements
- Items for discussion at the Regional Forum

Dr Bornman elaborated on the 2008 overall cruise plan and the 2008 cruise schedule.

The scientific activities related to the ecosystem-based approach which are going to be carried out onboard the vessel will cover the following topics:

- Environmental stations
 - Physical oceanography
 - Chemical oceanography
 - Biological oceanography
- Acoustic surveys to identify fish stocks, abundance and distributions
- Pelagic and demersal trawls: Biodiversity assessment of fish, crustaceans and other invertebrates
- Bathymetric survey: Multibeam echosounder survey to develop detailed bathymetric map of the seafloor
- Bird and mammal survey: Opportunistic study of bird & mammals
- Genetic and isotope samples of fish and zooplankton (samples will be collected and the analysis will be done in land-based laboratories)
- Remote sensing

Deliverables from cruises were defined as follows:

- Cruise reports
- Data reports
- Electronic inventories
- Scientific publications in peer-reviewed international journals
- Training and capacity building

In relation to planning for future cruises the requirements are:

- Cruises to be planned
 - 2009 – URGENT. The 2009 cruises will mainly cover the Somali Large Marine Ecosystem (SCLME), excluding the Somali coast.
 - 2010
- Discuss and reach agreement on:
 - Area of operation
 - Research needs (gaps)
 - Scientific work plan
 - Scientific expertise/training required
- National Cruise Coordinators
 - National COG
 - National scientists
 - Regional Cruise Coordinator
 - PCU

Training and capacity building for ship-based research will include:

1. Training preceding cruises
 - For 2008: 2 trainees from each of the following countries: South Africa, Mozambique, Madagascar, Mauritius and Seychelles received their training in Cape Town preceding the current cruises, which cover mainly the Agulhas Current Large Marine Ecosystem
 - For 2009: 2 trainees from Tanzania, Kenya, Somalia and Comoros will receive their training by June, 2009. Location for the training is Cape Town

2. Training on board *Dr Fridtjof Nansen*
 - Scientists from the region will have an opportunity to join the cruises, including students who may receive hands-on training onboard the research vessel.
3. Oceanographic equipment
 - Each participating country will receive a set of oceanographic equipment to assist them with continuation of the oceanographic research to monitor the conditions of the marine environment in the region.

The following items were noted and discussed during the regional coordination forum:

- Vessels needed to complement *Dr Fridtjof Nansen*
- Study areas – planning the cruise tracks
- Date and timing of expeditions
- In-situ instrumentation – Deployment of instrumentation
- International participation in cruises
- Opportunities for ship-based training
- Use of global information resources

Discussion

It was noted that all the suggested scientific measurements were being done for the first time in the targeted areas of Western Indian Ocean and with the involvement of regional scientists.

In response to a query on data being collected in the past by people from other regions of the world, it was suggested that there is a need to track those data for comparative purposes. It was further suggested and recommended that repatriation of such data be done through a request by UNDP to relevant organisations.

It was further suggested that progress of these scientific cruises should be tracked through having regular submissions and archiving of the national datasets, and also requesting national governments to support these activities through co-funding mechanisms.

On the number of trainees from participating countries, it was clarified that there could possibly be more than 2 trainees from each country in one training session. However, it is important that the countries identify the trainees and communicate their needs through the cruise coordinators early enough. MSc and PhD students could potentially be involved in data collection. Although the GEF no longer supported post-graduate education of this sort, this did not prevent the Project or the countries from seeking funding from elsewhere. In the event that some countries lack the required number of trainees, their positions could be covered by trainees from other countries.

Dr Vousden drew attention to the fact that a considerable amount of additional co-funding had been attracted by the unique nature of these cruises into uncharted and unfamiliar waters, particularly from organisations such as NOAA, which had provided well in excess of \$0.5 million in equipment, ships and expertise. The meeting advised the PCU to acknowledge such co-financing in order to attract even more support. This issue was recommended to be forwarded to

the Steering Committee. Mention was also made to acknowledge other support services, which may not necessarily be equipment.

The Chairman suggested that there might be more work to be done at the level of cruise organisation in an effort to save time and maximise data collection.

Regarding the coverage of Aldabra, it was clarified that it might be possible to include this region if the ship route is flexible and the timing would permit it. Reference was made to the Seychelles Coastguard, who have particularly expressed an interest in any data that could be collected from their southern islands, including Aldabra, as they are very short of information for these waters.

It was noted that delegates from respective countries could also request that the ship spend more time in their waters; however, this will require co-funding mechanisms either from national budgets or development partners' support.

It was also noted that it might be possible to accommodate extra trainees during training sessions in Cape Town; however, this will be at the discretion of the training institution.

The Chairman requested the cruise coordinators meet and discuss appropriate issues and notice was taken regarding the need for better online communications among coordinators.

Proceedings

DAY TWO

30 September 2008

Day 2 of the meeting started at 08h50

The Chairman welcomed the new members and asked them to introduce themselves. The Chairman then summarised the presentations and discussions from Day 1.

5. Session 3: Capacity Building and Training

Dr Warwick Sauer addressed the objectives for the development of the national training plans and the requirements for the training plan.

- Capacity Building and Training (CB&T) focal point in support of TDA and SAP development for the ASCLME
 - National capacity building and training (CB&T) Institution
 - National data and information synthesis and management (CB&T) representative
 - Background to the Regional CB&T Working Group for the ASCLME
- Timelines, including who, what and where of capacity building and training
- The proposed outline for the ASCLME national training plan for each country:
 - Overall objectives and general principles of the ASCLME Training Programme
 - Inventory of current educational capacity activities in the respective country
 - National needs and capacity for meeting them (Training to what effect?)
 - Proposed National training and capacity building Action Plan – incorporated into the MEDA
 - Regional and international linkages and support
 - Proposed start-up training projects and activities
 - Work plan and budget estimates (incorporation into both national and regional SAPs)

Discussion

The participants acknowledged that the proper focus for the development of the CB&T at national level was thoroughly addressed. However, it was pointed out that the method of selection of trainees is an important aspect and can make a significant difference in the achievement of outcomes.

The meeting proposed that training in marine science and management has to be one focal area for the training activities. Marine ecosystems are traditionally managed by sectors and ASCLME aims at promoting an integrated approach – ecosystem-based management of marine and coastal resources in the Western Indian Ocean. Thus, the challenge here is to identify the needs of training both fisheries managers as well as less obvious stakeholders such as foresters, officers dealing with tourism and mid-level managers/directors of the various sectors.

The need to consider language differences and translation, including translations of MEDA documents, was noted by the PCU and the respective countries' representatives. It was also suggested that responsibility for translation should rest with the Project and not with countries, as this would be the most effective method to ensure consistent and official communication.

There was a general discussion about the language barriers and one proposal was to have dedicated courses in English for some of the French and Portuguese speaking countries to allow them to engage more widely with the regional and global scientific fraternity.

It was also advised that the Project and the countries should reflect on the courses already held and planned and other training needs assessments that have been conducted, and review this in the context of the LME approach.

6. Session 4: Data and information management

Ms Scott introduced the data management requirements for the ASCLME in general and the objectives of this session in particular. [LINK TO THE PRESENTATION ON ASCLME.ORG](#) [11 MB]

The presentation covered:

- Objectives: To collect and integrate coastal and offshore data for LMEs at national level.
- ASCLME requirements and regional context
- Priority activities
- National and regional coordination (drivers)
- Data & information management framework for discussion
- Next steps

The meeting received information on projects that will provide/contribute to the collection of data and information at national and regional levels.

South West Indian Ocean Fisheries Project:

Mr Harrison Ong'anda presented the South West Indian Ocean Fisheries Project (SWIOFP) databases and approach to data management. [LINK TO THE PRESENTATION ON ASCLME.ORG](#) [733 KB]. He stated the following 3 objectives of SWIOFP:

1. To identify and study exploitable offshore fish stocks within the SWIO, more specifically, to determine existing fishing pressure on these stocks and to investigate the role of environmental influences on the life histories, seasonal variability and health of stocks in order to differentiate between environmental and anthropogenic impacts.
2. To develop institutional and human capacity through training and career opportunities.
3. To develop a regional fisheries management structure and associated harmonised legislation in collaboration with the SWIOFP.

The implementation of the SWIOFP Project is divided into three phases:

Phase 1: The initial 12-18 months focus on:

- Collection and analysis of relevant existing data, and setting up a regional database.
- Synergise with the ASCLME project (oceanographic and productivity data).

- Develop data collection and analysis procedures and commence training and capacity building.
- A data-gap analysis, to assist in developing work plans for component-based sampling at sea to collect new data.

Phase 2: (18-24 months)

- This phase involves intense shipboard sampling to collect data identified in the gap-analysis. Research cruises and observers on commercial ships will survey areas presently fished, and areas with possible untapped resources.

Phase 3: (24-36 months)

- This phase is set aside for data analysis and preparation of a Transboundary Diagnostic Analysis (TDA) and Strategic Action Plans (SAP). Adoption of the TDA and SAP will mandate future regional research, management, governance processes and investment within an ecosystem framework.

Nairobi Convention Clearinghouse Mechanism (CHM):

Mr Farid Anasse presented the Nairobi Convention Clearinghouse Mechanism (CHM) and information sharing system on the Eastern African coastal and marine environment. [LINK TO THE PRESENTATION ON ASCLME.ORG](#) [17 MB] He elaborated on the following points:

- Introduction to the Nairobi Convention CHM & information sharing system
- Implementation of the Nairobi Convention CHM & information sharing
- Objectives of the Clearinghouse Mechanism
- Themes of the Nairobi Convention Clearinghouse Mechanism
- Services and outputs of the Nairobi Convention CHM
- Nairobi Convention Clearinghouse activities
- The regional and national Clearinghouse Mechanism

Ocean Data and Information Management in Africa: the Role of ODINAFRICA:

Dr Desiderius Masalu introduced the “Ocean Data and Information Management in Africa: the Role of ODINAFRICA”. [LINK TO THE PRESENTATION ON ASCLME.ORG](#) [5.1 MB] He stated the following objectives of ODINAFRICA:

- Establishment of National Oceanographic Data (and Information) Centres
- Networking of NODCs in Africa
- Training in marine data and information management
- Development of catalogues of marine data and literature for Africa
- Development of products such as marine atlases and data CDs
- Improvement of communication infrastructure (including internet access)

The implementation of ODINAFRICA has undergone the following phases:

- 1989-1996 – RECOSCIX-WIO, a regional network for the exchange and sharing of scientific literature

- 1997-1999 – ODINAFRICA-I also known as ODINEA, a pilot project with focus involving seven African countries (Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, Tanzania)
- 2000-2003 – ODINAFRICA-II comprised 20 countries: Benin, Cameroon, Comoros, Cote d'Ivoire, Gabon, Ghana, Guinea, Kenya, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Nigeria, Senegal, Seychelles, South Africa, Tanzania, Togo and Tunisia. The achievements were as follows:
 - NODCs established in all institutions
 - Librarians and data managers trained
 - Equipment and software provided
 - Communication improved
 - Networking initiated
 - Products are coming out of the centres
- 2004-2008 – ODINAFRICA-III, An Integrated Ocean Observation and Service Network for Africa and linked NODCs/DNAs to data streams and to the end-users/stakeholders
- Proposed ODINAFRICA-IV, focused on integrated data and information products and services for the management of oceans and coastal zones in Africa. The overall goal of ODINAFRICA-IV is to promote the sustainable management of marine and coastal resources, as well as reducing the risks of ocean related hazards, based on sound scientific knowledge.

Discussion

It was noted that a great deal of data, relevant to the ASCLME project, was already available in the two databanks, namely The Nairobi Convention Clearinghouse Mechanism and information sharing system on Eastern African coastal and marine environment and ODINAFRICA data centres. The participants suggested looking into these two data systems and using existing information as the starting point for data and information gathering for the ASCLME Project in the region. However, the process of extracting the information from these databases should not compromise detail. The extraction/compilation of the existing data should not be restricted to these two systems but also include others such as WIOFish.

It was suggested that the ASCLME needs a strong policy on the publication of data from cruises to ensure that publications are written up and that data are archived appropriately. The meeting was informed that such policy exists and all scientists going on the research cruises are required by contract to publish.

It was agreed that Data and Information Working Groups would address these issues within their work programme under the philosophy of looking at existing national arrangements and working out an integrated plan to support the ASCLME data and information collection processes.

A question was raised about who coordinates the development and delivery of the MEDAs. The Project Director responded that the D&I Coordinators would have the key coordinating role for the production of the MEDA in each country, supported regionally by the Project D&I Coordinator in the PCU.

The issue of data repatriation and management of newly collected data by the Nansen expeditions would be properly addressed under appropriate guidelines related to ownership and publications. The need to manage both existing and newly collected data sets through the Nansen expedition, with respect to respective countries' sensitivities and the need for publications, was highlighted. Scientists interested in using the data would need to get appropriate permission from the country as well as from the ASCLME Project. Joint publications would be encouraged.

The Chairman highlighted the need to have specific meetings where the scientists who have participated in the cruises would meet and plan the joint publication of the results. The first such meeting is planned for August 2009.

The Chairman concluded the day by calling on the Coordinators for Data and Information and the Coordinators for Training and Capacity Building to meet separately and discuss the specifics under their respective themes.

Proceedings

DAY THREE

1 October 2008

Day 3 of the meeting started at 08h50

7. Update:

The Chairman provided a brief update on two major topics:

7.1 Capacity Building and Training

- a) Emphasis on the need to be focused and thorough on the training needs at the national level.
- b) The need to focus the training and capacity building on ecosystem-based management was highlighted. Marine ecosystems are traditionally managed by sectors. ASCLME is promoting an ecosystem-based, integrated approach. Thus the challenge is to identify the needs for training multi-sector managers, including stakeholders in fisheries, agriculture, forestry, tourism and even foreign affairs.
- c) The plan and topics were reviewed and enriched with the addition of two points related to consideration of language and translation: the need for translations of MEDA documents was agreed and the PCU will undertake the responsibility for translation.

7.2 Data and information management

In light of the two existing databanks (ODINAFRICA & Nairobi Convention CHM), ASCLME would look into the two data systems and use these existing systems to help inform the data and information gathering process in the region. Some of the questions that provoked discussion included “How much information is needed? Is there information for each country and what trends does it show?” The various frameworks for data and information at regional levels were noted. It was agreed that the Data and Information Working Groups would address a framework for D&I management for the ASCLME Project within the context of existing D&I management mechanisms and attempt to coordinate and integrate with them rather than duplicating regional efforts. The whole issue of data repatriation and management, especially from the *Dr Fridtjof Nansen* cruises, was discussed with respect to guidance on ownership and publications. The need to respect, manage and publish those data, and the mechanisms for the Project collecting the data for the participating countries was emphasised. It was also suggested to address the need to ask for permission pertaining to the use/publication of data. Attention was drawn to the Data and Information Management Guidelines produced by ASCLME, which were for discussion by the D&I coordinators in a break-away group, with further input requested at the national levels when they returned to their countries.

Discussion then focused on the fact that some scientists were not able or willing to publish existing data (in the region) either due to financial or time constraints, or simply lack of experience and know-how. This provides ASCLME with the challenge of assisting publication of both newly collected data and existing (historical) data. Training in publishing and joint publications would be encouraged. Note was also made of the need to be very strategic with data collection and organisation of meetings to discuss potential publications both at national and

regional levels. The ASCLME will be facilitating the first such meeting at the WIOMSA conference in 2009. The ODINAFRICA Project Manager stated that, in their experience, focused working meetings tend to be productive and provide an effective use of resources.

8. Breakaway group work:

The National Coordinators met in groups according to their respective themes as follows:

- Data and Information Management,
- Capacity Building and Training, and
- Cruise Coordination.

Feedback from the breakaway sessions was presented in plenary.

8.1 Cruise Coordination, planning & timing:

(a) 2009 Cruise

- East Africa Current Survey (Kenya, Tanzania, Mozambique with 4, 3 and 1 environmental lines, respectively)
- Comoros Basin Survey (4-5 environmental lines & moorings)

(b) 2010 Cruise

- 60 days available on R/V *Dr Fridtjof Nansen*
 - West Madagascar Shelf
 - Mozambique Shelf
 - Fill data gaps
- 20 days on Nansen for research on seamounts
- 60 days on FRS *Algoa*
 - Natal Bight
 - Agulhas Bank
- 3 - 6 day training cruise

(c) Cruise planning requirements were identified:

- Cruises to be planned
 - 2009 - URGENT
 - 2010
- Discuss and agree on:
 - Area of operation (cruise tracks)
 - Research needs (gaps)
 - Scientific work plan
 - Scientific expertise/training required
- National Cruise Coordinators
 - National COG
 - National scientists
 - Regional Cruise Coordinator
 - PCU

(d) Appropriate training and capacity building requirements were identified:

Training cruises

- ASCLME training programme

- Large research ships & coastal craft
- Oceanography & fisheries
- 2008: 2 trainees from South Africa, Mozambique, Madagascar, Mauritius and Seychelles. Location: Cape Town
- 2009: 2 trainees from Tanzania, Kenya, Somalia and Comoros. Location: Cape Town
- On-board training on *Dr Fridtjof Nansen*
 - ASCLME Research Cruises
 - Scientists from region

Oceanographic equipment

Proceedings of these discussions are reflected in the Next Steps (below)

8.2 Training and capacity building

The group agreed to;

- Work with the focal points and coordinators of the other themes of each country.
- All correspondence from each group to be copied to all members of the COG.

In terms of appointing someone to collect the information:

- Agreed to draft TORs and advertise tender (all countries) translated into the appropriate language, for the procurement of a consultant.
- That the COG and PCU would make the final choice.

The following were noted:

In terms of 2009 training requirements:

- To hold the 2009 training course in Cape Town.
- Comoros mentioned that the requests for nomination of students for 2008 required them to be able to speak English.
- This caused language issues to be addressed and it was agreed to ask the training institution (MARE, UCT) to look into possibilities for training in French and Portuguese.
- Course outline to be sent to all members for comment once any feedback from the first training course had been incorporated.
- People trained last year may be able to accompany the ship if space allows.
- Cruise planning must be carried out with training in mind in terms of data collected versus data needs (i.e. specific training needs to be matched to specific data collection by senior scientists).
- The D&I group should provide training needs for GIS and remote sensing.

If required for the MEDA development, countries would forward any urgent training requests for 2009.

Training Plan framework:

- Minor changes were suggested.
- A copy of the BENEFIT training plan would be sent to all.

General:

A request was made that all documentation on the web be translated into Portuguese and French. The PCU noted that in most instances this had been done but would re-check to make sure.

8.3 Data and Information (D&I)

Background

- In support of the development of the Marine Ecosystem Diagnostic Analysis (MEDA), TDA and SAP, the Project needs a plan to ensure appropriate management of data and information.
- Each country, coordinated by the ASCLME Technical Coordination Group (COG), principally the Data and Information Coordinator, should develop a national data management plan to feed into the ASCLME Project.
- The national plan should incorporate national mechanisms for data management and national data centres and nodes – archiving of data in national data centres is essential to ensure long-term sustainability beyond the life of the Project.
- Networks and systems implemented by the Nairobi Convention, ODINAFRICA (IOC/UNESCO), and SWIOFP should be incorporated into the plan to be used as necessary.

Items discussed:

- Timing and deliverables of preparation activities; development of plans in preparation for MEDA development
- Data/information guidelines and agreements including publications
- Points of discussion for the regional forum

A) Timing and deliverables of preparation activities; development of plans in preparation for MEDA development

- There was discussion on the development of national and regional data management plans.
- It was decided that a regional framework/guidelines be discussed first, based on ASCLME/CHM/IOC/UNESCO discussions, and national plans be drawn up afterwards. Decisions on activities and timing are reflected in Table 1 below.
- It was decided that the timing proposed here be reviewed in light of the overall ASCLME plan, and then shared with D&I coordinators to confirm dates.
- Timing needs to take into account national strategies (e.g. SWAP in Madagascar).
- It was agreed to meet with IOC/UNESCO and UNEP Nairobi Convention Secretariat to discuss the appropriate regional framework.

B) Data / information guidelines and agreements, including publications

- The cruise data agreement was reviewed (Appendix to the 2008 Nansen sailing orders).
- It was queried whether the data agreement had been signed-off by the countries.
- It was established that the sailing orders (including the data agreement) had gone through the focal points of each of the countries participating in the 2008 cruises, but that the agreement had not been formally signed by countries.
- Kenya asked if the agreement was relevant to countries not participating in the 2008 Expedition – the response was ‘yes, as comments will be relevant to agreements for future cruises’.

- There was general agreement that there were no obvious problems with the cruise data agreement, but additional comments will be sent to the ASCLME PCU by 31 October 2008.
- Regarding the ASCLME Principles and Guidelines document, D&I coordinators wanted some more time to reflect on this and agreed to reconvene after the presentations the next day (2 October), and in the meantime, to solicit comments (IOC/UNESCO) and UNEP-Nairobi Convention Secretariat and to ask them to join the meeting. Final comments on the broader document would be sent to PCU of the ASCLME before 3 November 2008.

C) Points of discussion for the regional forum

- The group felt that they should address intra-regional training, for example specialists from Kenya going to Mozambique to assist them with data management.

Table 1. D&I activities and timing

		Responsibility	Proposed Deadline
1	Overall ASCLME D&I plan (regional)		
	Second meeting of D&I coordinators	D&I coordinators, IOC/UNESCO, UNEP	2 October 2008
	Drafting of regional plan	ASCLME PCU, D&I coordinators, CHM, IOC/UNESCO, SWIOFP and others	December 2008
	Review of regional plan (including TOC for National Data management plan)	D&I coordinators with SC and COGs	Dec 2008 – Jan 2009
2	Data agreements		
	Data management agreement for the ASCLME Cruise	D&I coordinator with SC and in-country consultation	31 October 2008
	Data management Principles and Guidelines for the ASCLME Project reviewed	D&I coordinator with SC and in-country consultation	First comments 2 October, final by 3 November 2008
3	National data & information management plans (annex to the MEDA)		
	Review of Table of Contents of National Data & information management plan	D&I coordinators with ASCLME PCU	January 2009
	National Data & information management plan developed and causal chain analysis – draft v0	D&I coordinator with in-country consultation and PCU	9 February 2009
	National Data & information management plan developed – draft v1	D&I coordinator with in-country consultation and PCU	27 February 2009
4	Third meeting of D&I coordinators – Grahamstown Presentation and review of National Plans Working meeting for the MEDA 5 days (provisionally – will be confirmed)	D&I coordinators (and other COG members if necessary) with ASCLME PCU	9 February 2009

9. Session 5: Marine Ecosystem Diagnostic Analysis (MEDA) Structure

Dr Vousden gave a presentation on the MEDA [LINK TO THE PRESENTATION ON ASCLME.ORG](#) [2 MB] during which he addressed the following topics:

- The ASCLME regional approach, including the Transboundary Diagnostic Approach (TDA) and Strategic Action Programme (SAP)
- The ecosystem approach
- Adaptive management approach with respect to status of ecosystems and sustainability
- Definitions of TDA (factual document) and SAP (negotiable document).
- Development of regional TDAs
- Structure of regional TDA, emphasising its dynamic nature
- Summary of linkages between the national MEDA and the regional TDA & SAP
- Structure of the national MEDA
- Explanation of performance indicators
 - Process – adoption of pollution control legislation
 - Stress Reduction – construction of pollution reduction facilities such as sewage treatment plants
 - Ecosystem status – verification by measurement of resultant improvements to the ecosystem
- Independent project studies
 - Coastal Livelihoods Assessment
 - Cost-Benefit Analysis
 - Policy & Governance Assessment
 - Coastal Habitat Assessment (including RS/GIS)
 - Communications Strategy (community engagement, distance learning, information sharing, media outreach)
- In-country steps:
 - Step 1: Regional Meeting of COG representatives to discuss and agree on MEDA structure and development process (i.e. the current meeting in progress)
 - Step 2: In-country contractual and administrative arrangements
 - Step 3: Capture of existing data on Productivity, Fish and Fisheries and Ecosystem Health and Pollution status (into a Causal Chain Analysis and Prioritisation)
 - Step 4: Assessment of existing Socioeconomic concerns and Governance Mechanisms (Root Causes to Solutions)
 - Step 5: Annexes (Indicator & Monitoring Work Programme; Capacity Building and Training Work Programme)
 - Step 6: Assistance and input to additional project studies
 - Step 7: Draft and Adoption of MEDA at National Level
- ASCLME Project Support to Countries for MEDA Development
- Administration and logistics of MEDA development

Discussion

The issue of overlap of activities among currently ongoing sister projects was raised. It was also noted that close collaboration of different working groups from these projects will enhance effectiveness and identify gaps for complementarity. It was suggested that an adaptive approach be adopted.

In response to a question by David Vousden on whether it is acceptable for the countries for the PCU to channel funding through UNDP or if there is need to contract the focal institutions directly, it was noted that it would be best through UNDP, as direct contracting would cost more. However, it was clear that there were different mechanisms available for each country and some mechanisms would not be acceptable to all. Dr Vousden agreed to discuss this with UNOPS and to get back to the countries on the preferred method of contracting.

Regarding presentation of timelines for getting jobs done, it was agreed that the PCU and the respective coordinators within each country will come up with appropriate timelines.

It was resolved that Lucy Scott would follow up with the COGs regarding timelines, and that David Vousden would follow up with COGs and focal points regarding contracts.

10. Session 6: Discussion of individual projects

10.1 Coastal Livelihoods – Filling the gaps and addressing issues not covered in the other projects (Sauer).

- Artisanal fishing
- Economics
- Social issues

The coastal livelihood project was divided into several sectors. Institutional arrangements were also discussed as follows:

- Project coordinated through the PCU
- PCU to appoint a Regional Coordinator for the project
- Country D&I representatives responsible for the project within each country
- PCU, Regional Co-ordinator and country D&I representatives to decide on an information system
- Information system could be designed around current databases in the region
- PCU, Regional Co-ordinator and country D&I representatives draw up a TOR for collection of information in each country
- National consultants nominated by the national COG and PCU, responsible for collation of information
- Information is captured nationally (possibly offline) and uploaded to the regional system (extended bibliography)
- Country consultants produce country reports, which are drafted as per MEDA and TDA requirements

The following outputs were outlined:

- Templates for all available literature
- Collection of available literature, set up to assist the production of the MEDAs, National Action Plans (NAPs), TDA and SAP

- Short-term progress report from each country
- Summary report (as per MEDA) requirements, including literature summary, Identification of Key Issues, Knowledge Gaps and Recommendations for each country
- Assistance as required, to the development of the MEDAs, National Action Plans (NAPs), TDA and SAP

10.2 Communications and distance learning strategy

It was noted that NGOs, private sectors and other concerned stakeholders have to be engaged. Movies, radio programmes and brochures have been tried in the past; however, ASCLME would like to reach maximum people and DLIST is an important part of the communications strategy.

It was suggested that desktop work detailing the approaches used to date on the engagement/participation of stakeholders, including an evaluation of their effectiveness in communicating with the people in the region, be carried out to help guide ASCLME's effort in communications.

It was agreed that the COGs present their comments/concepts for consideration to the Steering Committee meeting.

11. Next steps

The following were discussed and suggested as the next steps:

- *Data and Information Management*
 - Comments on cruise data agreement (annex to sailing orders) 31 October
 - Final comments on ASCLME Principles and Guidelines for data management – 3 November
 - First draft of a regional D&I plan – 14 Nov (*later revised to 24 November to take cruise consultation into account*); to be reviewed by COGs by 28 November.
 - Liaise with PCU D&I Coordinator regarding logistics and workshops/working groups to deliver first stage of MEDA (identification of National Areas of Concern) – November
 - D&I workshop to discuss Causal Chain development and national data and information management plans (Grahamstown possible location) February 2009
 - ASCLME to enter into dialogue with NCCHM and ODINAFRICA over Data Sharing and long-term support – on-going and important.
- *Cruise Coordination*
 - Cruise Plan 2009. Feedback from Coordinators by 1 Dec
 - Training Plan for 2009. 2nd week in January. Training Course planned in mid-2009). UCT-MARE to be informed of decision ASAP (formally by end of October 2008)
 - Countries finalise plan for in-country ecosystem monitoring (equipment, training, etc) 1 December 2008
- *Capacity Building and Training*
 - Finalise template for training plan by 30 Nov 2008

- Essential training requirements for 2009 – Details by 31 Jan 2009
- Design ToR for collection of information for the training plan – 31 Jan 2009
- Appoint Training Plan Specialist/Developer – 1 May 2009
- Training Plan completed for inclusion in MEDA by mid-2010
- Cruise Plan 2009. Feedback from Coordinators by 1 Dec
- Training Plan for 2009. 2nd week in January. Training course planned in mid-2009). UCT-MARE to be informed of decision to use them again ASAP (formally by end of October 2008)

Having no pending issues, the Project Director, Dr David Vousden, thanked all respective participants for their valuable time and contributions.

The Chairman thanked all the delegates for their active participation through 100% attendance even though the lead-in time for invitations and arrangements was very short. This was viewed as a great and serious commitment to the project.

A vote of thanks was given by Seychelles: “On behalf of all my colleagues, I am very thankful; we are entering our new home and we have a long way to go”.

The Project Director thanked Mrs Marie-Ange and UNDP for all their support in convening the meeting and ensuring that it was a success. He also thanked all the ASCLME PCU team members and the participants and the Chairman, Magnus Ngoile. He also expressed his sincere thanks to the Minister of Environment and National Development of Mauritius and our Mauritian colleagues.

The meeting closed at 18h00.

ANNEX 1: PROVISIONAL AGENDA FOR THE WORKSHOP

ASCLME Regional Meeting of Technical Coordination Groups 29 September – 1 October 2008 La Plantation, Mauritius

Provisional Agenda

Day 1: Monday 29 September			
Time	Introduction and Cruise Coordination	Presenter	Facilitator
	Coffee/tea and lunch breaks will be announced during the course of the day		
08h30	Registration		
09h00	Welcome and opening address		
	David Vousden (ASCLME), Mitrasen Bhikajee (MOI, Mauritius)		
	Nomination and adoption of chair		
09h20	Introduction to the ASCLME project	David Vousden	
10h00	Introduction to the workshop and discussion of the agenda	Magnus Ngoile	
	Session 1: Review of National requirements for input into the ASCLME Project including country structures and an overview of the Marine Ecosystem Diagnostic Analysis, TDA and SAP process	David Vousden and Lucy Scott	Magnus Ngoile
	Session 2: Cruises	Tommy Bornman and Johann Lutjeharms	
	Introduction - objectives for this meeting Plans for 2008 and future cruises Scientific themes and scientific participation Training and the selection of trainees Requirements for cruise planning in the future Items for discussion at the Regional forum		
18h30 Evening function: icebreaker			

Day 2: Tuesday 30 September

Time	Data & information management and capacity building	Presenter	Facilitator
Coffee/tea and lunch breaks will be announced during the course of the day			
08h30	<p>Session 3: Capacity building and training Introduction - objectives for this meeting National training plan development Requirements for training plan development</p>	Warwick Sauer	Magnus Ngoile
	<p>Session 4: Data and information management Introduction to data management for the ASCLME, and the objectives of this meeting SWIOFP databases and data management Nairobi Convention Clearinghouse Mechanism ODINAFRICA Information/data movement on the ASCLME Project Guidelines and principles for data management - document Collecting information on projects (project tracking) Repatriation of data from international programmes to national institutions Data and information products (papers, charts, digital and online)</p>	<p>Lucy Scott Harrison Onganda Farid Anasse Desiderius Masalu Lucy Scott Lucy Scott</p>	

Day 3: Wednesday 1 October

Time Marine Ecosystem Diagnostic Analyses (MEDA)

Coffee/tea and lunch breaks will be announced during the course of the day

08h30 Update of Proceedings

Breakaway by coordinators (CC, CB&T, D&I)

Session 5: Marine Ecosystem Diagnostic Analyses (MEDA): structure

Cause and effect analysis

Root causes and solutions

Breakaway by country to develop ecosystem themes

Session 6: Marine Ecosystem Diagnostic Analysis (MEDA): logistics

Summary of MEDA discussions

Discussion of independent projects

A: Coastal livelihoods

B: Communications and distance learning strategy

Next steps: Review of timing and deliverables

Wrap-up

Thanks and closing

Annex II. List of Participants

Country	Name	Institution	Contact details
Comoros	Mr ANASSE Farid	Head, GIS Department - Ministry of Agriculture Fishery & Environment	Tel: +269 3327068 Email: farid_anasse@yahoo.fr
Comoros	Ms ALI M'CHANGAMA Nadjat	Technical Advisor Ministry of Agriculture Fishery and Environment	Tel: +269 3330307 Email: najalim@gmail.com or najat_cheikh@yahoo.fr
Comoros	Mr SOIFA Ahmed Soilihi	National Focal Point of Coral Reef Network in the Indian Ocean	Tel: 269 333712 Email: soifamed@yahoo.fr
Kenya	Mr ONGANDA Harrison	KMFRI-Kenya National Oceanographic Data Centre	Email: honganda@kmfri.co.ke
Kenya	Dr MWASI Shem	MOI University of Environmental Studies	Email: smwasi@africaonline.co.ke
Kenya	Dr MAGORI Charles	KMFRI-Research Marine & Coastal	Email: cmagori@kmfri.co.ke
Madagascar	Mr RAKOTOARIJAONA Jean Roger	Directeur des Informations environnementales, Office National pour l'Environnement	Tel: +261 3207322 10 Email: jroger@pnae.mg
Madagascar	Ms RAZANOELISOA Jacqueline	Chef Départemental Formation à l'IHSM - Université Tuléare	Email: jrzanoelisoa@yahoo.fr
Madagascar	Ms RAZAFINDRAINIBE Hajanirina	Service d'Appui à la Gestion de l'Environnement (SAGE), National Focal Point of ASCLME	Email: hajanirina.sage@blueline.mg or hajaniry@yahoo.fr
Mauritius	Dr (Mrs) APPADOO Chandani	Senior Lecturer, University of Mauritius	Tel: +230 4541041 Ext.1406; Email: chandani@uom.ac.mu
Mauritius	Mr Bhagooli Ranjeet	University of Mauritius (Rapporteur)	Email: rbhagooli@gmail.com
Mauritius	Mr MUSSAI Prakash	(MOI) Mauritius Oceanographic Institute	Tel: +230 4274434; Email: pmuissai@moi.intnet.mu
Mozambique	Mr ANDRE Emidio Raul	Instituto de Investigacao Pesquera	Tel: +258824922690; Email: eandre01@hotmail.com; dee@moziip.com
Mozambique	Mr LANGA Avelino	Lecture/VEM - School of Marine and Coastal Science	Tel: +258824711260; Email: avelinolanga@yahoo.com or avelino.langa@uem.mz
Mozambique	Mr COSSA Obadias	Mse Oceanography (INAHINA)	Email: objacoe@hotmail.com; ocossa@inahina.gov.mz
Seychelles	Mrs GEORGES Kethsia	Administrator, Fishing Vessel Manager, Seychelles Fishing Authority	Tel: (Mobile) +248521592; Office: 248 670300; Email: kgeorges@sfa.sc
Seychelles	Ms ETIENNE Michelle	Research Officer, Seychelles Centre for Marine Research & Technology, Marine Parks Authority	Tel: (Mobile) +248514182; Office: 248 323494; Email: m.etienne@scmrt-mpa.sc
Seychelles	Ms BETSY Christelle	Administration & Human Resource Manager, Seychelles Centre for Marine Research & Technology	Tel: (Mobile) +248 517223; Office 248 225114/224085; Email: c.betsy@scmrt-mpa.sc
South Africa	Mr KHANYILE Jimmy Phumlani	(MCM) Marine and Coastal Management, Capacity Building	Tel: +27(0)214023401; 27 (0)834337652; Email: Jkhanyile@deat.gov.za

South Africa	Ms DU PLESSIS Shaz	(MCM) Marine & Coastal Management, Scientific Coordinator Research Ships	Tel: +27216023198; Email: sharon@deat.gov.za
South Africa	Dr HERMES Juliet	SAEON/MCM	Tel: +27834729159; Email: juliet@saeon.ac.za
ASCLME PCU	Dr VOUSDEN David	ASCLME	Email: davidvousden@aol.com
ASCLME PCU	Ms SCOTT Lucy	ASCLME	Tel: +27 82886 7654; Email: L.Scott@ru.ac.za
ASCLME PCU	Prof SAUER Warwick	Rhodes University	Tel: +27 82774 1337; Email: w.sauer@ru.ac.za
ASCLME PCU / ACEP	Dr BORNMAN Tommy	ACEP/ASCLME	Tel: +27 4662 9899 Email: T.Bornman@ru.ac.za
ASCLME PCU	Dr NGOILE Magnus	ASCLME	Email: mngoile@simbanet.net
Advisor to ASCLME PCU	Prof. LUTJEHARMS Johann	Prof., University of Cape Town	Tel: +27 21650 3279; Email: jre@mweb.co.za; johann@ocean.uct.ac.za
Advisor to ASCLME PCU	Mr LAROCHE David		Email: dal1727@myvermont.com
Tanzania	Dr MASALU Desiderius	University of Dar-es-Salaam, Institute of Marine Science	Email: masalu@ims.udsm.ac.tz
Tanzania	Dr LUGOMELA Charles	University of Dar-es-Salaam, Faculty of Aquatic Sciences	Email: lugomela@uccmail.co.tz
Tanzania	Dr KANGWE Juma		Email: jumakangwe@yahoo.com

Annex III. List of Acronyms

Acronym	Full Name
ACEP	African Coelacanth Ecosystem Programme
ADCP	Acoustic Doppler Current Profiler
ALTICORE	Value added Altimetry in Coastal Regions
ASCLME	Agulhas and Somali Current Large Marine Ecosystems
BCLME	Benguela Current Large Marine Ecosystem
BENEFIT	Benguela Environment Fisheries Interaction Training Programme
CI	Conservation International
CoML	Census of Marine Life
CTD	Conductivity, Temperature and Depth recorder
EAME	Eastern African Marine Ecoregion (WWF)
EEZ	Exclusive Economic Zone
EU	European Union
FAO	Food and Agricultural Organization (UN)
GEF	Global Environmental Facility (UN)
GIS	Geographic Information Systems
GODAR	Global Ocean Data Rescue and Archaeology
GOOS	Global Ocean Observing System
IOC	Intergovernmental Oceanographic Commission
IOTC	Indian Ocean Tuna Commission
IUCN	International Union for the Conservation of Nature
IUU	Illegal Unregulated and Unreported fishing
LME	Large Marine Ecosystem
MEDA	Marine Ecosystem Diagnostic Analysis
MPA	Marine Protected Area
NAP	National Action Programme
NEPAD	New Partnership for Africa's Development
NOAA	National Oceanic and Atmospheric Administration (USA)
ODINAFRICA	Ocean Data and Information Network for Africa (IOC/UNESCO)
RS	Remote Sensing
SAP	Strategic Action Programme
SWIOFP	South West Indian Ocean Fisheries Project
TDA	Transboundary Diagnostic Analysis
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WIO	Western Indian Ocean
WIO-LaB	Addressing Land-based Activities in the Western Indian Ocean
WIOMSA	Western Indian Ocean Marine Science Association