



WIOMSA *Newsbrief*

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Dr Nyawira Muthiga re-elected at the helm of WIOMSA

During the first meeting of the new Board of Trustees in February in Johannesburg, Dr Nyawira Muthiga was re-elected as the President of WIOMSA. Dr Mitrasen Bhikajee from Mauritius was appointed the first Vice President of WIOMSA and Prof Ron Johnstone from Australia was re-elected as Treasurer.

All three office bearers in the WIOMSA Board were re-elected into the new Board by members of WIOMSA during the last

election (2005). This demonstrates the confidence that the Members have bestowed upon them, not only through making their voices heard in the auditoria, but also their feelings known through the ballot box.



Dr. Nyawira Muthiga, re-elected President of WIOMSA

First Award, then Presidency

President Muthiga's re-election comes just a few months after she received the National Geographic Society's Global Award for Leadership in African Conservation. The Award recognized her efforts in conserving the coastal and marine environment of the region.

Commendations to the Board

In her acceptance remarks as President of WIOMSA, Dr Muthiga thanked the Board Members for re-electing her, and in retrospect, the members for re-electing her to the board. She vowed to continue working hard in cooperation with the rest of the Board whom she commended for their



Dr Mitrasen Bhikajee, the first Vice President of WIOMSA.



Prof Ron Johnstone, re-elected Treasurer of WIOMSA.

selfless commitment and dedication that has enabled the Association to excel.

"Through our united efforts WIOMSA is bound to achieve even greater heights", President Muthiga said.

Dr Bhikajee first Vice President

Dr Bhikajee is the first person to hold the Vice Presidency of WIOMSA. The post of Vice President was introduced in WIOMSA's Constitution following recommendations of the previous Board for the purpose of maintaining institutional memory and continuity.

Election of Country Coordinators brought many new faces

The elections of WIOMSA's Country Coordinators were held between November 2005 and April 2006. Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, Tanzania Mainland and Zanzibar all got new Coordinators. Only in Comoros and Reunion were the incumbent re-elected.

The elections of Country Coordinators have now been completed in all the member countries of WIOMSA apart from Somalia. The elections were being held for the second time in all countries since the establishment of the association 12 years ago, with the exception of South Africa, which held its first election this time.

These networks provide appropriate vehicles for reaching out to new potential members as well as disseminating information about WIOMSA and its activities within their respective countries.

Wish for success

WIOMSA's Board of Trustees wishes the newly elected Country Coordinators suc-

cess in their work and look forward to working with them to increase WIOMSA's impact in the region.

For the full results of the elections, please visit WIOMSA's website: www.wiomsa.org.

Elected unopposed

The Country Coordinators in Comoros, Madagascar, Seychelles, Reunion and Zanzibar were elected unopposed. Kenya had six candidates contesting for the post while Mauritius, Mozambique, South Africa and Tanzania Mainland had two candidates each.

High expectations

There are high expectations on the elected coordinators. Besides being outstanding experts on their own right, they belong to a number of national networks.

Country Coordinators

Comoros	Mr Hachime Abderemane
Kenya	Dr Jacqueline Uku
Madagascar	Dr Manwai Rabenevanana
Mauritius	Dr Chandani Appadoo
Mozambique	Dr Adriano Macia
Reunion	Dr Mathiew Le Corre
Seychelles	Ms Colleen Morel
South Africa	Prof Michael Schleyer
Tanzania mainland	Dr Charles Lugomela
Zanzibar	Dr Narriman Jiddawi

Awarded for protecting the ocean

Dr. Narriman Jiddawi from the Institute of Marine Science, University of Dar es Salaam, Tanzania, is one of the Pew Fellows in Marine Conservation 2006.

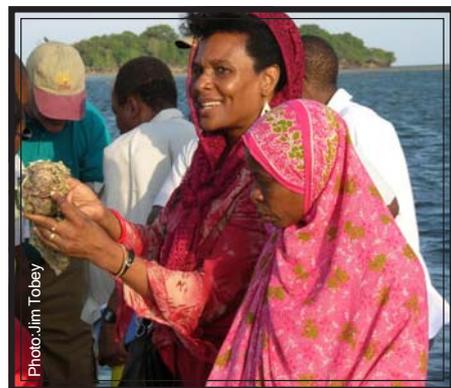
Dr. Narriman Jiddawi, a marine biologist and senior research fellow at the Institute of Marine Sciences at the University of Dar es Salaam in Tanzania, is one of the Pew Fellows for 2006 together with Dr. Glenn-Marie Lange. They will develop a system to assess goods and services provided by marine ecosystems into the income accounts of developing countries, using Zanzibar as a model.

Dr. Lange is a senior research scholar at the Center on Globalization and Sustainable Development at Columbia University's Earth Institute. She has worked extensively in Africa and Asia and will collaborate with Dr. Jiddawi to develop economic models for assessing the value of marine ecosystems.

The Pew Fellowship in Marine Conservation is an award for marine conservation that recognizes innovators from around the world who are finding solutions for ocean protection and preservation. It is delivered by the Pew Institute for Ocean Science in Miami, USA.

An international committee of marine specialists selected the 2006 Pew Fellows based on their potential to protect ocean environments. Each Pew Fellow or collaborative team receives \$150,000 to conduct a three-year conservation project.

Dr. Jiddawi becomes the fifth scientist from the region to win this renowned award. Others are the late Adelaide Semesi, Magnus Ngoile, Jean Harris and Tim McClanahan.



Dr. Narriman Jiddawi at one of her projects - women shellfish farming in Fumba, Zanzibar, Tanzania.



Shellfish farming
in Fumba, Zanzibar



Raft seaweed farming at
Mlingotini, Bagamoyo



Training workshop participants collecting information on oyster farming

WIOMSA hosts Regional 'Training of Trainers' Course - a SUCCESS story

Sharing knowledge and teaching new techniques can be a challenge. As a part of the programme for Sustainable Coastal Communities and Ecosystems (SUCCESS), aquaculture extensionists and managers from Tanzania were trained in how to better reach out to their target audiences.

The Sustainable Coastal Communities and Ecosystems (SUCCESS) is a program run jointly by Coastal Resources Centre of the University of Rhode Island, WIOMSA, Hawaii University at Hilo and the Institute of Marine Sciences of the University of Dar es Salaam.

The program is aimed at pursuing aquaculture that is environmentally friendly and economically sustainable. The main on-the-ground activities are aquaculture of finfish, shellfish and seaweeds. The program has established pilot milkfish and *Tilapia* ponds in Mfurumwambao in Mkuranga district, open ocean raft seaweed culture in Bagamoyo district and shellfish (*Pinctada margaretifera*) farming and half pearl production in Zanzibar. The pilot projects' personnel include district ICM facilitators for Bagamoyo and Mkuranga districts and Menai Bay staff for Fumba.

Multifaceted training in aquaculture

In order to consolidate knowledge, the program arranged two successive training workshops for extension, economics and science of aquaculture. The training also reviewed on-the-ground activities, learning from experiences in the pilot programs and projects elsewhere in Tanzania and worldwide. The first training was held between the 27th and

the 3rd of July and the second between the 5th and the 11th of December 2005, the first in Zanzibar and the second in Zanzibar and Bagamoyo.

Aquaculture practices

The first training workshop concentrated on aquaculture practices ranging from pond construction engineering to geographical distribution of milkfish fingerlings and adults. It also touched on the life cycles of black pearl oysters and milkfish.

Extension education was new to most of the participants and they were taught extension methods for coastal management and mariculture. Lectures were held on successful mariculture and mariculture extension, also taking social and economic angles into consideration. On the practicals, a bull-dozer push net was constructed and practically used in attempts to catch fry and fingerlings.

The training workshop participants also visited the Fumba shellfish farming to see the shellfish and discuss farming, marketing and the future prospects of the project. Both the participants and the women responsible for the shellfish farming were very enthusiastic about the meeting.

Oysters, pearls and economics

The second training invited the same participants. This time the trainers were

specialists in economics, oyster farming, pearl production and pond construction engineering. The training workshop high-lighted the theory and practices of oyster farming and half pearl implantation and production, using successful extension methods from Asia.

Emphasis was also put on pond designs, different designs of fry and fingerling collection nets, marketing and profit-loss analyses.

The participants also carried out very detailed economic analyses of case studies; evaluation of project viability, capital costs, recurrent costs, depreciation and general book-keeping, accounting and rate of returns. The on-the-ground activities were presented, evaluated and new plans were made.

Practicals included, among other things, implantation of 19 black pearl oysters with about 40 half pearl beads on the 6th December, 2005. Two months later, only six of them had died when the cage overturned due to strong waves. If this trend continues, black pearl farming may prove to be very successful.

The training workshops attracted participants from marine parks and conservation areas, NGO's, the government and the academia.

Mud creeper likes mangrove leaf litter

Women and children in Tanzania collect mangrove whelks like the mud creeper, *Terebralia palustris*, for food, but little is known locally about the ecology and population dynamics of the soft-bodied invertebrate. With funding from WIOMSA's Marine Research Grant (MARG), Dr. Norbert Kayombo from the National Museum in Tanzania has looked closer at the gastropod's environment.

Mangrove whelks are associated with mangroves where they feed on diatoms (microscopic algae) and mangrove leaves. They have large heavy dark brown conical shells with three spiral grooves running up each whorl. Women and children collect the species for food.

The mangrove whelk *Terebralia palustris* (Linnaeus), also known as mud creeper, is a common mangrove gastropod in Tanzania. The species is fished for food and for sale in many parts of the Tanzanian coast.

Intertidal micro climate

Results from Dr. Kayombo's work indicate that *Terebralia palustris* experience temperature regimes similar to those experienced in other intertidal mangrove habi-

tats. Temperature readings were generally higher for air temperature followed by substrate and water temperatures. Water temperature fluctuated close to substrate temperature.

Live in submerged mudflats

Studies on ecological requirements of the species showed that *Terebralia palustris* is found in immersed mudflats in mangrove habitats characterized by organic matter resulting from decomposed mangrove leaf litter. High densities of *Terebralia palustris* were found in accumulated mangrove tree litter under shades of mangroves.

Sand and silt

Results from grain size analysis points to *Terebralia palustris* living in habitats

characterized by gravelly clayey silty sand and clayey sandy silt according to unified soil classification system.

Study in Kaole

Sampling was carried out at Kaole, Bagamoyo and the preservation and the analysis of collected materials was done at the National Museum of Tanzania. Kaole is a small village on the Bagamoyo coast in Tanzania, approximately 40 km North of Dar es Salaam. The study site is close to a famous historical place, Kaole ruins. The site is protected from incoming waves by mangrove forests and thus affords suitable stable habitats for the growth of mangrove whelks.



Terebralia palustris collected at Kaole, Bagamoyo, Tanzania, by women and children for food.


ODINPubAFRICA

Scientific publications of ODINAFRICA

ODINPubAfrica - database for electronic publications

Opportunity for African researchers to publish their findings on marine science and oceanography worldwide as ODINAFRICA develops African repository for electronic publications.

African scientists have expressed their concern on the difficulties of publishing their research findings in international journals. Several attempts have been made by various organisations to start the publishing of African journals in print form, but they have failed due to lack of interested publishers or limited market potential.

Electronic platform

The goal of ODINPubAFRICA is to develop an electronic platform to collect scientific documents - both published and grey literature, including articles, conference papers, working papers and thesis that are produced by members of African research institutions.

This is an initiative of the Ocean Data and Information Network of Africa (ODINAFRICA) Project supported by the Intergovernmental Oceanographic Commission (IOC) of UNESCO and the Flemish Government of Belgium to develop a marine science network in Africa.

Improving accessibility of data

ODINPubAFRICA was first realised in 2004 and launched in August 2005. Its

activities in Africa are coordinated at focal points located in various institutions of coastal and marine research around the continent.

The ODINPubAFRICA uses an Open Access Initiatives (OAI) compliant repository, providing access to full text publications (articles, conference papers, working papers, theses, pre-prints etc.) by scientists affiliated to ODINAFRICA. This will later on be extended to include non-affiliated institutions. The ultimate objective of the project is to make material available that is not easily accessible through the traditional printed media.

Individual webpages

Every participating institution has its own webpage with its own collection of documents. The service provides a simple mechanism to enable the information managers to deposit on behalf of their authors. The documents can be searched globally and at every level.

In the first year of the project nearly 900 scientific publications were already uploaded in ODINPubAfrica. This collection will grow continuously in the next years. Thanks to the effort of the librarians, the information managers and all other people

involved in the project, ODINPubAFRICA will grow to the first information source on marine science and oceanography in Africa.

Training for participation

The success of the project depends on the participation of the different partners in the marine research centres. Training is also essential in realising the goals of ODINPubAfrica. At present a total of 15 information managers from the ODINAfrica institutes of Egypt, Ghana, Kenya, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Tanzania, Togo, Tunisia, Senegal and Seychelles have received specific training in order to sustain and underpin the development of the project.

website address:

<http://iodeweb1.vliz.be/odin>

Global Environmental Change

An Earth System Science Partnership Global Environmental Change Open Science Conference. 9-12 November 2006, Beijing, China

Scientists, policy makers, practitioners, scholars, members of the private sector and journalists are invited to participate in the ESSP Open Science Conference and to submit abstracts (parallel session or poster presentations).

The conference themes are: **Earth System Science Approach:** New advances

in studies of the physical, biogeochemical, biodiversity, and human dimensions aspects of global environmental change.

Science for Sustainability: Global environmental change research relating to carbon, food, human health, and water; as reflected in the ESSP Joint Projects.

Integrated Regional Studies: The dyna-

mics, impacts and consequences of the interactions between natural and social systems at regional scales, including extreme events, and how they connect with global-scale phenomena. **Global Change in Monsoon Asia:** Global environmental change research in monsoon Asia.

Deadline for submission of papers is the 1st of May 2006.

Go to the website of the Earth System Science Partnership for more information and registration: www.essp.org

New MASMA-project October 2005

Sea cucumbers inadequately studied despite large market potential

Although sea cucumbers have been considered a delicacy in some Asian countries for many years, the knowledge in the Western Indian Ocean region about these long and wormlike sea creatures is insufficient for the development of effective fisheries management systems. Therefore, an international team of researchers have initiated the project "Sea cucumbers, a poorly understood but important coastal resource: national and regional analyses to improve management", funded by MASMA.

Sea cucumbers are a poorly understood coastal resource, despite their long history of consumption by oriental populations. The most important sea cucumber product is the dried body wall that is marketed as beche-de-mer (trepang or hai-som).

Demanded globally

Although the high demand for sea cucumbers has resulted in overexploitation in the main producing nations, there remains a high demand for this product worldwide, leading to expansion into new fishing grounds. Renewed interest for this fishery has recently risen due to the sedentary behavior of sea cucumbers, high value of the product, low cost of processing and the huge international market that enables the development of community based fisheries.

Better use of the sea cucumbers

This project aims to strengthen the conservation and sustainable use of sea cucumbers in the WIO region. The information collected should form the foundation for a better understanding of the sea cucumber fisheries and the development of effective fisheries management systems. Training in sea cucumber taxonomy, biology and fisheries will also provide the capacity for monitoring and evaluating the effectiveness of the management systems put in place. The project will focus on Kenya, Madagascar, Reunion, Seychelles and Tanzania, although information on other countries in the WIO will be collated from the literature and questionnaires.

Main outcomes

The overall outcome will be an improved understanding of the status and management of sea cucumber resources in the WIO including detailed information at the country level and a regional analysis. This information will also contribute to the ongoing discussion on sea cucumber conservation through CITES and FAO and will support countries in meeting their commitments. Other outcomes will include:

- Identification of significant gaps in the information for the effective management of sea cucumbers and the root causes of these gaps and other barriers that are preventing better management of sea cucumbers in the WIO.

- A design and guidelines for establishment of national databases to store data on the status and trends in national sea cucumber fisheries. The databases will contribute to the national and international fisheries. Socioeconomic information will contribute to the proposed Regional Socio-economic network linked to Global Coral Reef Monitoring Network (GCRMN).

- An improved understanding of the socio-economic implications of the sea cucumber fishery and how the fishery can be improved to better support coastal livelihoods.

- Improved capacity to carry out surveys, biological and ecological studies and to collect fisheries data, and contribute to MSc and PhD research.

- Improved collaboration and networking of scientists and resources managers in

the WIO for fisheries management in general and sea cucumbers in particular.

Researchers:

N. Muthiga, Kenya
C. Conand, Reunion
P. Frouin, Reunion
E. Mirault, Reunion
R. Aumeeruddy, Seychelles
R. Rasolofonirina, Madagascar
J. Ochiewo, Kenya
M. de la Torre Castro, Sweden
Y. Mgaya, Tanzania

Postgraduate Fellowships 2006/7

Deadline 31 May 2006

In support of staff development in African Network of Scientific and Technological Institutions (ANSTI) member institutions, limited number of fellowships are available for postgraduate studies in the 2006/2007 academic session and tenable in ANSTI member institutions.

For more information, contact:

African Network of Scientific and Technological Institutions (ANSTI), UNESCO, P.O.Box 30592, Nairobi, Kenya.
 Tel: (254-2) 622620 / 622725,
 Fax: (254-2) 622750
 Email: info@ansti.org,
 m.matemu@unesco.org
 Website: <http://www.ansti.org>

B.Sc. in Fisheries and Aquatic Science

SADC (Southern Africa Development Cooperation) Region.
Deadline 30th of September 2006

The University of Namibia, through the Department of Natural Resources and Conservation, in association with the Norwegian College of Fisheries Science hereby introduces its B.Sc in Fisheries and Aquatic Science for the SADC Region. The programme offers courses in amongst other, fish processing and quality control, fisheries management, physical oceanography, aquaculture and chemical and biological oceanography.

For information regarding application forms and admissions, contact:

The Office of the Registrar
University of Namibia
Private Bag 13301
Windhoek
Namibia
Tel: (061) 206 3363
Fax: (061) 206 3013
E-mail: enowaseb@unam.na

New MSc course in Eco-tourism

Closing date 30th of June 2006

This degree offers the opportunity to learn about biodiversity and ecotourism in a tropical environment close to areas of outstanding natural diversity and cultural heritage. Students will be based on Naresuan University campus and be taught face to face and through the latest online methods.

The MSc is a joint effort between the University of Newcastle in the UK, and the Naresuan University in Thailand.

For more information, see:

www.ncl.ac.uk/biodiversity

25 - 27 October 2006, Gozo, Malta, 2nd International Conference on the Management of Coastal Recreational Resources

Beaches, Yachting and Coastal Ecotourism

The second Conference in Euro-Mediterranean Centre on Insular Coastal Dynamics's (ICoD's) biannual series on the Management of Coastal Recreational Resources will focus on aspects of coastal management related to the recreational amenities represented by beaches, yacht marinas and ecotourism. The conference aims to bring together academic researchers as well as practitioners whose work involves aspects of both research into integrated coastal area management practices and the development and management of coast-related recreational amenities.

For more information, contact:

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NaGISA World Conference

15 - 18 October 2006,
Kobe, Japan

Natural Geography In Shore Areas (NaGISA) is hosting an international conference with three primary goals: To facilitate the interaction of nearshore benthic ecologists and taxonomists; To strengthen the connection between NaGISA and complementary projects; To present research and results from the NaGISA project.

For more information, see:

www.nagisa.coml.org
or e-mail NaGISA at:
nagisaonline@yahoo.com

4 - 7 December 2006, Port Elizabeth, South Africa

Science Communication

The South African Agency for Science and Technology Advancement (SAASTA) will be hosting an African Science Communication Conference in Port Elizabeth, South Africa, in December this year. The conference will focus specifically on the need to develop the field of science communication and establish collaborative networks on the African continent engaging academics, universities, public and private research centres and industry, the media, the education field and professional practitioners.

Conference Secretariat:
Inkanyezi Event Organisers: Taskeen Henry, Tel: +27 +41 365 5634; Email: taskeen@inkanyezi.co.za

Website:

www.fest.org.za/ascc



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