

Bangladesh, India, Indonesia, Malaysia, the Maldives, Myanmar, Sri Lanka and Thailand are collaborating through the Bay of Bengal Large Marine Ecosystem (BOBLME) Project to better the lives of their coastal populations by improving regional management of the Bay of Bengal environment and its fisheries.

















Bangladesh

India

Indonesia

Malaysia

Maldives

Myanma

Sri Lanka

Thailand

Incredibly well done

Incredible India – that's India's current slogan to attract international tourists, and it's also how the Regional Coordinator of the BOBLME Project, Dr Chris O'Brien, described the one day International Symposium on the Ecosystem Approach to Fisheries in the BOBLME, which was part of the 9th Indian Fisheries Forum held in Chennai, India, from December 19 to 23.

The organisation of the symposium, by India's National Coordinator Dr Vijayakumaran Kandachamy and National Technical Adviser Dr V V Sugunan, was superb, the keynote speakers were impressive, and the audience was packed with distinguished experts and senior government officials.

Dr Ken Sherman and Dr Mick O'Toole were the keynote speakers; supported by a highly competent line-up of Indian experts to cover the thematic aspects of the project.

Dr Sherman is an oceanographer and marine biologist who has made it his life's



Dr Sherman (right) speaks at the symposium. Dr G. Syda Rao, Convener of the 9th IFF, listens.

work to promote coordinated and sustainable use of marine resources and marine environments, primarily by developing the Large Marine Ecosystems (LMEs) concept, which creates natural units that embrace socioeconomic factors, along with ecological and governance considerations.

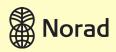
Dr Sherman's presentation, "Large Marine Ecosystems: Assessment and Management Practices for Fisheries and other Goods and Services", gave participants a tremendous insight into the history and future of LMEs and set the scene for the rest of the day.

Dr Sherman was later honoured for his outstanding work in a ceremony led by Dr S N Dwivedi the former Additional Secretary of the Indian Department of Ocean Development.













Stock assessment in focus

he Asia-Pacific Fisheries Commission (APFIC) held its Regional Consultative Workshop on the theme of "Strengthening Assessment of Fisheries and Aquaculture in the Asia-Pacific Region" from October 4 to 6 in Yangon, Myanmar.

This initiative was taken in response to a recommendation of the 31st session of APFIC, which recognized the need to conduct fishery assessments to assist in fishery management decisionmaking.

BOBLME provided funds to support the participation of 10 delegates from BOBLME Project countries.

The visit to Yangon also offered an opportunity to discuss various aspects of the planning and implementation of activities of the BOBLME Project's 16 subcomponents and key areas of work.

For one of these work areas – hilsa shad fisheries management – a seminar on fish stock assessment approaches was scheduled for the day after the APFIC workshop, with the lecture series being delivered by Dr. Rishi Sharma, the BOBLME Stock Assessment Coordinator, who also made a presentation at the consultative workshop.

The workshop was opened by H. E. Tin Naing Thein, Union Minister, Ministry of Livestock and Fisheries and Ministry of National Planning and Economic Development of Myanmar, and the APFIC Secretary, Dr Simon Funge-Smith.

There were also special Bay of Bengal-South Asia working group sessions for capture fisheries, to review how existing and new approaches to assessment (for example, under Fisheries Improvement Plans) can contribute to the different stages of the fisheries management process.

The workshop also reviewed some of the tools that have been used for stock assessment and fishery assessments (including those in data-poor situations) and how they can be tailored to the characteristics of fisheries and aquaculture within the region, with particular relevance to small-scale fisheries.

The outputs of the three days of the



Taking time out from the workshop the participants had the opportunity to visit fish landing sites and the famous Shwedagon Pagoda (above).

workshop were put together to form summary recommendations which were reviewed in plenary by the workshop and adopted during the final plenary session at the end of the workshop.

These summary recommendations will

be presented at the 32nd APFIC Meeting, taking place this year (2012).

Capacity development: The main recommendation refers to the need for capacity development through, among others, exchange of regional transnational knowledge and sharing in management planning processes for transboundary fisheries, and/or fisheries with similar characteristics, and the establishment of a Regional Centre of Excellence; for example FAO APFIC in collaboration with NGOs and others (SEAFDEC, for example).

Expertise: Efforts should be made to create regional and national pools of experts to facilitate development of plans, to strengthen the knowledge of decision makers and to build more effective fisher organisations within the sector.

Other recommendations:

Promotion of fishery management planning; using a regionally consistent structure for developing plans (though allowing for the specific needs of individual countries); and prioritizing key fisheries (for example, on the basis of economic importance or sources of conflict/risk of collapse) to be

targeted for a fisheries improvement planning process.

This may be at national or sub-national level. Some transboundary stocks may be candidates if there are good economic reasons for joint action.

Core members of BOBLME hilsa assessment working group named

The BOBLME hilsa assessment working group has had a busy year of meetings and made good progress on developing a regional assessment for hilsa in the Bay of Bengal.

In doing so, a core group of scientists has been established to carry on the work over the coming years. This group includes Dr. Anisur Rahman (BFRI), Ms. Masud Ara Momy (DoF), Mr. Ashraful Alam (BFRI) and Mr. Kamruzzaman Hussain (DoF) from Bangladesh; Dr. D. Panda (CIFRI), Mr. M.K. Sajeevan (FSI), Mr. D.K. Gulati (FSI) and Dr. R. Suresh(CIFRI) from India; and Mr. Khin Maung Soe, Mr. Htay Win, and Mr. Myint Thein - all from the DoF, Myanmar.

Indian mackerel working group meets in Kochi, India

A BOBLME Indian mackerel working group was also convened. The report from this meeting held in Kochi, India on 1-2 December 2011 will be available on the BOBLME website shortly.





Dr JK Patterson Edward (right), Director, of the Suganthi Devadason Marine Research Institute, informing the participants on his research results in the Gulf of Mannar. Dr Shekhar Kumar Niraj, Conservator of Forests and Director, Gulf of Mannar Marine Biosphere Reserve looks on.

Gulf of Mannar talks highly productive

onsultations that brought together more than 50 delegates from India and Sri Lanka were held from September 4 to 7 last year on the island of Rameshwaram (Pamban Island) in the Gulf of Mannar (GoM).

The meeting was attended by delegates from concerned ministries, research institutions, inter-governmental bodies, NGOs, and representatives from fisher organizations. Almost one third of the participants were from Sri Lanka.

The BOBLME subcomponent, dealing with collaborative critical habitat management, promotes multi-national approaches to managing and addressing issues that affect transboundary coastal and marine ecosystems within the broader BOBLME region.

A similar initiative is already underway in the Mergui/Myeik Archipelago in the Andaman Sea, shared by Myanmar and Thailand.

The governments of India and Sri Lanka have agreed that the Gulf of Manner (GoM) is a critical habitat for both countries, and are working together through the BOBLME Project to establish a collaborative management arrangement.

The BOBLME Project is collaborating with the Bay of Bengal Programme Inter-Governmental Organisation (BOBP-IGO) on the work programme for sustaining the GoM ecosystem and its resources.

As a core activity, a series of consultations is to be organized, alternating between India and Sri Lanka, to come to an agreement or platform for the preparation of common ground for management of the GoM.

The Bi-National Stakeholder

Consultation highlighted the concerns about the health of the GoM ecosystem and contributed to understanding of the need for bilateral cooperation in management of the GoM for sustainable use of its resources.

The inaugural session was chaired by Dr. J R Bhatt of the Indian Ministry of Environment and Forests, and included welcome remarks from the BOBP-IGO, BOBLME, and ministry officials from India and Sri Lanka.

The first technical session was started with an overview of the BOBLME Project and the objectives of the workshop, presented by the BOBLME CTA, Dr Rudolf Hermes.

This was followed by two presentations on the GoM ecosystem by Dr G Gopakumar of CMFRI India and Dr Shamen Vidanage of IUCN Sri Lanka.

Issues impacting on the livelihoods of fishers in the GoM were discussed by Ramya Rajagopalan of ICSF, while Dr E Vivekanandan of CMFRI spoke on the ecosystem approach to managing marine fisheries.

Four working groups were formed for the afternoon technical session to deliberate on the following themes:

- Review of existing management measures in the GoM and lessons learned from past initiatives, while identifying the stakeholders and the role they play;
- Identification of gaps in available information on the GoM ecosystem, to delineate the status of the ecosystem, and the measures needed to close these gaps;
- Understanding the transboundary importance of the GoM ecosystem and modalities to approach it; and
- Strengthening cooperation in managing the GoM ecosystem and moving towards an ecosystem approach to fisheries.

The concluding session during the second day consolidated the recommendations for actions. Key recommendations were:

- Collaborative efforts in conservation and management of charismatic species;
- Capacity building, including stock assessment, pollution monitoring and the ecosystem approach to fisheries;
 - Education and awareness-raising;
- Strengthening of data collection, processing and analysis; and
- Sharing of information and networking.

Proposal outlines will be prepared for the next meeting, planned for 2012 in Jaffna, Sri Lanka. This will also be organized and hosted by BOBP-IGO.

The expected proposals should also include a draft concept of a future "binational or joint mechanism". This may initially consist of a Joint Scientific Committee (for biodiversity concerns), and a Technical Committee on Pollution Monitoring and Control.

The meeting was characterized by a remarkable spirit of cooperation, high energy and great willingness to share information.

The excellent atmosphere was further enhanced by two short field trips: one to Dhanushkodi at the southeastern tip of the island, the start of the culturally highly significant Adam's bridge and the part of India closest to Sri Lanka's Mannar Island.

The other excursion took the participants to one of the small islands forming a part of the Gulf of Mannar Marine National Park to look at conservation efforts and discuss threats to the marine environment.

BOBLME PROFILE: DR MOHAMED SHIHAM ADAM

In the lucky islands

r Shiham Adam didn't always want to be in fisheries. In fact, when he passed his A-levels, the highest qualification attainable in the Maldives at that time, what he really wanted to study was engineering. Fisheries was third on his list.

But that was what was on offer – a scholarship to study for a degree in marine biology at Newcastle University in the northeast of England. He got this bachelor's and then followed up with a master's degree in fisheries biology at Bangor, in Wales, before returning to the Maldives in 1993, ready to serve the government.

In 1996 he applied for and received another scholarship, this time from the Islamic Development Bank and headed back to the UK, this time to Imperial College in London to begin work on his PhD.

His thesis looked into ways to assess the population of skipjack tuna in the Maldives.

He followed this up with post-doctoral work at the University of Hawaii, using tag-and-release recapture data to model distribution of tuna on a oceanic scale.

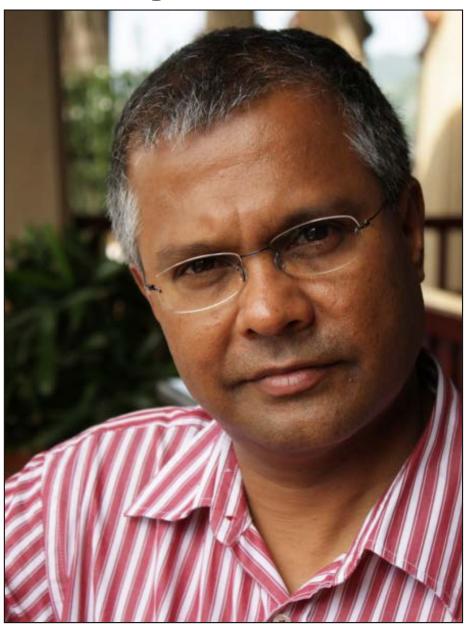
Today, Dr Adam is Director-General of the Maldives' Marine Research Centre and his country's National Coordinator for the BOBLME Project.

"I've been involved with BOBLME since 2003. The project had a rough start – after the Asian Tsunami in 2004 it went into hibernation because priorities naturally changed.

"But in 2006 it took off again, with inception in 2009." It was an interesting time on many fronts. In 2008 the government of the Maldives changed after 30 years of authoritarian rule. Dr Adam believes that the new government is "still need more time in understanding the bigger picture of regional fisheries management".

But Dr Adam's part in the government steams ahead. "The Maldives is lucky. It's an area where fish like to aggregate in the centre of Indian Ocean," he says with a grin. "I was very pleased when the Maldives became a full member of the International Tuna Commission."

He enjoys meetings that bring together people in the marine sciences field from



Dr Adam: 'The Maldives is lucky. It's a place where fish like to aggregate.'

other countries. "I love the interplay of ideas. It always enriches me.

"Fisheries is no longer a problem of your own – it's everyone's problem. I knew this, but to feel it was quite recent."

Visiting other countries has helped bring a full appreciation of the problems home to him, he says. He particularly remembers a visit to Karachi, and being shocked by the state of the Lyari River. "It was really bad."

He would like to see the BOBLME

Project encouraging more research. "One aim should also be to study the predictability of the Bay of Bengal. Research finds the truth.

"But then you have to communicate the truths effectively to government and fishers." In this, he says, BOBLME "is making a big difference."

If he could start all over again, would he still want to be an engineer? "No," he says, "I'd do this."



Participants in the ICM workshop in Cox's Bazar in Bangladesh take a break for a group photograph.

ICM experts warn 450m livelihoods 'under threat'

ome 60 national-level experts from the eight BOBLME member countries attended a workshop on Integrated Coastal Management organised at the beginning of December by the Bangladesh chapter of the International Union for Conservation of Nature (IUCN) and the BOBLME project.

The *Daily Star* of Bangladesh published the following report:

The livelihoods and food security of around 450 million people living on the coast of the Bay of Bengal are under threat from habitat degradation and overfishing.

Rapid population growth and continuous reduction of marine and coastal resources has led to uncertainty over whether the coastal ecosystem will be able to support the livelihoods of the region's population in the near future.

The observations came at a two-daylong international workshop on coastal management at a hotel in Cox's Bazar, Bangladesh, on December 5 and 6.

The consensus was that expansion of Integrated Coastal Management (ICM) and enhancing regional collaboration is essential to coping with the perceived impending crisis and to protecting the population living along in the 6.2 million square kilometres of coastline around the

Bay of Bengal.

ICM refers to a system whereby governments, fishing communities, non-government organisations and scientific and management experts come together to protect and develop the coastal ecosystem and resources.

Man-made hazards like sewage, industrial effluent, establishment of ports and harbours and absence of eco-friendly tourism are the main causes of destruction of the coastal eco-system.

Bangladesh's ship building industry, it was noted, is adding to the negative effects.

"The coastal eco-system is definitely affected by the shipbuilding industry, though how much of the impact reaches the Bay of Bengal is debatable," said Dr Rudolf Hermes, chief technical adviser of the BOBLME project.

Emphasising the importance of ICM, an ecology expert from India, Probir Banerjee, said around 65 per cent of global GDP comes from coastal areas and 30 per cent of the world's population lives along the coast.



Dr Jayampathy Samarakoon: sedimentation is destroying the ecosystem.

"Neglecting the coast will adversely affect the world's economy and people's livelihoods," he said.

Talking to *The Daily Star*, Sri Lankan coastal ecology specialist Dr Jayampathy Samarakoon said continuous sedimentation is destroying this region's coastal ecosystem.

"Although sedimentation is good for agriculture in floodplain deltas such as Bangladesh, it is harmful for rocky islands

such as Sri Lanka," he said.

The recommendations from the experts include building capacity in small-scale fishing communities, initiating multisectoral and coordinated approaches to developing ecosystems and livelihoods, and conservation of endangered species such as marine turtles.

They also suggested developing mechanisms to address trans-boundary problems such as disease transmission through migratory wildlife, and creating mass awareness.

- Pankaj Karmakar, The Daily Star



The meeting attracted some 40 participants. Inset, below, environmentally critical areas in the Southern Andaman Sea.

SEAFDEC talks end with 16 recommendations for action

he Sub-regional Consultative Meeting of the Southern Andaman Sea was held at the Peach Blossom Resort, Phuket, Thailand, from October 11 to 13, 2011.

BOBLME, through its implementing partners Wetlands Alliance and CORIN-Asia, collaborates with the SEAFDEC-SIDA Project in promoting sub-regional transboundary bior tri-national processes for fisheries and environmental management for critical transboundary habitats, such as the Mergui/Myeik Archipelago and the Malacca Straits.

The meeting was organized by the Southeast Asian Fisheries Development Center (SEAFDEC) with funding support from the Swedish International Development Cooperation Agency (Sida).

Participants included officers from central and provincial governments and also fishermen from Indonesia, Malaysia and Thailand, as well as representatives from collaborative partners such as the Bay of Bengal Large Marine Ecosystem (BOBLME) Project and Prince of Songkhla University.

Dr. Chumnarn Pongsri, SEAFDEC Secretary-General, senior officers of the SEAFDEC Secretariat, Training Department, and Marine Fishery Resources Development and Management Department (MFRDMD) all attended, along with members of the Regional Fisheries Policy Network (RFPN) for Indonesia and Thailand.

The meeting heard presentations by Nopparat Nasuchon, RFPN member for Thailand; Dr Ahmadi, her counterpart from Indonesia; Dr. Matius Bangun, head of the Marine and Fisheries Agency of North Sumatra Province; Tan Geik Hong, representative from Malaysia; Wudtichai Wungkhahart, Director of the Andaman Sea Fisheries Research and Development Center; Rudolf Hermes, Chief Technical Advisor of the BOBLME Project; Abu Talib Ahmad, Special Department Coordinator of SEAFDEC/MFRDMD; Kongpathai Saraphaivanich, Head of the Information and Communication Technology Section of SEAFDEC/TD; and Panitnard Taladon, Head of the Training and Extension Section of SEAFDEC/TD;

The meeting made 16 specific recommendations:

- The establishment of larger fisheries resources conservation areas (refugia) and development of a joint management plan.
- Establishment of an integrated mackerel management plan at subregional level.
- Building of awareness of how to maintain stock assessment activities on a long-term basis under government responsibility (without dependence on any donor).
- Data collection, including DNA studies to improve understanding of the connectivity among mackerel populations and related species, including spawning and spawning seasons, important feeding areas and movement of fish in trans-boundary areas.
- Improvement of collection of oceanographic data.
- Systems should be developed for the supervision, monitoring and the control of encroachment by larger vessels into coastal waters.
- Provision of a framework for the development of cooperation on Monitoring Control and Surveillance (MCS) and the

building of an MCS network..

- Suitable areas should be identified conservation/rehabilitation and management of habitats. .
- Improvement of databases on vessel registration and licensing systems as a tool to manage and control fishing capacity as well as to combat illegal, unregulated and unreported (IUU) fishing, faking of licenses or double registration of fishing vessels.
- Promotion of data exchange on vessel registration and fishing licenses, including
 - numbers and movements of vessels, transshipment of catches at sea and cross-border landings.
 - Building of capacity and the quality of the functions and management of fishing ports and landing sites, based on international requirements.
- Continue dialogue on legal and institutional aspects to allow for harmonized policy development.
- Enhancing local government, NGO and community involvement in fishery management.
- Build awareness of the implications of the beginning of the ASEAN Community in 2015. This should include strengthening of institutional collaboration and sharing of information at provincial, national and subregional levels.
- Building of awareness regarding climate change.
- Establish a core group of experts among the three countries to identify what can be done most effectively, by avoiding duplication of efforts by institutions, optimising use of resources and facilitating the development of sub-regional agreements.



21 master public speaking in Malé

wenty one people from the Asian scientific and technical community spent four days of October in Malé, in the Maldives, learning presentation skills in the second half of a two-part course on communications organised by BOBLME and Mangroves for the Future (MFF).

The first part, which covered the organisation and writing of compelling papers, was held in Phuket, Thailand, in August.

In Malé the aim of this course was to "enhance effective communication of the results and progress of BOBLME and MFF projects to stakeholders and the broader scientific community through oral presentations".

This was a more daunting challenge than the one posed in Phuket; in this case, participants had to stand in front of an audience to deliver their presentations.

Each presentation was captured on video as an aid to review.

The course also covered the making of posters and responding to questions from the press.

Dr Peter Rothlisberg, formerly of CSIRO, taught both the Phuket and Malé



Dr Rothlisberg (third from right) with students on the course in the Maldives.

courses, assisted by mentors Dr Sevvandi Jayakody (from Sri Lanka); Dr Zelina Ibrahim (Malaysia); and Dr E Vivekananadan (India).

Dr Rothlisberg was pleased with the results. In his final report he commented, "By and large the delivery of talks was very proficient and articulate. Use of PowerPoint technology was also of a high standard, in some cases very high. Increased confidence was evident even during the four-day workshop."

Participants were also generally happy with the course. Comments included:

"Well organised, well planned. This workshop ... definitely helped me to improve my presentation skills and my shortcomings."

"It should be given not only to [the] scientific community, but also other communities e.g. business, administrative etc."

"The video play-back was a great technique to assess performance!"

"I cannot deny our wonderful feeling of joy and gratitude for lessons learned and experience [in] scientific presentation I gained in the past four days."

Review targets fishery data

he BOBLME Project has recently initiated a review of fishery data collection systems of its member countries.

The aim of the review is to provide information on sampling design and strategy as well as the institutional arrangements for data collection and implementation in each country.

In other words, it will provide answers to the why, who, what, and how of fishery data collection and present these in a report that will facilitate cross-country comparisons and provide a regional overview.

This will include a gaps analysis, identify strengths and weaknesses, identify best practices and recommend possible courses of action to be followed up by the BOBLME and partners.

Fisheries specialist Dr Kim Stobberup has been carrying out this review on behalf of BOBLME, travelling to all eight countries

On the basis of his recommendations,



Dr Stobberup (right) in Visakhapatnam port, India, with Dr Ansuman Das of the Indian Fishery Survey. In the background are trawlers covered in dried fish.

BOBLME will support measures to enable partner countries to improve their fisheries statistics, so that these can be used (or relied upon) for the management of their fisheries and resources.

Dr Stobberup has extensive experience of data collection starting with his time (1994-97) at the Indo-Pacific Tuna Development and Management Programme, which was instrumental in preparations for the creation of the Indian Ocean Tuna Commission (IOTC).

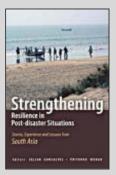
More recently, he has worked for the European Commission on improving fishery data collection systems in EU candidate countries.

MEMORANDA

BOOKSHELF

Strengthening Resilience in Post-disaster Situations: Stories, Experience and Lessons from South Asia.

Edited by Julian Gonsalvez and Priyanka Mohan



In four parts, the book presents an overview of the coastal threats and post-tsunami issues; examines the concept of risk reduction; describes the pathways for building the capacity of vulnerable

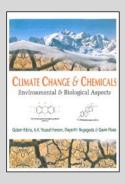
communities; and presents real-life stories of how post-disaster rehabilitation and resilience-building projects have led to positive change.

800 pages, published by Academic Foundation. EAN 9788171889044, £34.95

Can be ordered via www.academic foundation.com/n_detail/636.asp or viewed as an Ebook at web.idrc.ca/openebooks/535-9/

Climate Change and Chemicals: Environmental & Biological Aspects.

by Golam Kibria, A K Yusuf Haroon, Dayanthi Nugegoda and Gavin Rose



Reviews and summarises research results and information from both developed and developing countries including Asia-Pacific, Australasia and other parts of the world.

460 pages, published by New India Publishing Agency. ISBN 9380235305, 9789380235301, US\$125. Can be ordered via bookfactoryindia. com

DIARY

January 2012

- 12-13: BOBLME-NACA-FAO Regional Expert Group Workshop on transboundary aquatic animal health issues in the Bay of Bengal (Bangkok, Thailand)
- 23-27: Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) Intergovernmental Review and Global Land Oceans Conference (Manila, Philippines)
- 24-26: Transboundary Diagnostic Analysis (TDA) Synthesis group meeting (Phuket, Thailand)
- 30-1 Feb: BOBLME-SEAFDEC-FAO Regional Workshop "Putting into practice the FAO Technical Guidelines on MPAs and Fisheries: MPAs as a potential management tool for sustainable fisheries in South and South East Asia" (Bangkok, Thailand).

February 2012

- 1-2: BOBLME Marine Protected Area (MPA) Working Group Meeting (Bangkok, Thailand)
- 13-14: TDA Confirmation meeting (Phuket, Thailand)
- 15-17: Strategic Action Plan (SAP) Process Development workshop (Phuket, Thailand)
- 28-29: BOBLME partners' meeting for project and portfolio managers working in fisheries, ecosystems, coastal management, pollution, habitat protection, Fostering coordination to enhance effectiveness of resource project activities in the Bay of Bengal (Bangkok, Thailand).

March 2012

- 1-2: BOBLME annual work plan development workshop (Bangkok, Thailand)
- 12-14: SEAFDEC-SIDA-BOBLME North Andaman Sea/Myeik Archipelago Consultative Meeting (Bangkok, Thailand)
- 13-14: BOBLME Regional Fisheries Management Advisory Committee meeting (Phuket, Thailand)
- 19-20: Fisheries Statistics Working Group (Indonesia to be confirmed)
- 20-22: Project Steering Committee meeting (Negombo, Sri Lanka)

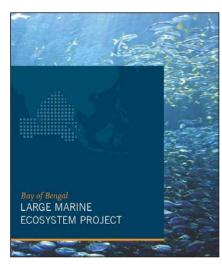
WHAT IS BOBLME ABOUT? NEW BROCHURE EXPLAINS ALL

The BOBLME Project has published an eight-page brochure covering essential facts about the project, its aims and how it works.

The brochure covers the project's vision; the challenges faced by the Bay of Bengal; the partners and aims; the structure and areas of work; a statistical snapshot of the Bay of Bengal; the project's approach to solving the challenges; and the key people involved.

This is a very useful executive summary of the BOBLME Project and a useful tool for introducing the project to relevant people at all levels.

The brochure may be downloaded from www.boblme.org/About_BOBLME_Brochure 2011.pdf



This newsletter was compiled and designed by Alasdair Forbes and Forbes Communications in conjunction with the Regional Coordination unit of the BOBLME Project, Phuket, Thailand. For further information please visit our website at www.boblme.org.