

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

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Sri Lanka

Thailand

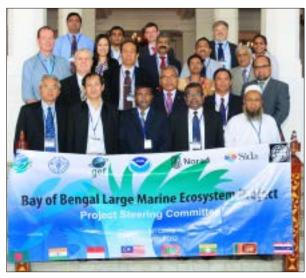
A major milestone

he members of the Project Steering Committee (PSC) of the Bay of Bengal Large Marine Ecosystem (BOBLME) Project have adopted the BOBLME Transboundary Diagnostic Analysis, or TDA – the findings of a two-year study that identified the major issues affecting the health of the Bay of Bengal ecosystem.

They also accepted the findings of the project's mid-term evaluation – which concluded that the project is well on track (see page 3).

The crucial meeting, at the Galle Face Hotel in Colombo from March 20 to 22, was attended by PSC members from Bangladesh, India, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand, representing the lead government agencies in environment and fisheries.

Other participants included representatives from the donor and



Delegates at the Galle meeting of the BOBLME PSC.

implementing partner agencies – SIDA, the FAO and the World Bank.

Mr Koralage Ajith Ilex Silva, Director of Policy and Planning at Sri Lanka's Ministry of Environment and Natural Resources, was elected Chair of the PSC in 2012.

Apart from endorsing the TDA – described by Regional Coordinator Dr Chris O'Brien as "a major milestone" – the PSC members now have the task of finishing their Strategic Action Plan (SAP) for which they have set an ambitious deadline of March 2014. This will require intensive consultations and a series of multinational agreements.

A coordinating body will also have to be established to take over the work of the Regional Coordination Unit when the BOBLME project ends later the same year.

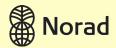
Dr O'Brien thanked the Sri Lankan hosts for their "magnificent" organisation of the meeting. The next meeting of the PSC is

scheduled to take place in India in March next year.















Areas of the Sunderbans, dark colour in this NASA image, would make fine transboundary MPAs. Below, the FAO guidelines.

FAO MPA guidelines spark discussion

arine protected areas, or MPAs, are increasingly recognised as an important management tool for fisheries under the "ecosystem approach to fisheries" management model.

BOBLME recently joined hands with the Southeast Asian Fisheries Development Centre (SEAFDEC) and the Food and Agriculture Organisation (FAO) to organise a workshop in Bangkok to disseminate recently published guidelines on MPAs.

Delegates agreed with many of the points made in the guidelines, published as part of an FAO series of technical guidelines for responsible fisheries, noting particularly that MPAs should be designed with fisheries objectives and benefits in mind.

BOBLME Chief Technical Adviser Dr Rudolf Hermes pointed out that although this might seem obvious, it was often



overlooked when protecting biodiversity was the main aim.

He also noted that almost all MPAs are established within the coastal waters of a single country. "Parts of the Gulf of Mannar [between Indian and Sri Lanka] would make beautiful MPAs.

"In the Bay of Bengal there are other opportunities for transboundary MPAs, for example areas of the Sunderbans [India and Bangladesh] and the Myeik Archipelago [Myanmar and Thailand]."

After the main meeting was over, the BOBLME working group on MPAs stayed on for a further day of discussions on the implications of the FAO guidelines and to discuss how pilot MPA areas and projects might be supported through the BOBLME project.

These might include projects that have already begun in Bangladesh and Thailand.

The 198-page FAO guidelines may be bought in hard copy through Eurospan Group Customer Services (info@ eurospangroup.com) or may be downloaded free at http://www.fao.org/docrep/015/i2090e/i2090e.pdf

So far, so good

The mid-term evaluation (MTE) of the BOBLME Project was recently completed on behalf of the FAO by independent consultants Dr Sherry Heileman and Arne Andreasson. Here Mr Andreasson answers questions about their conclusions.

■ What was your overall rating of the project so far? How does this compare with other projects you have evaluated?

This is a complex project aiming to bring together eight countries to create a joint vision, to build consensus on how to address these issues and then create mechanisms for joint actions.

Just bringing eight countries around a table to talk is an achievement. In addition, the project has created a momentum through a series of workshops, meetings and consultancies, which have worked on important issues, but also served to create the embryo of a joint vision, and enhanced understanding of problems and proposed actions

The project has made considerable progress towards most of the expected outputs and outcomes and the MTE confirmed its status as "satisfactory".

We were impressed by the efficient and effective project management and clear, concise reporting from the project.

The project management in particular would get a favorable ranking compared with many other projects.

■ What were the aspects in which the greatest progress has been made?

The process for the preparation of the transboundary diagnosis analysis [TDA] was impressive.

Although not all countries did enough, this was an expression of interest and commitment to the project on a technical level in most countries.

The revised TDA is a good document which will be a sound basis for the strategic action plan (SAP).

Also, the project has provided training and other forms of capacity development for the member countries and raised awareness about problems for the sustainable management of the bay.

■ You noted a lack of political commitment. Was that because the project has not reached people at that



Dr Heileman (left) and Mr Andreasson conduct an interview during their MTE research.

level, or because of reluctance at that level to commit to regional pacts and actions?

Politicians want to see practical, concrete effects that relate directly to people and their livelihoods. This may be one reason for the limited political commitment at this stage.

Another may be that the project does not have sufficient links into the political level. Fisheries research institutions, which were effective during the study and planning processes, may not be as effective in building commitment and support at senior management and political levels.

We could not detect any enthusiasm at higher levels for a region-wide organization. This may contribute to limited political support.

But the project has two years more to go. If the recommendations from the MTE are followed – not least the one about strengthening the RCU [Regional Coordination Unit] to allow more strategic work – awareness can be built on all levels and thereby, hopefully, greater commitment.

And, being optimistic, a second phase with the project providing the platform for regional cooperation, could possibly enhance the interest in region-wide organized cooperation.

■ You make a call in the MTE for more onthe-ground activities. For example?

One approach which was proposed was more focus on a series of pilot projects or case studies instead of workshops, working groups and training courses.

These could have addressed

transboundary issues like management of a shared fish stock or integrated coastal zone management.

■ Only three countries have appointed full-time national technical advisers (NTAs), and attendance at PSC meetings is patchy. Solutions?

This is a tricky question with several dimensions.

Yes, we concluded that attendance in PSC meetings lacked continuity and that the right people don't always attend workshops and training courses.

This may be due in part to lack of commitment to the project, but it could also be related to the demand for people to attend meetings; one comment we heard was, "We are running out of people."

Another contributing reason is that overseas travel is regarded in some countries as a reward and is therefore allocated on a rotational basis.

The lack of NTAs is, again, an issue with several dimensions. While in some countries it may be a lack of capacity, in most cases I think the project does not appear on the agenda at higher levels.

We would very much like to see the countries allocating sufficient resources during the crucial SAP formulation and adoption process.

There should be a common commitment to conclude the project with a successful outcome. For that you need strong national teams and you need to have the politicians on board.

Good progress for Hilsa WG

he BOBLME Hilsa Fisheries Assessment Working Group met in Mumbai, India, on April 24 and

The meeting was attended by four members from Bangladesh, five from India, one from Myanmar and the Stock Assessment Coordinator from the BOBLME project.

During their deliberations, they developed an understanding of how India, Bangladesh and Myanmar would assign fishery management stock status advice in the region.

The WG also agreed to a common framework for management, and a long-term strategic action plan for the region.

Of particular relevance were the shared research plans across the three countries, to be used to improve current understanding of Hilsa stocks across the three countries, and to create a database of historic catch and effort data in the region.

The Stock Assessment Coordinator, Dr. Rishi Sharma, presented an integrated modeling framework encompassing all pieces of data, and demonstrated how the stock varies in abundance over time.

In addition, Bangladesh and Myanmar updated their time series of data, and India, under Dr Malay Naskar's guidance, developed similar integrated approaches to management for the region.

The working group members are developing a nurturing and collaborative



Hilsa Working Group members take a break for a group photograph.

attitude to improving the understanding in the region of Hilsa.

Based on preliminary model results, it appears that the stock may be overfished, though actions being taken by Bangladesh are ensuring rebuilding of the stock.

One of the key objectives of the WG is to establish how these policies could be harmonized across the region so that all countries will benefit in the long run.

In addition a standardized sampling plan for catch and effort data in the region is

being developed, with the Fishery Survey of India taking the lead and coordinating this with Bangladesh and Myanmar.

Finally, a survey to assess Hilsa abundance will be targeted for the month of September to get an independent estimate of biomass for the region.

The WG chalked out a plan of action for the next 18 months and will meet again in Myanmar in August to continue developing the management framework document.

IOSEA turtle report a must-read

Il eight BOBLME countries are now signatories of the Indian Ocean-Southeast Asia (IOSEA) Marine Turtle Memorandum of Understanding. In Dec. 2011, Malaysia has joined, making it the 33rd country to sign the MOU. The signing was, in a sense, a formality. Malaysia has long had a very active policy on conservation of marine turtles.

Much more information on efforts to conserve turtles can be found in the recently launched Review of National Reports of eight BOBLME countries, pursuant to implementation of the IOSEA Marine Turtle MoU, prepared by the IOSEA MoU Secretariat for the BOBLME Project.

Aside from the assessment of country reports, with emphasis on interactions between fisheries and turtles, this review



also analyzed information from IOSEA Site Datasheets regarding presence and abundance of species, threats, and remedial measures.

The report concludes that all BOBLME countries have national conservation and action plans in various stages of implementation, and all use measures to minimize or reduce the mortality of turtle

eggs, hatchlings and nesting females.

Legislation for the protection of critical habitats exists, but there is still weak enforcement and monitoring.

Capacity building and habitat studies were identifed as essential or key areas requiring international assistance, and these findings will become valuable input into the BOBLME Strategic Action Programme (SAP), now being developed.

The BOBLME-IOSEA collaboration also resulted in the expansion of an online bibliography of turtle-related documentation for the BOBLME countries and the Western Indian Ocean. In the course of the work, over 1,300 citations were added to the IOSEA bibliography, most with abstracts, including 467 with linked PDF versions of the papers and reports.

To see these, visit ioseaturtles.org

BOBLME PROFILE: U MYA THAN TUN

The Dolphin Protector

Mya Than Tun is the BOBLME national coordinator for Myanmar. Born in 1954 in Meikhtila, in the Mandalay Region, he studied zoology, specialising in ichthyology, receiving a BSc and master's degree from Rangoon Art and Science University in the 1980s.

He is currently Assistant Director of the Department of Fisheries, under the Ministry of Livestock and Fisheries.

"After graduating I worked from 1980 to 1988 with the FAO's Marine Fisheries Resources Survey and Exploratory Fishing Project, as a junior fisheries scientist, working alongside the People's Pearl and Fisheries Cooperation.

"I conducted marine fisheries surveys and research along the coastal areas of Myanmar, with an FAO consultant and a master fisherman."

The team conducted research into marine flora and fauna and looked at appropriate ways to assess marine stocks, particularly of demersal species.

They also worked on a public education and awareness programme for environment conservation.

He enjoys being out on the water, conducting surveys and research on coral reefs, marine mammals and sea grasses. He has been an open-water scuba diver since 1999, and after attending a training course in Nga Trang, Vietnam, has collaborated with the Global Coral Reef Monitoring Programme.

But the achievement of which he is proudest is his work on the Irrawaddy Dolphin (*Orcaella brevirostris*).

"I was the pioneer scientist of Irrawaddy dolphin research, surveying the entire range of the Irrawaddy – or Ayeyawady – River, and I established the Irrawaddy Dolphin Protected Area.

"I organised and persuaded the Myanmar government to establish the Irrawaddy Dolphin Protected Area, and also got their agreement for my protected area management plan.

"I also published the first fisheries reference book in Myanmar, *Marine Fishes of Myanmar* in 2000.

"Since 2002, and still now, we continue to conduct surveys and research, monitoring and surveillance in upper Myanmar."



Above, Irrawaddy dophin. Mya Than Tun (left – who took the photo) was instrumental in the establishment of the Irrawaddy Dolphin Protected Area in Myanmar.

He enjoys working with the BOBLME project, particularly explaining and discussing Myanmar's marine ecosystem status and the threats to it, "especially what I found in the Mergui Archipelago".

"This is our first experience in Myanmar of ecosystem conservation work.

"Much depends on the donor agencies and the funding for the project. We need human resources development and capacity building to conduct marine ecosystem research activities.

"We need to train young scientists so

that they understand our resources and environment and want to do something to support sustainable practices and use of these resources."

He adds, "I believe that if we want to conserve and maintain a healthy ecosystem and healthy fisheries we need to spend more money." Many scientists lack incentives and budgets for their activities, he says.

One ongoing challenge for BOBLME, he believes, is that because member countries conduct their own research and conservation activities, the data and information they amass are often not comparable.

"We need to establish a regional collaborative organization to conduct activities in our region so that we get data and information scientifically, internationally and in a way that is comparable and reliable."

BOBLME agrees and has been taking steps to standardise data from all the project countries. (See page 8.)



One of the main aims of the meeting was to eliminate duplication of work by the various partner organisations.

Partners meeting aims to iron out inefficiency

he BOBLME project recently organised a meeting of partners at the Amari Watergate hotel in Bangkok to look at ways in which they might work together more efficiently and effectively.

Regional coordinator Dr Chris O'Brien explained, "The Project has established partnerships with many of the regional bodies and organisations that are working in the Bay of Bengal.

"This has been a most constructive aspect of the Project, and we are continually learning of organisations that are funding or implementing activities that are complementary with the

BOBLME Project (and/or those of our partners).

"However, we are also becoming increasingly aware that there are work overlaps and, worse, duplication of work.

"The meeting with partners aims to improve understanding of the resource management activities in the Bay of Bengal – past, present and future – and foster future collaborations, assist partners in making their funding go further and avoid duplication of work.

"BOBLME will review the activities of organisations operating in the Bay of Bengal and attempt to describe the differences and commonalities of work being undertaken, so we can better understand the linkages, complementarities and overlaps."

At the meeting, on February 28 and 29, BOBLME's national coordinators gave an overview of initiatives in their countries, followed by similar presentations from partner organisations.

This was followed by a presentation of the findings of a web-based review of the activities of organisations operating in the Bay of Bengal in order to arrive at a better understanding of the linkages, complementarities and overlaps between the various organisations' activities.

A general discussion on opportunities for collaborations wrapped up the day.



Dr Sevvandi Jayakody

Workshop has immediate effect on presentations

he President of the Sri Lanka
Association for Fisheries and Aquatic
Resources (SLAFAR), Dr Sevvandi
Jayakody, and Regional Coordinator of
BOBLME, Dr Chris O'Brien, spent a day in
May helping 50 attendants at a SLAFAR
conference sharpen up their presentation skills.

"We helped them to organise their data, to understand the use of colours and so on, and to get to the bottom line," Dr O'Brien explained.

Dr Jayakody, who is from the Department of Aquaculture & Fisheries, Wayamba

University, acted as a mentor at a similar BOBLME workshop in Phuket, Thailand, a year ago, run by Dr Peter Rothlisberg of Australia, and was key in adapting what she had learned to the cultural and scientific milieu of Sri Lanka, he added.

Dr O'Brien said he was gratified to see that the workshop had an immediate effect. In presentations at the SLAFAR Annual Meeting, he explained, "You could see from the presentations who had been on the course and who had not."

Concern over spread of diseases

B OBLME recently co-organised a regional meeting with the FAO and the Network of Aquaculture Centres in Asia-Pacific (NACA) in Bangkok, to discuss the spread of diseases through aquaculture.

NACA is particularly concerned about the emergence of a new shrimp disease that has been named Early Mortality Syndrome (EMS) or Acute Hepato-Pancreatic Necrosis Syndrome (AHPNS).

The disease affects both Penaeus monodon (giant tiger prawn) and Litopenaeus vannamei (white-leg shrimp) and is characterized by mass mortalities (up to 100 per cent in some cases) during the first 20 to 30 days of culture.

The disease was reported to have caused significant losses among shrimp farmers in China in 2009, in Vietnam the following year, in Malaysia in 2011 and in Thailand this year.

On its website (enaca.org) in May, NACA explained, "This degenerative pathology of Hepato-Pancreas is highly suggestive of a toxic etiology, but anecdotal information suggests that disease spread patterns may be consistent with an infectious agent.

"The primary cause or pathogen has not been identified yet."

NACA has launched an awareness campaign and "improved surveillance and reporting efforts on the part of all stakeholders including farmers".

Shrimps and prawns are by no means he only species moved live from one country to another, the meeting



At risk: tiger prawns are one of the species hit by Early Mortality Syndrome.

noted. Others include groupers, blood cockles, abalone, seabass, ornamental species, mudcrabs, cobia and lobsters.

Another concern is the transmission of diseases to wild populations via escaped members of cultivated populations or

through effluent released from aquaculture.

Data are to be collected on transboundary transmission of aquatic disorders and will be fed into the BOBLME SAP.

ICM students complete course at AIT

wenty-one participants from the BOBLME region, along with eight from Pakistan, the Seychelles and Vietnam, have now completed a course in integrated coastal management (ICM) at the Asian Institute of Technology (AIT) in Bangkok.

The course has five modules: Marine and coastal ecosystems; Principles of ICM; Tools for ICM; Coastal Project Management; and Coastal Management and Evaluation, with 90 hours of homebased assignment, including field work.

Completion of the course was delayed by the severe flooding in Bangkok last year, which at its height inundated the



AIT campus to a depth of three metres. Rehabilitation work, much of it funded by alumni of the institute finally allowed courses to resume there in February. The aim of the course, organised by the BOBLME Project, the IUCN and Mangroves for the Future, was to increase the number of ICM practitioners so that they can contribute to better management of coastal resources in the Bay of Bengal and elsewhere in Asia, and to the wider use of ICM.

It is also part of an initiative to encourage resources co-management by government and stakeholders, or community-based ICM, after it has become increasingly clear that a top-down approach to coastal management, run by government, has failed to achieve desired objectives.

MEMORANDA

6-10



The Great Mosque of Medan

Medan meeting moves toward standardisation of fish data

epresentatives of all eight BOBLME member-countries met in Medan, Indonesia, on March 19 and 20 to report on updates to their statistical systems to manage data collected on focus species – Hilsa, mackerel and sharks.

The meeting, organized jointly with the Indonesian Ministry of Marine Affairs and Fisheries, drew 26 participants from the BOBLME member-countries, along with two representatives from the Bangkok-based Southeast Asian Fisheries Development Center (SEAFDEC), and one from the Seychelles-based Indian Ocean Tuna Commission.

In addition to the updates, a status review of countries' data collection systems, carried out late in 2011 by BOBLME external reviewer/consultant Dr Kim Stobberup was presented by Stock Assessment Coordinator Dr Rishi Sharma.

Based on Dr Stoberrup's report, Dr Sharma made recommendations for improvements, and it was agreed that an updated system of catch-and-effort statistics for the focal species was to be completed by the third quarter of 2012.

This was the second of two meetings, and recommendations to develop a standardized system of collection, similar to SEAFDEC's current system, were made for the region, allowing management measures to be monitored and improved over time.

DIARY

August 2012

Unesco-IOC/Westpac Summer School on Monsoon Onset Monitoring and its Social & Ecosystem Impacts, Qingdao, China.

9-10 BOBLME Scientific Presentation Workshop, Bangkok, Thailand.

11 International Conference on Environment, Agriculture and Food Sciences, Phuket, Thailand.

13-17 AOGS-AGU (WPGM) Joint Assembly, Singapore 21-24 BOBLME Scientific Writing Workshop, Bangkok, Thailand

23-24 International Conference on Fisheries and Marine Sciences, Negombo, Sri Lanka.

28-29 SEAFDEC-SĬDA 2nd Andaman Sea Meeting, Phuket, Thailand

29-31 BOBLME Hilsa Working Group Meeting, Naypyidaw, Myanmar.

31- Aug 1 COBSEA Regional Inception workshop for the KOICA Yeosu Project on Coastal Erosion, Bangkok, Thailand

September 2012

1	5th International Conference on Environmental and Computer Science, Phuket, Thailand.
1	2nd International Conference on Biotechnology and
	Environment Management, Phuket, Thailand.
6-15	IUCN World Conservation Congress, Jeju, South Korea
14	International Conference on Biodiversity & Sustainable
	Energy Development, Hyderabad, India.
17-19	APFIC Regional Consultative Fisheries Forum, Da
	Nang, Vietnam
20-21	International Conference on Hazards and Disasters,
	Negombo, Sri Lanka.
24-26	International Waters Science Conference, Bangkok,
	Thailand
28	2012 2nd International Conference on Environment and
	BioScience (ICEBS 2012), Phnom Penh, Cambodia.

October 2012

1-4	BOBLME Scientific Presentation Workshop.
3-5	BOBLME Policy Workshop, Penang, Malaysia
8-19	11th CoP CBD Hyderabad, India
15-20	IOP / SIBER / IOGOOS Meeting, Capetown, South
	Africa
16-18	SEAFDEC Workshop on Assessment of the Impact of
	IUU Fishing and EC Regulation 1005/2008 on Small-
	scale Fisheries in the Southeast Asian Region, Vietnam
22-26	2nd Conference for Regional Cooperation in Ocean and
	Earth Science Research in the South China Sea, Kuala
	Lumpur, Malaysia.

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.