

# Current Legal Developments

## Bay of Bengal

### **Progress Towards Collaborative Sustainable Resource Management for the Bay of Bengal Large Marine Ecosystem**

Large marine ecosystem (LME) management is an ambitious example of the myriad creative ways in which coastal states are giving practical effect at the regional level to the Preamble of the 1982 United Nations Convention on the Law of the Sea (the LOSC Convention): 'the problems of ocean space are closely interrelated and need to be considered as a whole'. Bangladesh, India, Indonesia, Malaysia, Maldives, Myanmar, Sri Lanka and Thailand border the Bay of Bengal (BOB) LME<sup>1</sup> and have embarked on a long-term initiative that will culminate in a strategic action programme (SAP), intergovernmental institutional arrangements and a sustainable financing strategy for holistic, collaborative management of the BOBLME. In the preparatory phase of the BOBLME Program, communication and collaboration mechanisms among the BOBLME countries were established, and the preliminary 'Framework Transboundary Diagnostic Analysis' (FTDA) and the Project Brief<sup>2</sup> were prepared. The first six-year main implementation phase as set out in the Project Brief is expected to begin in October 2005.<sup>3</sup>

Notable achievements of the BOBLME Program already include contributions to international marine policy and law, discussed below.

- <sup>1</sup> The Bay of Bengal (BOB)LME is defined as comprising the coastal watersheds, islands, reefs, continental shelves and coastal and marine waters of Bangladesh, the east coast of India, the Indonesian provinces of Aceh, Riau, and North and West Sumatra, the west coast of Peninsular Malaysia, the Maldives, Myanmar, Sri Lanka and the west coast of Thailand.
- <sup>2</sup> The BOBLME Program is executed by the Food and Agriculture Organization (FAO), implemented by the World Bank and funded by the Global Environment Facility (GEF), the Swedish International Development Agency (Sida), the BOBLME countries, FAO, Japan, and the US National Oceanic and Atmospheric Administration (NOAA). The Government of India hosts the BOBLME Program office in Chennai. Dr Random Dubois, Senior Environmental Adviser, FAO, prepared the Project Brief, the present author prepared the preliminary FTDA and Ms Barbara Cooney, FAO GEF Focal Point, guided GEF and World Bank liaison.
- <sup>3</sup> In the interim, project appraisal, endorsement, donor co-financing and letters of agreement are being secured and the preliminary FTDA is being reviewed by the BOBLME countries.

## Consultative Process

The FTDA and the Project Brief are the result of extensive country-driven, multi-sectoral, national and regional consultations;<sup>4</sup> these were carried out through the communications and collaboration network set up in the preparatory phase. The Project Brief expands the network for the main implementation phase to accommodate the greater scope and demands of this phase. Despite its complexity and the time and resources it requires, this painstaking, inclusive, multi-tiered consultative process is essential to build mutual confidence and implement effective policies and legislation that benefit from national and regional stakeholder ownership, involvement and expertise.

## The Project Brief

The Project Brief consists of five mutually reinforcing components<sup>5</sup> around a central theme of 'stabilizing and reversing fisheries depletion in LMEs through ecosystem-based approaches'.<sup>6</sup> It supports catalytic interventions promoting collaborative management of the BOBLME at four integrated levels with the following key outputs:

<sup>4</sup> This process involved: (i) establishment and meetings of the Program Steering Committee; (ii) establishment and meetings of national task forces and national steering committees; (iii) a comprehensive literature review; (iv) national reports; (v) national consultations; (vi) regional thematic papers; (vii) international peer review; (viii) experts meetings; and (ix) national and regional workshops. The principal documents are posted at <http://www.fao.org/fi/boblme/website/index.htm>. The Project Brief and its Executive Summary are posted at [http://www.gefweb.org/Documents/Work\\_Programs/WPFebruary05.html](http://www.gefweb.org/Documents/Work_Programs/WPFebruary05.html).

<sup>5</sup> Outline of Project Brief Components—

- (1) Strategic action programme (SAP):
  - (i) TDA preparation;
  - (ii) BOBLME institutional arrangements;
  - (iii) Sustainable financing strategy;
  - (iv) SAP formulation and adoption.
- (2) Coastal/marine natural resources management and sustainable use:
  - (i) Community-based integrated coastal management (stock-taking);
  - (ii) Improved policy harmonisation (mainstreaming);
  - (iii) Collaborative regional fishery assessments and management plans;
  - (iv) Collaborative critical habitat management.
- (3) Improved understanding and predictability of the BOBLME:
  - (i) Large-scale processes and dynamics affecting the BOBLME;
  - (ii) Marine-protected areas in the conservation of regional fish stocks;
  - (iii) Improved regional collaboration;
  - (iv) Establishment of a geo-referenced database.
- (4) Maintenance of ecosystem health and management of pollution:
  - (i) Indicators of a healthy BOBLME;
  - (ii) Coastal pollution loading and water quality criteria.
- (5) Project management:
  - (i) Establishment of the RCU;
  - (ii) Monitoring and evaluation system;
  - (iii) Project information dissemination system.

<sup>6</sup> This was identified as one of the key gaps in the recent review of the GEF's International Waters (IW) portfolio which included the BOBLME Program.

- (1) *Regional* (all BOBLME countries):
  - (i) the TDA;
  - (ii) the SAP;
  - (iii) a regional shark management plan;
  - (iv) a harmonised system of fish data collection and information sharing;
  - (v) a process leading to the eventual establishment of a regional system of marine protected areas and fish refugia;
  - (vi) a study identifying key data gaps and research priorities leading to an increased understanding of large-scale oceanographic and ecological processes in the BOBLME;
  - (vii) closer collaboration with other regional and global environmental monitoring programmes;
  - (viii) a geo-referenced data base;
  - (ix) development of an agreed set of environmental indicators to measure the health of the BOBLME;
  - (x) regional pollution assessment and development of water-quality criteria;
  - (xi) permanent institutional arrangements and development of a financial sustainability mechanism and strategy;
  - (xii) a regional co-ordinating unit (RCU).
- (2) *Sub-regional* (two to seven BOBLME countries):
  - (i) fishery management plans for selected key-shared fish stocks;<sup>7</sup>
  - (ii) collaborative approaches to manage coastal/marine critical habitats shared by two or more countries.
- (3) *National* (inter-ministerial):
  - (i) capacity-building and training;
  - (ii) improved policy framework;
  - (iii) information dissemination.
- (4) *Sub-national* (local coastal community):
 

Participation in sub-regional and national activities.

These activities will provide critical inputs to SAP development (see also below) and contribute to collaborative coastal and marine policy and law formulation, harmonisation and implementation in the BOBLME region by:

- (1) Enhancing understanding of the policy processes in the BOBLME region, improving policy-forming capacity; 'mainstreaming' policy recommendations into national policy and legislation; and facilitating regional information exchange on policy and legislation.

<sup>7</sup> Indian mackerel (Bangladesh, India, Indonesia, Malaysia, Myanmar and Thailand) and Hilsa (Bangladesh, India and Myanmar).

- (2) Improving collaborative regional and sub-regional management and monitoring of fisheries, critical habitats, marine protected areas, fish refugia and water quality.
- (3) Distilling lessons learned from the extensive body of community-based integrated coastal management (ICM) projects in the BOBLME region; providing policy recommendations to sustainably (co-)manage community-based fisheries and habitats; and developing alternative livelihoods among fisher communities.

### The Strategic Action Programme and Intergovernmental Institutional Arrangements

The SAP will initially focus on living marine (fisheries) resources and the identified priority transboundary<sup>8</sup> environmental threats<sup>9</sup> to those resources. SAP formulation will be guided by lessons learned from simultaneously conducted, complementary activities outlined above and fully described in the Project Brief. This approach to SAP design is also intended to ensure that the SAP will be a living, flexible document, responsive to experiences gained and changes in circumstances. The SAP will be developed during and adopted at the end of the first implementation phase, as will the intergovernmental institutional arrangements to implement the SAP. Many pertinent international, regional and sub-regional institutions and programmes<sup>10</sup> operate in the Bay, and already

<sup>8</sup> 'Transboundary' issues in this context are *shared* between two or more BOBLME countries and cross their borders, or are *common* to two or more BOBLME countries without necessarily crossing country borders.

<sup>9</sup> The three priority transboundary environmental threats to these resources identified by the BOBLME countries by the preliminary Framework Transboundary Diagnostic Analysis (FTDA) are: (i) overexploitation of living resources, (ii) critical habitat degradation, and (iii) land-based sources of pollution. The final TDA will present a scientific, quantifiable and politically neutral analysis of these threats to inform SAP formulation, assist in identifying activities, and serve as an environmental baseline against which to measure results. These threats were selected by the BOBLME countries from a larger set of BOBLME-related transboundary concerns that may have environmental effects but were not viewed as environmental problems *per se* (in particular, livelihoods, food security, absence of legal mechanisms and inadequate enforcement). These latter concerns were viewed as more appropriately analysed as causes of the three aforementioned environmental threats, and they will be addressed accordingly in the TDA and the SAP.

<sup>10</sup> Selected relevant regional programmes/projects—

- (i) *Asia-Pacific Economic Cooperation (APEC)*. Created in 1989 to promote regional economic co-operation. A Fisheries Working Group was established in 1991 to focus on conservation and sustainable use of fisheries resources and aquaculture, development of solutions to common resource management problems, enhancement of food safety and quality of fish and fisheries products, and sector-specific work on trade and investment.
- (ii) *Asia-Pacific Fishery Commission (APFIC)*. Established in 1976 and evolved out of the Indo-Pacific Fisheries Council to promote full and proper utilisation of living aquatic resources by developing and managing fishing and aquaculture.
- (iii) *Association of Southeast Asian Nations (ASEAN)*. A political association created in 1967 to accelerate economic growth and achieve social progress and cultural development. Under ASEAN, a Fisheries Consultative Group was created in association with SEAFDEC in 1998 to support regionalisation of the Code of Conduct for Responsible Fisheries, address fish-trade and environmental issues, collect information and develop a five-year programme on sustainable fisheries for food security.

form part of the regional BOBLME collaborative network. However, none appear to have the mandate, geographical scope, relevant country membership and/or capacity to support this challenging and innovative LME approach to address the transboundary issues characteristic of the BOBLME. Nevertheless, their experience is an essential input to designing institutional arrangements appropriate to the specific demands of BOBLME management and SAP implementation. Thus enriched, when finalised, the SAP and its institutional structure are likely to offer innovative solutions to the management of transboundary marine environmental concerns in an LME context in general and those that are fisheries related in particular.

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- (iv) *Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic Cooperation (BIM-STECC)*. Co-operative agreement to foster socio-economic development and create an enabling environment for co-operation to enhance the livelihoods of the peoples in the region, including strengthening fisheries development and management.
- (v) *Bay of Bengal Programme Inter-governmental Organization (BOBP-IGO)*. Established in 2003 to support regional co-operation in fisheries development with a major focus on socio-economic improvement of small-scale fisheries and fish farmers.
- (vi) *East Asian Seas Programme (EAS)*. Part of UNEP's Regional Seas Programme to protect and manage the marine environment and related coastal ecosystems in East Asia.
- (vii) *Indian Ocean Tuna Commission (IOTC)*. Established in 1993 to promote co-operation for conserving and achieving the optimum utilisation of tuna and other stocks covered under the Agreement.
- (viii) *Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia and Pacific Region (INFOFISH)*. Established in 1987 to provide marketing information and technical advisory services to the fishery industry of the Asia-Pacific region.
- (ix) *IOC Regional Committee for the Central Indian Ocean (IOCINDIO)*. A regional subsidiary body of the IOC created in 1982, its objectives are to plan, promote and co-ordinate co-operative regional marine scientific projects, assist in implementing regional components of global ocean science programmes, facilitate transfer of scientific information, promote exchange of oceanographic data, and identify needs for training, education and mutual assistance in marine sciences.
- (x) *Network of Aquaculture Centres in Asia and the Pacific (NACA)*. Initially established through a donor-supported project, NACA became an IGO in 1990 to promote rural development through sustainable aquaculture, focusing on capacity-building, research, information dissemination, aquatic animal health, disease management and policy guidance.
- (xi) *Southeast Asia Fishery Development Center (SEAFDEC)*. Established in 1967, SEAFDEC operates through four centres in SE Asia to promote sustainable development of fisheries in the region through research, training and information dissemination.
- (xii) *South Asian Association for Regional Cooperation (SAARC)*. Created in 1985 to promote economic co-operation and trade.
- (xiii) *South Asian Co-operative Environment Programme (SACEP)*. Established in 1982 to promote and support conservation and management of the environment in South Asia in a co-operative manner.
- (xiv) *South Asian Seas Programme (SAS)*. Part of UNEP's Regional Seas Programme to protect and manage the marine environment and related coastal ecosystems in South Asia.
- (xv) *World Fish Center (WFC)*. An international research centre that promotes an ecosystem-oriented, multi-disciplinary partnership approach to fisheries research and development through contributing to improved productivity, environmental protection, saving biodiversity, improving policies and strengthening national institutions.

## International Legal Instruments

The BOBLME initiative benefits from the participation of the BOBLME countries and contributes to the implementation of numerous binding and non-binding international legal instruments pertaining to the sustainable management and use of the oceans.<sup>11</sup> With regard to the overarching and fundamental LOSC Convention, the Project Brief gives constructive effect to many of its provisions, including Part XII on Protection and Preservation of the Marine Environment through its co-operative approach focusing on the whole BOBLME, 'taking into account characteristic regional features' (Article 197), and in the delicate balance struck by the activities set out in the Project Brief between the duty of marine environmental protection (Article 192) and the

<sup>11</sup> Selected relevant BOBLME legal instruments—

| Legal Instrument  | Bangladesh                    | India                         | Indonesia                    | Malaysia                     | Maldives                      | Myanmar        | Sri Lanka                     | Thailand                     |
|---|-------------------------------|-------------------------------|------------------------------|------------------------------|-------------------------------|----------------|-------------------------------|------------------------------|
| UN Law of the Sea Convention *  | P<br>(07/01)                  | P<br>(06/95)                  | P<br>(02/86)                 | P<br>(10/96)                 | P<br>(09/00)                  | P<br>(05/96)   | P<br>(07/94)                  | S<br>(10/82)                 |
| Convention on Biological Diversity *  | P<br>(08/96)                  | P<br>(02/94)                  | P<br>(08/94)                 | P<br>(06/96)                 | P<br>(11/92)                  | P<br>(11/94)   | P<br>(03/94)                  | P<br>(01/04)                 |
| UN Fish Stocks Agreement * <sup>12</sup>  | S                             | P<br>(08/03)                  | S                            |                              | P<br>(12/98)                  |                | P<br>(10/96)                  |                              |
| FAO Compliance Agreement* <sup>13</sup>   | Res.<br>15/93**               | Res.<br>15/93**               | Res.<br>15/93**              | Res.<br>15/93**              | Res.<br>15/93**               | P**<br>(09/94) | Res.<br>15/93**               | Res.<br>15/93**              |
| FAO Code of Conduct for Responsible Fisheries   | P***                          | P***                          | P***                         | P***                         | P***                          | P***           | P***                          | P***                         |
| Jakarta Mandate on Marine and Coastal Biological Diversity  | A                             | A                             | A                            | A                            | A                             | A              | A                             | A                            |
| UNEPs Regional Seas Agreements/ Programs  | A<br>South<br>Asian<br>(1995) | A<br>South<br>Asian<br>(1995) | A<br>East<br>Asian<br>(1981) | A<br>East<br>Asian<br>(1981) | A<br>South<br>Asian<br>(1995) |                | A<br>South<br>Asian<br>(1995) | A<br>East<br>Asian<br>(1981) |
| Declaration and Global Programme of Action on Protection of the Marine Environment from Land-Based Activities | A                             | A                             | A                            | A                            | A                             |                | A                             | A                            |
| FAO Committee on Fisheries (COFI)   | M                             | M                             | M                            | M                            | M                             | M              | M                             | M                            |

Key: \* Legally binding on Parties and in force.

P (Party); A (adopted); M (member); (Signatory).

\*\* Present at the unanimous adoption by the Conference at its 27th Session on 24 November 1993 of FAO Conference Resolution 15/93 approving the Compliance Agreement as well as its forwarding by FAO to its Members for their acceptance of the Agreement in accordance with their internal constitutional procedures; Myanmar has since deposited its instrument of formal acceptance with FAO.

\*\*\* Present at the unanimous adoption by the Conference at its 28th Session on 31 October 1995 of FAO Conference Resolution 4/9 approving the Code of Conduct.

right to sustainably exploit marine resources in accordance with that duty (Article 193). This balance is also reflected in, for example, Articles 56 and 61–64 of Part V on the Exclusive Economic Zone (EEZ), Article 77 of Part VI on the Continental Shelf, and Articles 87 and 116–120 of Part VII on the High Seas, and further elaborated in the UN Fish Stocks Agreement (FSA),<sup>12</sup> the FAO Compliance Agreement,<sup>13</sup> and the FAO Code of Conduct for Responsible Fisheries. The Project Brief is also consistent with Article 194 with respect to ‘critical habitats’,<sup>14</sup> Article 200 on participation in studies, research programmes and information exchange, Article 201 on establishing scientific criteria for regulations, Article 204 on monitoring and environmental assessment, and the obligation to endeavour to harmonise policies on the marine environment at the regional level.

The Project Brief also assists the BOBLME countries in meeting the World Summit on Sustainable Development (WSSD) 2002 Plan of Implementation targets, including developing and implementing national and regional plans of action to put into effect the International Plans of Action (IPOAs) on illegal, unreported and unregulated fishing by 2004 and on fishing capacity by 2005 (para. 30(d)); applying the ecosystem approach by 2010 (para. 29(d)); restoring depleted stocks by 2015 (para. 30(a)); establishing ‘representative networks’ of marine-protected areas by 2012 (para. 31(c)); strengthening regional co-operation and co-ordination, particularly among regional bodies (para. 29(f)). Meeting these targets will also comply with and give further detail to the LOSC regime and the Convention on Biological Diversity. It is hoped that the inclusion of these conventions in the BOBLME Project Brief, especially as set in the context of its illustrative activities, will encourage other countries to become parties to the conventions and to assist in their implementation.

## Conclusion

The BOBLME Program to date and the plan for its further development in its next phase as set out in the Project Brief are wholly consistent with the relevant international legal instruments. With regard to improving the effectiveness of their implementation, a particular innovation of the BOBLME Program that merits close attention to its further evolution is its iterative, action-oriented

<sup>12</sup> Agreement for the Implementation of the Provisions of the LOSC Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

<sup>13</sup> Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas.

<sup>14</sup> These are addressed by Art. 194(5) which requires measures to be taken that are ‘necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life’.

approach at four key administrative levels to guide the formulation of the SAP, which will be its own specific regional instrument to manage the BOBLME.

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