Learnings of the Third Phase of the Bay of Bengal Programme for Coastal Fisheries Management, 1994-1999

INTEGRATED COASTAL FISHERIES MANAGEMENT
LEARNINGS OF THE THIRD PHASE OF THE  
BAY OF BENGAL PROGRAMME  
FOR COASTAL FISHERIES MANAGEMENT, 1994-1999  

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BAY OF BENGAL PROGRAMME  
Chennai, India  
2000
Preface

This report describes and documents the lessons and learnings from the Third Phase of the Bay of Bengal Programme for Coastal Fisheries Management (BOBP) (1994-1999). It was prepared by two consultants, Dr Garry Preston and Dr. Y.S. Yadava, who over a period of three months reviewed BOBP literature (including the work of national consultants who documented the learnings for each country), visited member countries and project sites, held discussions with national project coordinators and BOBP staff. The two consultants divided the member countries among themselves for project visits.

The report discusses the issues concerning coastal management in the light of the Programme’s objectives and the lessons that emerged. The issues are discussed from the Programme’s standpoint as well as the standpoint of member-countries. The consultants have outlined their conclusions and recommendations.

Appendices to the main report include summaries of the lessons from each country prepared by seven national consultants.

The BOBP is a multi-agency regional fisheries programme which covers seven countries around the Bay of Bengal: Bangladesh, India, Indonesia, Malaysia, Maldives, Sri Lanka, Thailand. The Programme plays a catalytic and consultative role in developing coastal fisheries management in the Bay of Bengal to improve the conditions of small-scale fisherfolk in member-countries.

The BOBP is sponsored by the governments of Denmark and Japan. Member-governments of BOBP provide cash contributions. The executing agency is the Food and Agriculture Organization of the United Nations (FAO).
## Abbreviations and acronyms

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AFI</td>
<td>Aquaculture Foundation of India</td>
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<td>ASFDC</td>
<td>Andaman Sea Fisheries Development Centre (Phuket, Thailand)</td>
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<td>BFDA</td>
<td>Brackish Water Fish Farmers Development Agency (India)</td>
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<td>BOB</td>
<td>Bay of Bengal</td>
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<td>BOBP</td>
<td>Bay of Bengal Programme</td>
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<td>BOBP2</td>
<td>The second phase (1988-1994) of the Bay of Bengal Programme</td>
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<td>BOBP3</td>
<td>The third phase (1994-1999) of the Bay of Bengal Programme</td>
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<tr>
<td>CBFM</td>
<td>Community-based fisheries management</td>
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<td>CCRF</td>
<td>Code of Conduct for Responsible Fisheries</td>
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<td>CIBA</td>
<td>Central Institute of Brackishwater Aquaculture (Chennai, India)</td>
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<td>CMFRI</td>
<td>Central Marine Fisheries Research Institute (Kochi, India)</td>
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<td>CODEC</td>
<td>Community Development Centre (Chittagong, Bangladesh)</td>
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<td>CPDC</td>
<td>Coastal Peace and Development Committee (Kanyakumari District, Tamil Nadu)</td>
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<td>CPUE</td>
<td>Catch per unit of effort</td>
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<td>DFID</td>
<td>Department for International Development (United Kingdom)</td>
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<td>DOF</td>
<td>Department of Fisheries</td>
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<td>DOFM</td>
<td>Department of Fisheries Malaysia</td>
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<td>DFAR</td>
<td>Department of Fisheries and Aquatic Resources (Sri Lanka)</td>
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<td>ESBN</td>
<td>Estuarine set bag-net</td>
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<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>FRI</td>
<td>Fisheries Research Institute (Bangladesh)</td>
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<td>GEF</td>
<td>Global Environment Facility</td>
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<tr>
<td>GIS</td>
<td>Geographic Information System</td>
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<td>MFARD</td>
<td>Ministry of Fisheries and Aquatic Resources Development (Sri Lanka)</td>
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<td>MOFAMR</td>
<td>Ministry of Fisheries, Agriculture and Marine Resources (Maldives)</td>
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<td>MOFL</td>
<td>Ministry of Fisheries and Livestock (Bangladesh)</td>
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<td>MRC</td>
<td>Marine Research Centre (Maldives)</td>
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<td>NARA</td>
<td>National Aquatic Resources Agency (Sri Lanka)</td>
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<td>NGO</td>
<td>Non-government organisation</td>
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<td>PA2FM</td>
<td>Precautionary approach to fisheries management</td>
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<td>PNB</td>
<td>Phang Nga Bay (Thailand)</td>
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<td>RAP</td>
<td>FAO Regional Office for Asia and the Pacific</td>
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<td>RAKVK</td>
<td>Ramakrishna Ashram Krishi Vigyan Kendra (West Bengal, India)</td>
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<tr>
<td>TOR</td>
<td>Terms of reference</td>
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Foreword

The third phase of the BOBP (Bay of Bengal Programme for Coastal Fisheries Management) represented the FAO's first attempt to promote participatory management of coastal resources through a regional prograllime.

This document on the learnings of the BOBP's Third Phase is therefore important...for history, for coastal fisheries management, for the seven member-countries of BOBP, for other countries concerned with their coastal resources, for the FAO and other international agencies, for donors. The document compresses in 60-odd pages the work of five years of intense participatory effort initiated by the BOE3P and executed by member-countries with regular assistance and monitoring from the Programme.

Member-country cost-sharing was willingly shouldered by those countries that were able to do so. These “smart partnerships” brought immense satisfaction and pride to colleagues in the field.

While fisheries officials and decision-makers in the region are familiar with production-oriented effort (with projects to raise the catches and incomes of fisherfolk), management effort in small-scale fisheries has few precedeits to go by. In particular, the stakeholder approach is quite new. It is based on identifying the stakeholders, getting them to analyse their problems, and holding joint discussions with groups of stakeholders to discuss possible management actions, initiatives and solutions. As the discussions went on, differences in the perceptions of problems narrowed, while agreements concerning aspirations and solution options increased.

Patience and persistence were needed for the process, as well as a spirit of conviction, and confidence in the spirit and the substance of the stakeholder approach to management.

I think substantial progress was achieved in raising awareness in every member-country about participatory management processes...which may be slower than traditional management processes but are safer, sounder and surer. Participatory management mechanisms were also put into place in every country. But as this report on the BOBP's learnings points out, more work is needed to actually implement management solutions. The closure of the Programme before it has a chance to carry forward its good work fails to do justice to the goals of fisheries management. It also severely impairs the morale of stakeholders and their confidence in participatory processes. The consultants have pointed this out very well.

I congratulate the two main authors of this report, as well as the seven national consultants, for the excellent job they did in studying the work done under the Programme and extracting the lessons that emerged. I thank the member-countries for their co-operation and their commitment to coastal fisheries management. Together we came a long way. Hopefully, we will get further.

I would urge everyone concerned with coastal fisheries management in the BOBP member-countries and outside to pay attention to this report. I believe that reflecting on the report's conclusions and recommendations, and acting on them, is important if the process of participatory coastal resources management is to be carried forward.

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Andhra Pradesh
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West Bengal
Summary
Appendix 6 : Country summary - Indonesia
Appendix 7 : Country summary - Malaysia
Appendix 8 : Country summary - Maldives
Appendix 9 : Country summary - Sri Lanka
Appendix 10: Country summary - Thailand
India: Fishing fleet at Chinnamuttom, Tamil Nadu, gives an idea of the pressure on resources.

Bangladesh: Fisherfolk who depend on the resource-damaging setbagnet and push net fisheries need alternative livelihood options.
Sri Lanka: Laminated cards for identification of ornamental fish whose export is banned were printed. This was part of the BOBP-assisted pilot activity on conservation and management of the marine ornamental fishery.

Maldives: Integrated reef resources management was promoted through workshops, posters and publications.
Malaysia: The Pulau Payar Marine Park in Kedah was developed as a model for a Special Area Management Plan (SAMP) that sought to integrate land and water management.

Thailand: Community-based fisheries management (CBFM) was successfully demonstrated in villages of Phang-Nga Bay.

Indonesia: The BOBP2 assisted pilot activity in Taipan Nauli Bay provided lessons in participatory fisheries management.
This report presents the findings of a study of lessons learned during the implementation of the third phase of the Bay of Bengal Programme (BOBP3). For a period of almost five years the programme has focused on raising awareness of the need for and benefits of fisheries management among coastal communities in the Bay of Bengal region, and helping to put in place the enabling processes and mechanisms needed to facilitate fisheries management. The purpose of the study was to assess what approaches and activities had been most (or least) successful, and distill the information gathered into a form that would be useful for those wishing to establish similar such programmes in the future.

In general the study found that BOBP3 had largely achieved its goals in terms of awareness-raising at various levels among resource users, coastal communities, fisheries managers, senior officials and even aid donors. However awareness has not always resulted in changes in behaviour. In some cases the introduction of participatory and consultative processes has led to the development and implementation of fishery management solutions. In others the solutions have been identified but for various reasons—usually lack of funds—have not been implemented, leading to feelings of frustration among those who have participated in the long and sometimes difficult management process. In yet other cases the process is still in its early stages and has not moved far enough along the track to enable management solutions to be identified. Part of the reason for this is that the establishment of participatory management arrangements seems to be inherently time-consuming. However the process has been made slower still by the limited resources available to BOBP3. The programme could certainly have achieved considerably more with a greater complement of professional staff.

The operational approach taken by BOBP3 has been to establish pilot projects in each of its member-countries (four in India) and use these as opportunities to establish and try out the participatory process. Most BOBP3 member-countries place a high value on this approach, but most have also experienced difficulties in fully meeting their commitments to the projects. In general this is due to the novelty of BOBP3’s work, which does not correspond closely to the activities traditionally undertaken by partner institutions in BOBP member-countries. However, the national projects have also suffered from cumbersome bureaucratic and administrative systems in member-countries, as well as from the failure of countries to follow up on commitments. Specific problems encountered have included: the inability of national project coordinators to dedicate sufficient time to BOBP3 activities due to conflicting duties and responsibilities; failure of governments to provide promised financial support; and the re-allocation of staff to other duties after they have been trained by BOBP3.

BOBP3 member-countries generally expressed satisfaction with the quality and high standard of the programme’s work, and the progress made with the national projects, even where this was limited. They also placed a high value on the training activities carried out by the programme. However all of them commented on the programme’s limited resources, which, in the view of most national officials, prevented sufficient contact and input at the country level. Some countries felt that BOBP3’s activities should have extended beyond localised coastal management issues and into state- or national-level problems.

All of BOBP3’s member-countries felt that, despite any shortcomings, the programme had been extremely valuable and should be renewed or continued, preferably with additional resources to enable a higher level of in-country activity. All agreed that the work of the programme has been innovative and valuable and is highly worthy of continuation due to the potential improvements the participatory approach can bring to management of the region’s coastal fishery resources.

On the basis of these findings, the study concludes with a series of recommendations concerning the possibility of extending or renewing BOBP3. The recommendations draw attention to key issues that need to be addressed in formulating a replacement programme, so that the main shortcomings of the current programme are minimised in any future incarnation.
The recommendations are summarised below.

FAO and member—countries of the BOBP should work together to identify funding mechanisms that will allow a continuation or renewal of the Programme.

Bridging funds, including unspent funds form the E3OBP3 budget, should be used to extend the present Programme, even if only at a skeletal level.

During this bridging period, the Programme should devote its resources to continued information sharing and dissemination (including the continuation of Bay of Bengal News), and to encouraging the setting up of refinement of coastal management regimes in those pilot projects where the most progress has been made.

During the preparation exercise for the proposed GEF-funded project (for Sustainable Management of the Bay of Bengal Large Marine Ecosystem), member-countries should explore the possibility of funding for a BOF3P follow-up Programme from the GEF project. Many countries are now committing national development resources to promoting participatory management of coastal resources. Incremental funding from the GEF project could be used to give a regional dimension to the various national-level activities being either planned or carried out.

Any new follow-up Programme should plan for more substantial resources than BOBP3 had available. The limited financial and human resources of BOBP3 were responsible for slowing progress and constraining achievement which otherwise would have been possible.

Any new follow-up Programme should not restrict itself to local-level interventions. Where possible, it should tap opportunities to encourage use of the participatory approach at higher national or policy levels in member-countries. This is because many BOBP member-countries believe that the Programme could have contributed usefully to national-scale and oceanic fishery management issues, besides operating pilot projects at specific locations.

Any future or follow-up Programme should move beyond the establishment of management processes (which was the focus of BOBP3). The delivery of management solutions should be formally embedded in the Programme’s goals and objectives. This factor should be noted in terms of the funding requirements of the new Programme and the responsibilities of member-countries.

To overcome weakness in the execution of national projects experienced during BOBP3, any future Programme should establish a formal memorandum of agreement on each national project, laying down the responsibilities and inputs of every project partner.

Any future Programme should identify mechanisms whereby national project coordinators could be seconded to the Programme on a full-time basis. They would spend a substantial part of their time at the Programme headquarters, interact more extensively with Programme staff, and assume greater responsibility (including financial management) for Programme activities.

Any follow-up Programme should continue to work with both government and non-government agencies, and actively foster and encourage closer working relationships between both groups. In the implementation of BOBP3, a reluctance in working together was sometimes noticed among the two groups.
2. STUDY RATIONALE AND METHODOLOGY

2.1 Introduction

The present report was commissioned by the Food and Agriculture Organization of the United Nations (FAO) through its Bay of Bengal Programme (BOBP) in order to document the lessons learned during the process of implementing the BOBP third phase (BOBP3), which runs from April 1, 1994 to December 31, 1999.

2.2 BOBP

The Bay of Bengal Programme is a regional fisheries development activity which has operated since 1979 in its seven member countries (Bangladesh, India, Indonesia, Malaysia, Maldives, Sri Lanka and Thailand). The programme has been carried out in three distinct phases which, broadly speaking, concentrated respectively on fishing technology, fisheries extension, and coastal fisheries management. The first two phases focussed mainly on helping to increase fishery production, but during BOBP3 the programme shifted its emphasis towards the management of coastal resources. This was done through participatory approaches that were intended to increase the involvement of resource users and other stakeholders in the management process. While retaining its focus on coastal fisheries, the approach adopted in BOBP3 has also led the programme into non-fisheries areas that impact on the fisheries sector. These include aquaculture, coral and sand mining, tourism and other non-extractive marine-resource uses, and coastal pollution.

BOBP3 was designed as a ‘process’ project. Its aims, as articulated in the Project Document and elsewhere, were to put in place the mechanisms whereby coastal resource management could take place, rather than to achieve specific management goals’. This aspect of project design arose from the fact that, at the time of project formulation, fishery management in the Bay of Bengal (BOB) region was generally lacking or unsuccessful, which in itself was attributed to the absence of workable management mechanisms. Most of the region’s management arrangements, where they existed, relied on a centralised, top-down approach based on the enforcement of fishery regulations. In general, however, even where management legislation or regulations were sufficiently developed, enforcement capacity was inadequate.

Meanwhile, more and more observations were accumulating of fishery resources that were clearly under threat from exploitation, pollution, coastal development, or other factors. Broad management targets were not overly difficult to formulate – arrest the decline of a certain fishery, resolve conflicts between user groups, reduce the incidence of deleterious activities but the absence of mechanisms whereby these goals could be achieved was very pronounced, and was perceived as a major obstacle to successful fishery management in the BOB region.

FAO’s response in formulating the third phase of BOBP was to ask its member countries to identify key fishery management problem areas where BOBP assistance could be applied to support the establishment of management arrangements. As part of this process, each country undertook a ‘situation analysis’ which presented more or less detailed information on selected problem fisheries. The situation analyses were used to identify opportunities for UOBP intervention, which were then developed in partnership with national fishery agencies and, where appropriate, local government or non-government organisations. In each case the approach taken was to identify the various fishery stakeholders and their perceptions of the problems being encountered. This process was then developed to lead into the identification of solutions and, subsequently, of specific actions that each stakeholder group would need to take in order to achieve them. In all cases, however, BOBP’s primary goal was to establish and test the process, irrespective of

The immediate objective of BOBP3 is Increased awareness and knowledge of the need, benefits and practices of fisheries management among institutions and people concerned at all levels and in all sectors of major relevance to marine fisheries and Coastal fishing communities.
the details of the particular management problem being addressed. Because of this approach, a great deal of reliance and responsibility was placed on the national-level partners when it came to implementing the management solutions that the process generated.

In promoting its national-level projects, BOBP adopted the method of selecting one site in each country where the participatory approach could be tried out, and designating this site as a ‘pilot’ activity. These pilot projects were designed as learning exercises, where the participatory approach could be put on trial and the results used to help improve the design of subsequent projects. However the pilot projects were not intended as tests or demonstrations in regard to the technical or technological aspects of fisheries management, and there was never any intention that a pilot project in one part of a country should serve as a model for replication elsewhere.

In terms of its financing and staff complement, BOBP3 is somewhat smaller than previous phases. The first two BOBP phases were both funded to the tune of about $11 million over their 5-year lives, but BOBP3 funding was $3 million over five years – a substantial decline even before taking into account the effects of inflation. The reduction in funding availability may be partly associated with ‘donor fatigue’, whereby aid agencies periodically refresh their policies or directions and tend not to fund what they perceive as ‘the same activity’ for more than a few years. In addition, the programme was affected by a tendency of donors to move away from project implementation through FAO. Finally, the development of BOBP3 coincided with a general shift in donor thinking away from fisheries production and towards sustainable utilisation and environmental management. This in itself was prompted at least in part by direct observation of fishery overexploitation and the declining quality of coastal habitats in the BOB region.

BOBP3 is thus quite different in character from the previous two phases, and represents FAO’s first attempt to promote the participatory management of coastal resources through a regional programme.

2.3 The Study

By documenting the lessons learned prior to the conclusion of BOBP3, FAO hopes to provide an assessment of the major issues affecting or arising from the programme’s implementation, as well as to identify those avenues and interventions that had proven most (or least) successful or productive.

The present report was compiled in response to this requirement, and will be presented for consideration by BOBP3’s Advisory Committee meeting in October 1999 (the last one to be held under present funding arrangements). In addition, it is hoped that the report will provide information that will be useful in the establishment of similar such programmes in future, either in the Bay of Bengal or elsewhere.

The study was carried out by a team of two consultants whose terms of reference (TOR) are shown in Appendix 1. The purpose of the study was not to undertake a ‘classical’ project evaluation, whereby results and achievements are compared to project objectives and work plans. Instead the consultants were to venture more widely, examining the technical, social, economic and environmental framework within which BOBP3 has been operating, and to consider the programme in this broader context. In addition to the formal TOR, BOBP staff also emphasised that the study should consider the mechanisms and procedures used by BOBP3 to implement its activities at the national level in member-countries.

The team spent a few days in initial consultations at BOBP headquarters in Chennai, and then about a month travelling to all BOBP member-countries to discuss implementation of the programme with individuals who had been involved in it. The consultants followed slightly different itineraries, so not all country visits involved both members of the team. However, consultations were held in all BOBP member-countries by at least one team member. In some cases it was possible to visit field sites and hold talks directly with project beneficiaries. In others this was not feasible due to time constraints, logistical difficulties or the unavailability of national project personnel. Discussions in these cases were restricted to Government officials. After completion of the country visits a draft of the study report was compiled.
at BOBP headquarters in Chennai during a 1-week period at the end of July 1999, and reviewed by BOBP staff. The report was finalised by the consultants working from their home bases between August and October 1999.

Before the commencement of the study proper, BOBP engaged a national consultant in each member country to document learnings at the country level. The national consultants, who are listed in Appendix 2, were all individuals who had been closely involved in BOBP's activities in the country concerned (sometimes former BOBP national coordinators). The national consultants worked according to the standardised TORs shown in Appendix 2. In most cases the national consultants’ reports were completed before the commencement of the country visits. In others the reports were made available to the team on arrival in-country, or afterwards. Copies of these country reports are available from the E3OBP Secretariat. The study team is extremely grateful to the national consultants for their efforts in compiling this information.

One of the first tasks undertaken by the team was the development of an ‘information framework’, shown in Appendix 3, to ensure that all major issues were covered during the various discussions to be held. The information framework was used as an aide-memoire during meetings in order to guide the line of discussion when necessary, and ensure coverage of the full range of issues that needed to be discussed.

2.4 Observations at the national level

For each of the countries visited, the study team prepared notes on the interviews and discussion held. These have been compiled into short reports which summarise the observations and views of the study team about the BOBP’s work in its various member countries. One team member took responsibility for documenting the discussions from each country. The areas of responsibility were:

- G. L. Preston: Bangladesh, India (General, Tamil Nadu, West Bengal, Summary), Maldives, Sri Lanka;
- Y. S. Yadava: India (Andhra Pradesh, Orissa, review of other sections on India), Indonesia, Malaysia, Thailand.

For the sake of clear organisation of the main report, the team’s country summaries have been included as appendices to the present report. They document country-specific learnings or issues, as well as providing the basis for the discussion of the broader issues contained in Section 3. In the country summaries, every attempt has been made to avoid repeating information from other documents (in particular the reports by the national consultants participating in the study) except where this is essential to the discussion.

The individuals met by the study team came from many walks of life: they included government officials, research and extension workers, fish traders and businessmen, church leaders, commercial and artisanal fishers, dive tour operators, representatives of non-government organisations (NGOs), staff of international development agencies, and others. A full list of the people consulted in each country is shown at the end of each country summary. The wide range of opinions received through these interviews enabled the consultants to gather broad (and sometimes contradictory) views on the work of BOBP.

The states of Orissa and Andhra Pradesh were not visited as part of the study, but one team member (Y.S. Yadava) is intimately familiar with BOBP work in these areas by virtue of his position as India’s Commissioner for Fisheries Development.
3. LESSONS AND ISSUES

3.1 General

This section of the report attempts to draw together the common threads that emerged from the study team’s in-country discussions and document reviews. Extracting these themes has proven to be quite difficult because the countries themselves, as well as the range of activities in which BOBP3 has been involved, are very diverse. In addition, the opinions received from the various individuals consulted were sometimes at odds with each other, as indeed were the views of the two members of the study team in some cases.

Nevertheless there were a number of dominant or persistent themes that emerged from the discussions, as well as common or cross-cutting issues that were observed directly by the consultants themselves. In some cases the issues concerned were unanimous or universal, but for the most part the consultants have had to base their conclusions on a subset of what is essentially ‘noisy’ data. These are presented below, organised somewhat subjectively into categories of more or less linked issues, which are themselves inter-linked.

3.2 The participatory approach to coastal fisheries management

3.2.1 Participatory vs. centralised systems of fisheries management

The ‘traditional’ approach to fisheries management by national governments worldwide has typically been to establish fishery laws and regulations, which then had to be enforced. In most BOB countries this system has proved inadequate for the management of coastal fisheries, for many reasons. Fishery laws may have been inconsistent with current practices or with localised variations, may not have been understood or accepted by participants in the fishery, or may have been based on unsound, unfair or illogical principles. Local patterns of resource utilisation or management may have been subsumed by a desire to achieve coherent or consistent national fishery policies. However surveillance and enforcement of fishery regulations on a centralised basis is typically costly. In the case of artisanal or small-scale fisheries, enforcement may be infeasible or impossible due to the many thousands of fishing vessels involved and their scattered distribution among coastal bays, estuaries and islands.

The failure of the ‘traditional’ fisheries management approach may be interpreted as meaning that fishery regulation and enforcement is a flawed concept that is always doomed to failure. Participatory management implies the willing or voluntary co-operation of all stakeholder groups, and some proponents of the concept seem to believe that it will somehow be able to succeed in the absence of regulation and enforcement. In reality, however, there will always be some individual stakeholders who can profit from a management situation at the expense of others (including members of their own group), and it will always be necessary to devise fishery management regulations, and then enforce them. The issue is at what level and via what mechanisms the regulations are developed and the enforcement takes place.

Documents referring to fisheries management in the BOBP region frequently suggest that the participatory approach is being attempted because centralised methods have not been successful. This in itself implies that the participatory approach is a second choice, and that a centralised system of regulation and enforcement would be preferable, if only it could be made to work. In fact, many countries outside the BOB region have improved their centralised fishery management arrangements by incorporating systems of public review and comment into the development of management plans, by making fishery management agencies more accountable and requiring them to defend their decisions in public, and by giving stakeholders the opportunity to make legal challenges to fishery management rules they disagree with. Fundamentally, therefore, there is no incompatibility
between centrally-managed fishery systems and the participatory approach, and in many situations merging of
the two has led to successful fishery management arrangements.

3.2.2 **Intimation and maintenance of participatory management**

Where participatory management has been initiated, it has almost always been the result of some sort of catalytic
input, such as the advice or enthusiasm of a government, NGO or BOBP officer. Frequently a community or
stakeholder group feels a need for management but is unable to articulate that need without the assistance and
support of a particular spokesperson or representative. Once participatory management arrangements are under
way, the need for these catalytic inputs is unlikely to disappear. After problems have been identified and
articulated, the process of defining and implementing solutions, as well as simply maintaining cohesion among
the stakeholder groups, requires continued ongoing effort by someone willing and able to make available his or
her time and energy.

The BOBP experience so far indicates that those cases where project activities have made most progress are
those where the active inputs from government (in terms of man-hours of field time, rather than dollars spent)
have been the most intense. There will almost certainly have to be substantial ongoing maintenance efforts in each
location where participatory management arrangements are being fostered. The more widespread such
arrangements become, the greater will be the maintenance effort required. and the higher the costs, which will
need to be shared in differing proportions between government and the other stakeholders.

3.2.3 **Costs and cost—effectiveness of participatory management**

It is sometimes stated that the cost of the participatory approach will be lower than the cost of more ‘traditional’
management based on centralised regulation and enforcement. Because participatory management typically
involves resource users, communities and other stakeholders acting out of their own volition, there is sometimes
the impression that management arrangements can somehow be developed which will be self-sustaining, without
any obvious cost implications. However, an increase in the degree of stakeholder participation is more likely to
lead to an increase in the cost of establishing and maintaining fishery management arrangements. Government
must cover the costs of staff time, training in participatory techniques, building awareness, studies to fill
information gaps, convening numerous meetings and workshops, etc. These costs may or may not be recovered
at a later time through increased compliance and a consequent reduction in enforcement costs, or indirectly,
through benefits to the economy. In addition there is a price to be paid by other (non-government) stakeholders,
such as the cost of attending meetings and workshops, opportunity cost to stakeholders of lost fishing or working
time when participating in management meetings, etc.

The main advantage of the participatory approach is that it allows a more holistic view of fishery management
since it involves all stakeholders, including those whose activities may impact on the fishery even if they
themselves are not directly involved in it. Conversely, the approach also allows stakeholders to address issues
that may not be fishery problems in the strict sense of the term, although they may affect the fishery (such as
land-use practices in coastal areas). Traditionally, centralised fishery management systems have treated fisheries
as if they are isolated from other sectors of the economy or the environment. This is not the case in reality, and
the participatory approach recognises and adapts to this.

Nevertheless the true cost of participatory management at the grass-roots level, as promoted by BOBP, may be
higher than it appears. In most cases BOBP has dealt with small numbers of fishing communities which make
up a small fraction of the total fishing population of each member country, and who are being helped to address
an essentially localised management issue. In each case, however, developing the participatory approach has
taken several man-years of time by government and/or NGO staff, backed up by BOBP’s own inputs into processes which, for the most part, are still incomplete.

In almost all the areas where BOBP is working, the activities undertaken have involved just a handful of coastal villages. In addition to BOBP-sponsored work, there are now several community-based coastal management projects, some of which are quite new, being supported in countries of the BOB region by bilateral or multilateral aid agencies. This indicates that some progress is being made in expanding the participatory management approach to larger areas. However, in each of the five or six projects encountered during the present study, several millions of dollars have been allocated in order to initiate management activities in relatively small areas or among a limited number of communities. When considered on a per capita basis, the costs of this process could be higher than those incurred through a centrally based management system. In the eyes of the proponents of participatory management, this additional cost is justified because the resulting management arrangements are more successful, hence the approach itself is more cost-effective. Nevertheless, it should not be imagined that participatory management is free, or even cheaper than existing arrangements.

The learning here is thus that the participatory approach may lead to more effective fishery management arrangements and better compliance, but that the cost may not be any less, and could be greater, than the cost of setting up fishery management arrangements through a ‘top-down’ procedure. In addition, the further the participatory approach is taken down the scale to the grass-roots level, the more costly it becomes. Although participatory management at the grass-roots level is needed to address many local problems, participatory arrangements at a higher level maybe more appropriate for addressing larger-scale issues such as the management of land-based impacts on coastal resources. Where possible, therefore, it may be more cost-effective to adapt existing centralised fishery management systems to make them more participatory than to try to replace them on a wholesale basis with large numbers of locally-based fishery management schemes.

3.2.4 Technical interventions

BOBP3 has essentially been process-oriented, rather than goal-oriented, focussing on establishing dialogue and mechanisms for arriving at consensus, with participation as its foundation. (In fact BOBP3 has in effect generated the process itself as part of programme implementation). The process approach was necessary in order to move towards the identification of problems, but it has become evident that once the process is in place, there is a need to complement it with more ‘classical’ goal-oriented activities.

In most of the locations visited, the participatory approach encouraged by BOBP had proceeded far enough to allow definition of fishery or coastal management problems and, often, the identification of solutions which almost always required some sort of technical or technological intervention. The nature of these interventions varied widely, and included: trials to investigate the potential for offshore fisheries development: construction of small fishery harbours, landing sites or market houses: value-adding and marketing trials for fishery products (this was a very common requirement): deployment of fish aggregation devices; establishment of alternative income-generating activities of various kinds: construction of schools and health centres; vessel and gear buyback or replacement schemes: and various others.

In each case these solutions had been identified as a result of the participatory process, but in very few of them was there any prospect of the required technical intervention actually taking place, mainly due to the absence of any obvious source of funding to finance it. In one or two cases the national or state fisheries agency has, with BOBP assistance, prepared funding proposals to government or to aid donors to try to implement some of the interventions identified, but even here there is no certainty that the requested funding will be approved. In some cases this situation has led to a feeling of frustration among the stakeholders, and even of resentment that they have been led through a long and sometimes difficult process in order to identify solutions which they now find...
they have no means of implementing. In fact this situation may be a result of BOBP’s aims being different from those of its member-countries. As noted earlier, BOBP’s main objective has been to develop and put in place the management process, rather than to achieve specific management targets, but achievement of targets may have been more in line with the expectations of the member-countries.

The learning here is that the participatory approach will not on its own solve coastal management problems or put management arrangements in place. It may identify the solutions to problems, but implementing those solutions may require significant additional financial commitments and, perhaps, specialised technical expertise. If there is a reasonable expectation that financial and technical inputs might become available at an appropriate stage in the participatory process, there is a much greater chance that the process will lead to the fishery management solutions it is intended to produce. However, if it is clear from the outset that there is no prospect of such financial and technical inputs being realised, then embarking on the participatory management process may only raise expectations and lead to disillusionment on the part of the stakeholders.

3.2.5 Expected results of fishery management

The need for fisheries management is becoming recognised in many of the countries visited by the study team, but no one articulated a clear statement of what the fishery management objectives are at national, state or local levels. Fisheries management can take many forms and would normally be determined by the economic, social and biological management goals, which might include: maximising revenue from the fishery; maximising fishery production; maximising the economic efficiency of the fishery; maximising the earnings of each fishing unit; distributing the earnings from the fishery as widely as possible; providing cheap protein to consumers; generating foreign exchange; etc., etc. However, the only management aim mentioned during the study was a broadly stated wish to exploit the resources as fully as possible, but without causing over-exploitation.

In the minds of many of the people interviewed, over-exploitation is symbolised by declining catch per unit of effort (CPUE). From there the logical extension is that if management arrangements are put in place, CPUE will increase. At many of the sites visited by the study team there were strong expectations that CPUE would increase as a result of participatory management. However, there are several reasons why this may not happen:

Fishery resources may extend beyond the boundaries of the area covered by the participatory management arrangements in question. In such a case the activities of other fishermen would affect trends in CPUE;

Falling CPUE is the normal response of a fishery to increased fishing effort. When a fishery is being exploited at a level which maximises biological productivity, or turnover, the CPUE will be substantially lower than in a fishery which is being exploited at low levels of effort. Depending on the goals and mechanisms of fishery management, therefore, management may not result in increased CPUE (although there may be other benefits, such as improvements in the profitability of fishing operations);

Management may slow down the rate at which a fishery is degrading, but may not actually turn it around to create an improvement. Under such circumstances CPUE might stabilise, or might decline more slowly than it otherwise would have done in the absence of management, but no CPUE increase would be observed.

In such circumstances, the enthusiasm for participatory management might diminish if anticipated increases in CPUE failed to materialise after a certain period of time. It is therefore important during participatory management exercises to make sure that participants do not have unrealistic expectations of the benefits that fishery management might be able to deliver in terms of increased production or CPUE. Another area where unrealistic expectations need to be avoided is in regard to resource enhancement, specifically through the release of juveniles for restocking purposes, and through the deployment of artificial reefs, both of which have been carried out or are planned in the framework of BOBP-sponsored activities:
Juvenile restocking programmes for marine resources have been demonstrated to have an impact on natural populations only in highly specialised circumstances, such as where certain stages of the organism’s life cycle have special habitat or other requirements that are absent in the release area. In most cases, however, mortality of marine organisms is very high in the early life stages, so huge numbers of juveniles need to be released to make a detectable impact on the fishery.

Similarly, artificial reefs need to be extensive and to create large areas of new habitat if they are to generate a significant increase in the biomass of most marine organisms. They are, however, often effective in aggregating together the fish or other resources already present in the area, making them more catchable and giving the impression of greater productivity around the reef. The net result is that fishermen are able to exploit existing resources more efficiently, and drive down stock levels still further.

Both of these techniques may result in resource enhancement in certain specific circumstances, but as a general rule no real enhancement will be observed.

There are nevertheless other benefits that have nothing to do with resource enhancement, but which may justify their use. For example, the ceremonious public release of shrimp juveniles has been carried out in one BOBP project in an attempt to raise public awareness of the need for resource management, but without any real expectation that the released juveniles will contribute significantly to the wild population. In other areas FADs have been deployed with the main aim of preventing the operation of trawl nets, with the supposed resource enhancement effect being very much a secondary consideration. In these cases the expectations of the benefits that resource enhancement techniques can offer have been realistic.

3.3 BOBP

3.3.1 Programme goals

BOBP staff typically divides the process of developing and putting in place participatory management arrangements into six phases, although with some overlaps:

i) problem identification (determining the geographic and socio-economic boundaries of the problem in question);

ii) stakeholder identification (establishing the roles of the various players)

iii) stakeholder analysis (understanding the stakeholders, one by one);

iv) problem analysis (encouraging one player to see things from another’s viewpoint);

v) stakeholder consultations and negotiations (identifying the benefits of management to each group, agreeing on actions and initiatives, and making commitments);

vi) adoption and implementation of a management plan.

Stage (vi), identified as the last phase, is in fact not really the end of the process, because management plans need to be maintained and periodically reviewed in response to changing circumstances. Because of the constant need for revision and renewal of management arrangements, as well as the grey area between ‘adoption’ and ‘implementation’ of a management plan, it can be difficult to even identify whether stage (vi) has actually been reached or not.

In general, one may regard this stage has been reached in, at most, two of the BOBP3 project sites. In most cases, however, the process is still at or before stage (v), which is when talking should start translating into action, commitments and sacrifices are needed, and costs begin to be incurred. In some cases stakeholders have
begun to take specific, concrete management actions in response to the problems identified as a result of BOBP’s interventions. For the most part, however, the process is still somewhere in the preparatory or ‘talking’ stage.

As noted earlier, BOBP is a process activity, which concerns itself primarily with putting in place procedures whereby management decisions can be made and implemented. BOBP’s goals are defined in terms of awareness-raising and the establishment of participatory mechanisms, rather than in terms of delivering specified management outputs or solutions. These latter elements are considered to fall more in the area of responsibility of the national counterpart agencies or local bodies.

Technically speaking, it can be said that BOBP has achieved its primary objectives in most of the sites where it has worked. In all cases there is a clearly increased consciousness of the need for and benefits of management among fishery stakeholders. In many cases participatory management mechanisms have been established and are now operating with only limited BOBP intervention. Whether these arrangements will be sustainable in the absence of continued BOBP support is debatable: the study team’s consultations indicated that country representatives were divided on this question.

Nevertheless it is unsatisfying to note that in most cases BOBP’s interventions have not yet led to the achievement of actual management targets, or to significant changes in behaviour among fishery stakeholders. Although awareness may have been raised and consultative mechanisms established, BOBP’s impact has not been deep enough to carry the process far enough forward to arrive at the management solutions that the participatory process has identified. This in itself suggests that the goals of the programme may have been focussed too heavily on the establishment of processes, while the achievement of actual management targets was assumed as something which would follow naturally. Experience now indicates that the management process and the management output are equally important, and should perhaps be given a more balanced emphasis in project design.

3.3.2 Human and financial resources

BOBP’s budget has been US$ 3 million spread over 5 years, or $600,000/ year on average. This has covered the cost of the Programme’s two (increased to three for a 2-year period) full-time international professional staff who undertake travel to member countries in support of national activities, as well as organising and running international activities (meetings, workshops and training courses). The programme is also supported by an Information Officer (full-time for the past year, part-time prior to that) who, among other things, prepares the BOBP Newsletter; by a part-time documentalist; and by 3-4 administrative staff. In addition, two FAO Associate Professional Officers (APOs) have been attached to the Programme between 1997 (Oct) and 1999 (Jan), and short-term consultants have sometimes been engaged to assist with specific activities.

BOBP’s member-countries were unanimous in their praise of the calibre of advice, inputs and technical support provided by BOBP’s core staff. Similar comments were made about the inputs of consultants, whose work was generally considered to be of a high professional standard. However, all the countries noted that the small size and limited financial resources of the programme restricted the amount of assistance that BOBP could provide them with. Visits by professional staff have tended to be shorter and less frequent than member-countries would have wished, and there was some suggestion that in-country project activities may sometimes have been delayed due to non-availability of Programme staff or funds. There was also some comment that consultant assignments were often too short, or did not involve enough repeat visits to reinforce training or follow up on technical developments.

In an early BOBP planning meeting it was explained to member countries that after deducting base costs (staff salaries, travel, etc.), the Programme’s operational budget translated into the equivalent of about $30,000 per
country per year. This information was presented for illustrative purposes but unfortunately has been latched on to by many countries, who have interpreted it to mean that they are entitled to receive an annual budgetary allocation of $30,000 from BOBP to support national-level activities. There were various complaints during the mission that these funds had not been forthcoming, and that BOBP in general was not ‘generous’ enough and attached too many strings and controls to the financial support it did provide. In general BOBP’s national counterparts wished that BOBP funds could be accessed more freely and easily and that they could have more direct control over how the funds were spent.

In fact there has never been any firm commitment or policy by BOBP to allocate a fixed amount of financial support to each country. The operational budget is used to cover both international and national activities on the basis of need, progress in project implementation, local cost considerations, etc. It is quite possible for one country to receive more than its ‘fair share’ of funding support from BOBP simply by carrying out numerous project-related activities— or, less constructively, by restricting its own counterpart funding contributions. On the other hand, BOBP staff consider that achievement in national projects is unrelated to expenditure: the activity which BOBP staff consider to be the most successful is the one where the Programme has spent the least, while expenditure is the highest in another country where it is perceived that only limited progress has been made. In general, the success of national projects appears to depend much more on the motivation and drive of one or two key individuals than it does on the amount of money spent.

3.3.3 Time-frame

Part of the reason most BOBP projects may not have moved far enough along the path to delivery of management results is the large number of tiny steps needed to develop and put in place participatory management arrangements. In each case there is an extensive process of: training government and other staff in the procedures to be used; identifying who the stakeholders are, and bringing them together; working through the various problems and issues involved; carrying out studies to fill information gaps; and gradually moving from the point of understanding the solutions to the problems encountered, towards initiating concrete actions on the part of the various players. By its nature, the process of instituting participatory management is inherently time-consuming.

In the case of BOBP3 the process may have been slowed further by the relatively limited human and financial resources available to the programme on the one hand, and to national counterpart agencies on the other. In general it seems that progress in BOBP3-sponsored activities is greatly boosted during periods of contact between BOBP and national staff, and tends to die back in between. Because of the small number of BOBP staff, contact periods in any given country have tended to be short and infrequent and this has had consequences for the rate of progress of project activities. If the programme had had more staff and been able to achieve more contact time with national counterparts, it may have been possible to carry the management process further in more countries. Conversely, at present staffing levels, it seems that the programme time-scale was too short for BOBP3 to deliver management results in most of the situations where it has been working.

Technically, BOBP3 has now been operating for four-and-a-half years. However, the first year or so was spent on situation analyses, defining the programme’s role, and agreeing with national agencies on financial and operational issues. BOBP’s member countries are unanimous in their view that BOBP3’s real inputs should be dated from the time that in-country activity commenced. Depending on the country concerned, this was between 12 and 18 months after BOBP3’s official commencement date. By this calculation (which may not be entirely justified, since situation analysis and the establishment of working practices are both essential precursors to the commencement of field work) BOBP has been actively supporting in-country activities for 3-3.5 years.
It is not clear whether the time-frame required for the establishment of participatory fishery management arrangements was fully appreciated at the time that BOBP3 was put in place. However, a major lesson from the programme is that, at least in the absence of more substantial human and financial resources, the 5-year programme time-scale is unlikely to allow completion of the process, and a longer time horizon is needed.

### 3.3.4 Awareness-raising

BOBP has had a strong impact in raising awareness about fisheries and coastal management issues, and the need for management. In many countries there has been a line of thinking that fisheries are an inexhaustible source of production which can continue to be increased without restraint. While this thinking still persists at all levels, including among fishermen themselves, it is beginning to be replaced by a recognition that marine resources are not infinite and that management is required if economic and other benefits from fisheries are to be optimised.

Most of the individuals interviewed during the study were connected to BOBP3 in one way or another, and were thus highly conscious of the need for fisheries management and of the participatory approach. Many had been exposed through BOBP to the precautionary approach to fisheries management (PA2FM), and to FAO’s Code of Conduct for Responsible Fisheries (CCRF), and were supportive of both.

It was difficult to judge to what extent the fisheries management message had diffused beyond this core group, which mostly comprised senior and middle level officials. In general, however, the interviewees indicated that there was a change in attitudes of at least a proportion of the individuals employed in government fisheries agencies at state and national levels. This attitudinal change is fundamental to instilling a culture of fisheries management, and is often undervalued by those who take environmentally responsible or informed attitudes for granted. One of BOBP’s major achievements is that the Programme has been successful in creating a core group of fishery officers, especially at the senior and middle level in each member-country, who are informed about and committed to improving fisheries management.

Although it seems that recognition of the need for management has begun to be embedded, the definition of what constitutes ‘participatory’ management varies widely among the countries visited. In some cases the concept of stakeholder consultation and their involvement in the identification of problems and solutions has been taken on board and implemented. In others, the understanding of stakeholder participation seems to be that the stakeholders participate in a meeting where they will be told what to do by government. In one location the stakeholders were identified as various government departments and research centres, but not the actual users of the resource.

It should also be emphasised that there is a big difference between being aware of the need for fisheries management, and managing fisheries. Many smokers are aware that smoking is bad for them but this awareness may be insufficient to lead to a change in their behaviour. While BOBP’s awareness-raising work is important, it is only a first step in the process of moving towards management of the region’s coastal resources. As mentioned earlier, so far the time has been too short for anything other than limited actual management action.

### 3.3.5 Information dissemination

The team made a particular effort to assess the value that BOBP member-countries attached to the Programme’s information activities, because a mid-term review of BOBP3 had suggested that the Programme was placing too much emphasis on these aspects. Most of BOBP’s member countries spoke highly of the information activities, in particular the Newsletter, *Bay of Bengal News*, which is the main channel for information-sharing about activities in member-countries. Where interviewees claimed ignorance of BOBP activities in other countries,
this was felt by the study team to reflect lack of individual interest, rather than lack of access to information. In some cases BOBP Newsletter articles had been translated into indigenous languages for local dissemination. BOBP posters were seen in many of the locations that the study team visited, from community halls to government offices, and the general consensus was that these too were useful in transmitting and maintaining fisheries management awareness.

National counterparts also attached great value to local-language materials whose production BOBP had supported. By necessity these were usually specific to the site or locality in question, although in certain cases (for instance, some of the leaflets and brochures produced about shrimp aquaculture management) materials produced in one country or language could probably have been transferred fairly easily to another. Most countries stated that there would have been potential for BOBP3 to increase its support to the production of local-level information materials, if financial and human resources had permitted.

3.3.6 Gender issues

Unlike the first two phases of BOBP, where a range of activities were developed specifically to benefit women, BOBP3 has not targeted women directly. Indeed the study team noted the almost total absence of women during its consultations with stakeholders in the various countries visited. Apart from a handful of government representatives, there was little direct input by women into the findings of the study. This appears to be reflective of BOBP as a whole: in general, women do not feature prominently in the participatory management process.

There are several reasons for this. Some of BOBP’s project sites are predominantly Muslim, and women appear to be largely excluded from the participatory process for cultural reasons. More significant, however, is the fact that most of the sites where BOBP is working are dominated by male fishers who assume the role of primary stakeholders in the participatory process. In most cases women, whose role tends to be in the processing and marketing of fish, are not viewed as stakeholders in their own right. If and when the participatory process reaches stage (vi), i.e. the identification and implementation of management solutions, it would be expected that women would become more directly involved in the process, since many of the fishery management solutions identified involve post-harvest activities. Similarly, if BOBP had been a needs-based Programme — i.e. one intended to respond directly to the social and economic needs of fisherfolk communities — then women would have been expected to figure far more prominently (as indeed was the case in the first and second phases). As a programme aimed at developing participatory processes, however, BOBP has rarely identified women as principal stakeholders in the development of fishery management arrangements.

3.3.7 Addressing large-scale issues

The work in which BOBP has been involved has tended to take place on a relatively small-scale—that of one or several communities scattered along a coastline, around a bay or on an island. In such cases the communities, if acting in a consistent and coordinated manner, may be able to exercise a certain degree of control over local activities that impinge on marine resources.

On a larger scale, however, there are development activities that are beyond the control or even influence of coastal communities, but which will have a major impact on coastal resources. These are usually land-based (deforestation and watershed modification causing increased sediment loads in coastal waters, coastal eutrophication and toxicity resulting from the use of agro-chemicals, marine pollution from urban sewage and waste disposal, etc.) but may also be sea-based (oil spills, foreign fishing, pollution from ships, etc.). If such activities are allowed to proceed in an uncontrolled way, the resulting degradation of coastal waters and detrimental impacts on marine resources may outweigh any benefits gained from locally-based management initiatives, no matter how successful these may be.
In addition to operating at the community level, therefore, there is also a need to put in place environmental or coastal zone management initiatives at a higher level. This is being done more effectively in some BOBP member-countries than in others, usually by state or national governments. The involvement of BOBP in this higher-level work so far has been limited. In several of the countries visited it was suggested that it would have been useful if BOBP had been mandated to assist national or state governments with the formulation of broad coastal management policies or plans. This is particularly the case in countries where state or provincial governments have responsibility for these issues, since they tend to be less well-endowed with technical expertise than the national governments. One country also suggested that it would have liked BOBP to provide assistance with EEZ management arrangements.

3.3.8 Regional approach

During the study, all countries were asked to consider the relative benefits of dealing with coastal management issues through a regional programme such as BOBP3, rather than through dedicated national programmes. The countries were unanimous in stating that, while most coastal management issues needed to be addressed on a local, state or national basis, the regional dimension added by BOBP has been extremely valuable. Specific benefits mentioned included: the relative ease with which specialised advice and expertise could be obtained; the attention given to information-sharing (both through BOBP’s information dissemination activities, and through the opportunities for personal contact afforded by the various BOBP workshops and meetings); and the moral support and ‘sense of pride’ attached to working in partnership with an international programme. This last issue was raised at all levels, from senior government to fishing communities. All participants seemed to be conscious of the fact that, by working within BOBP-sponsored initiatives, they were ‘on show’ to other countries, and thus (in theory at least) motivated to better performance.

Despite the apparent satisfaction with the regional dimension of the programme, there was little specific comment on BOBP’s regional-level activities other than in regard to the Programme’s information dissemination work. The various meetings, workshops and similar activities that BOBP has carried out at a regional level are viewed as a necessary adjunct to the national-level projects that are the main preoccupation of most of the individuals consulted. All the comments received about BOBP’s national level training courses, and about such activities as workshops on the Code of Conduct for Responsible Fisheries, were very positive, and were always made in the context of their application to national problems and issues.

3.3.9 Advocacy and leverage

The value of BOBP’s advocacy role was emphasised in a number of countries. BOBP’s endorsement of a fisheries management initiative or proposal lends it credibility in the eyes of both fishery stakeholders and government decision-makers, which it may not have if put forward by a national or state fisheries body alone. Examples were cited where funding proposals had been approved by central governments or international agencies, which it was said would have been rejected if they had not had BOBP’s endorsement. In this sense the funds spent on BOBP3 might be said to have a multiplier effect by permitting the leverage of additional funds from other sources.

In terms of its national-level activities, BOBP has in some cases supplanted the national or local fisheries agency by taking the lead role in an initiative that is not really viewed by the stakeholders as having come from the agency concerned. In most cases, however, BOBP has legitimised activities which fisheries agencies have wanted to carry out but have been previously unable to address because their broad mandate has been focussed on fisheries development (generally meaning increasing production) rather than management.
At the other end of the spectrum, it was pointed out that the commitment of coastal communities and perhaps other stakeholders to participatory management activities was greatly enhanced when the stakeholders believed that, through BOBP, the success of their efforts was being observed and judged in other countries. This was particularly the case when the communities were exposed to visits by BOBP staff and consultants, or individuals from other BOBP countries undertaking study tours. Essentially, BOBP provides a mechanism whereby national-level efforts can be put on display to the international fisheries community, and this has a generally positive effect on stakeholder motivation, commitment and performance.

3.4 BOBP member-countries

3.4.1 Financial resources

In most of the countries visited, national project activities had suffered from lack of local funding or, in some cases, difficulties in accessing that funding in a timely manner. This is one of the reasons why many BOBP counterpart staff were disappointed that BOBP's own funding allocations were less generous and more difficult to access than they had hoped (see Section 4.3.2).

In a couple of cases the BOBP national coordinators had been able to solve the problems of accessing local funds and now had in place workable systems. In most cases, however, national coordinators still have considerable difficulty in obtaining approval to spend government funds on BOBP-related activities, even where, technically, these have been allocated for this purpose. A difficulty experienced in several countries is that BOBP’s activities are somewhat unconventional and not in line with usual fisheries agency activities. As a result they do not always easily fit into any established budget category or allocation.

On the other hand, there is always the risk that funds, whether from government or from BOBP, could be abused. This of course is the underlying reason for many of the government financial control procedures that BOBP's national counterparts have found so obstructive. The difficulty that arises is that in genuine cases of need, project activities may be delayed or cancelled because the national project coordinator cannot access either BOBP or local funds, even though both may be technically available.

There is thus a need for BOBP to be vigilant on this issue, to remain in close contact with national counterpart staff, and to try to ensure that financial control procedures on either side are not so inflexible that they interfere with the work programme. In future such exercises, there may be merit in establishing more formal memoranda of understanding or similar control instruments which lay down the contributions, responsibilities and operational arrangements of each partner in regard to the project.

3.4.2 Human resources

BOBP’s modus operandi for national execution has been to agree with the partner agency in each country on the selection of a national BOBP coordinator who will take responsibility for liaison with BOBP, coordination of activities in-country, and management of inputs from the national side. This arrangement places a large share of the responsibility for BOBP outputs in the hands of the national government, and may thus help generate a sense of ownership of the national activities undertaken. However, there are also some inherent weaknesses, the most important of which is that the individual nominated as BOBP coordinator is almost always expected to take on BOBP-related duties in addition to his or her existing workload, and so may be unable to dedicate as much time to BOBP activities as they really need. There is no doubt that this situation has led to delays in the implementation of BOBP activities at the national level.
As noted above, a better arrangement might have been the establishment of a formal memorandum of understanding between BOBP and each of its member-countries. Such an agreement would lay down financial and managerial responsibilities, and would also make it easier for member-countries to make and follow through on commitments such as allocation of staff or financial resources.

The participatory management approach generally requires the government officers involved to dedicate a substantial amount of time to travel and field work, often outside normal working hours. This has led to difficulties in certain cases, where officers have been either unwilling to work in this way, or have expected additional financial recompense for which there is no government provision. In some cases BOBP has had to pay travelling allowances to government officers in order to induce them to go into the field.

Further weaknesses in the present national-level implementation arrangements relate to government procedures concerning staff rotation. BOBP’s operational philosophy is that its activities should support the development of national capacity in each of its member-countries to effectively manage coastal resources through a process-oriented approach. Since government is the body that has ultimate responsibility for resource management, the Programme’s capacity-building efforts have been concentrated there, with all BOBP’s projects being carried out in partnership with national or state government agencies. Where appropriate other partners, such as NGOs or the private sector, may also be involved. Each of BOBP’s national-level projects has been the focus of a major training effort aimed at introducing participatory and consultative approaches to dealing with fishery stakeholders. The staff of the participating government departments and various partner organisations are the main direct recipients of BOBP training activities.

Unfortunately, many of the individuals trained, especially those in government fishery agencies, have subsequently been transferred to other work areas. In some BOBP member-countries, staff are regularly transferred between posts, sometimes in distant locations, so BOBP may lose an experienced coordinator and gain someone who has to go through a learning process before becoming effective, thus interrupting the flow of project activities. In one country this has happened so frequently that there have been four different national coordinators since BOBP was established. The problem also applies to other officers who have undertaken BOBP-sponsored training. In one case most of the government officers who undertook training in participatory management principles have now been transferred elsewhere. This constant process of staff rotation is outside BOBP’s control, but has a significant negative effect on the Programme’s ability to achieve its objectives.

It was pointed out to the study team that this process may lead to spin-off benefits if staff are transferred to positions where they can continue to use the skills or knowledge they have acquired as a result of their BOBP-sponsored training. In some cases the training has caused participatory approaches to be introduced into other areas of the fisheries agency’s work programme, thus enhancing capacity overall. In this sense the ‘pilot project’ approach of BOBP has produced significant benefits. In many cases, however, the staff concerned have been transferred to jobs with entirely different functions and responsibilities, thus wasting the resources spent on providing them with training.

The study team attempted to explore this problem during the country visits. No perfect solution emerged, but there was a consensus that a good arrangement would have been for the national coordinators to be seconded to BOBP, preferably under an arrangement whereby the Programme paid for some or all of their salaries and other costs. This would allow the coordinators to spend 100% of their time on BOBP-related work, while the salary contributions received from BOBP could support an additional staff member or relief officer to take over their original duties in the national agency concerned. The specific mechanisms whereby such an arrangement could be put in place varied from country to country, but the general idea was favoured by most. A budget for such a purpose must be provided for.

It was noted that under such an arrangement, the national coordinators would be able to undertake additional useful activities that had not so far been possible, including the preparation of more local—language materials.
based on information from other BOBP national projects. It was also suggested that under this arrangement each national coordinator should spend at least some of his time working at BOBP headquarters. This would enhance the working relationship with BOBP staff, thus making communications easier. It would also enable national coordinators to become more familiar with BOBP’s work in other countries, and allow them to make more use of the Programme’s information resources in support of their own projects. All these suggestions seemed to the study team to be positive and constructive.

Alternative arrangements were also explored, including the use of full-time BOBP staff, local NGO staff, local consultants, or other individuals as national coordinators. In most countries it was felt that, in order to have full participation by government, the national coordinator would need to be an officer from within the government system, at a level senior enough to mobilise resources or high-level support when needed.

3.4.3 Incompatible functions

During the course of the present study, an incompatibility was observed in the functions of some national fisheries agencies. In a number of cases the agencies are involved in managing welfare schemes (such as the provision of subsidised equipment and fuel) for fishermen. In some instances, administration of the scheme puts the fisheries officer in a position of ‘dispensing largesse’ to fishers, who themselves become dependent on the fisheries officer’s favourable inclinations or goodwill. This tends to discourage ‘listening’ on the part of the fisheries officer, and reinforces the development of a ‘top-down’ communication process.

This observation was not universal, and a great deal obviously depends on the personality and approach of the individuals involved. There was nevertheless an observable difference between the attitudes of fisheries agents in situations where welfare schemes were in place, and those where they were not. In broad terms it would seem that when fisheries officers are expected to administer welfare schemes, they are less likely to be effective in generating the two-way communication process on which participatory management relies.

3.4.4 Involvement of NGOs

In general, government departments involved in BOBP3 activities appear to be suspicious of NGOs, and reluctant to work closely with them. In cases where NGOs have been involved in BOBP-related work, the attitude of the national fisheries agency has ranged from lack of interest to hostility. In at least two BOBP countries the national or state fishery agencies appear to have actively discouraged NGO participation in BOBP-sponsored work, sometimes covertly. The observation was also made that NGOs should stay out of technical areas, which they are usually less well-equipped to deal with, and stick to social issues. NGOs were accused of causing confusion by giving technical advice that was wrong, and contrary to that given by the fisheries agencies. Reciprocally, NGOs are frequently less than enthusiastic about developing close relationships with government departments, with whom they may not want to be too closely identified in the eyes of the communities or groups with whom they work.

This is an unfortunate situation, because NGOs often have good links with coastal communities and may be able to act as vehicles for communication between stakeholders. They are considerably more flexible in terms of working in the field outside normal working hours, and are less likely to be constrained in this by the lack of financial provision for travel allowances and overtime, as has been the case with some of the fishery agencies. In addition, NGOs can be more flexible and responsive to stakeholders because they are not constrained by the restrictions that official government policies or practices may impose. In some countries of the BOB region, external donors are actively channelling development funds through NGOs in preference to government, often precisely because of these close links. NGOs may thus become increasingly important players in the development process in some areas.
Where they can be achieved, therefore, tripartite working relationships involving government, communities and NGOs could be constructive. However, for this to happen, one party needs to be willing to take the initiative and work to paint such arrangements into place. BOBP has attempted to foster this approach in certain locations, but so far the results have been less positive than expected and BOBP has ended up working mainly with either the government agency, or the NGO, but rarely both.

3.4.5 Adoption of the BOBP approach

In several of the countries visited by the study team, governments have recently worked with bilateral and multilateral aid donors to establish national projects aimed at improving the management of coastal resources or the coastal zone. In several cases these projects place considerable weight on the participatory approach and the empowerment of coastal communities. Where possible the study team attempted to establish whether any of these projects had benefitted from observation of BOBP3’s activities or method of operation. In the two countries where it was possible to meet the leaders or co-ordinators of such projects (financed by the Asian Development Bank and the World Bank respectively), the answer was an emphatic ‘yes’. In both cases the individuals concerned were familiar with the participatory principles and ideas applied by BOBP3 and had adopted these ideas in their own projects, although with modifications in each case. In addition, BOBP staff informed the study team of two further donor-supported projects being planned or implemented in BOBP member countries, and which had adopted participatory methods pioneered by BOBP3.

Thus, as well as the gradual diffusion of participatory approaches into fisheries agencies and NGOs in BOBP countries, it appears that the Programme has also played its part in helping to refine or modify the thinking of the bilateral and multilateral donor community. This can be viewed as an additional way in which BOBP3 has moved towards its goal of awareness-raising in regard to coastal fisheries management.

3.4.6 Future requirements

All of BOBP’s member-countries felt that the work that had been initiated by BOBP had assumed a life of its own to at least a certain degree. Some interviewees expected that the work would continue after BOBP3’s intended closure in December 1999, but not all were confident about this. Nevertheless BOBP3 can be said to have left a ‘footprint’ in that it has raised awareness and, to some degree, changed behaviours in regard to coastal resource management.

In all cases, however, the member-countries voiced a strong desire to see the work begun by BOBP3 continue after the currently scheduled closure of the Programme on 31 December, 1999. It was noted that the catalytic and information-sharing functions provided by BOBP would enable national activities to move forward much more quickly and completely than they would in the absence of regional-level support. An important aspect was that all players, from coastal communities through to senior officials, felt more highly motivated when they knew they were involved in a regional activity, and being observed by other countries. The advocacy and leverage functions referred to in section 3.3.9 (page 15) were emphasised as being extremely valuable, as also were the easy and timely access that BOBP could provide to expertise and technology that might not be available locally.

Some countries felt that even a downsized BOBP with only skeleton staff would still be better than no programme at all, since it would still be able to provide some of these functions. Based on the team’s observations, however, any future implementation of a BOBP3-type programme should more appropriately be up-scaled, and should extend beyond a process-oriented approach. As noted earlier, the mechanism of identifying management solutions raises expectations that then need to be addressed by technical interventions so that the solutions can be
Any future BOBP3-type programme may also need to extend beyond specific coastal resource management issues in order to provide broader-scale coastal zone or EEZ management advice to its members.

When discussing future arrangements under which the work of BOBP3 could be continued, most countries expressed themselves satisfied with the present structural arrangements, i.e. an FAO regional programme supported mainly by one or more external donors and with a continued focus on the promotion of coastal fishery management arrangements. There was less enthusiasm for other arrangements, such as the uptake of BOBP3-type work by other existing regional bodies, all of which were felt to have their own roles or specialities that differed significantly from those of BOBP3. The creation of a new permanent regional organisation to assume BOBP3’s functions was not generally regarded as a desirable option.

Most of the individuals interviewed by the study team were technical officers who were not in a position to express their views about how future BOBP3-type work should be funded, or to assess the willingness of their own administrations to provide financial support. In the few cases where senior officers expressed an opinion on this matter, it was generally to the effect that national country commitments would by necessity have to be limited (several mentioned the recent Asian financial crisis that their governments were still trying to recover from) and that there would be a need for substantial aid donor funding. FAO is currently leading a regional initiative to establish a Strategic Action Plan for the Large Marine Ecosystem of the Bay of Bengal under Global Environment Facility (GEF) funds. This initiative (abbreviated hereinafter to ‘the GEF project’) has now been endorsed by most countries of the region.

During the present study, most interviewees were under the impression that the GEF project may represent a mechanism for continuing BOBP’s work. However, it is the understanding of the consultants that what is currently being proposed is a project preparation exercise which may or may not lead to the formulation of a longer, GEF-funded programme. Even if this programme materialises, there is no certainty that it will focus on participatory management of coastal resources. Indeed if the experience of other geographical regions is anything to go by, such a programme might be expected to focus more on the Bay of Bengal’s larger-scale trans-boundary problems.

Under normal circumstances, GEF project funds are intended to be incremental, and are used to ‘top up’ funds already being expended by government(s) so that the activity being undertaken can be carried out in a manner which is more beneficial or less harmful to the global environment. Many BOB countries are now committing large amounts of government or aid donor funding to the establishment of participatory or community-based management arrangements for coastal resources. In most cases these national-level projects will generate information and experience that has substantial value to other countries of the region. For the most part, however, such national projects do not contain financial or other provisions for information-sharing or for otherwise extending the benefits beyond the national (or in some cases local) horizon. A legitimate function of the GEF project, if approved, might therefore be to provide incremental funding so that a regional mechanism can be established to promote the exchange of information and the sharing of resources in this field. It is not difficult to envisage that such a mechanism could function along the lines of BOBP3, and it may also be possible for such a project to become involved in some of the higher-level functions, such as policy formulation, that BOBP3 has not been able (or mandated) to do. For such a course to be followed, however, it would be necessary for BOBP member governments to make the appropriate representations to FAO and GEF during the project preparation exercise.

During the mission, the study team was advised that approximately US$ 250,000 of unspent funds will remain in the BOBP budget on 31 December, 1999. Conflicting information was received about the source of these funds (i.e. whether they were derived from the contributions of an aid donor or from BOBP member-country contributions) and about the uses for which they might be eligible. Given that every country consulted strongly
urged that BOBP3 be extended, it would seem reasonable to consider using these funds for that purpose if it can be done.

Unfortunately, however, unless further additional funds can be identified, then even with substantial downsizing it seems unlikely that this amount would be sufficient to extend BOBP for the 18-24 months that would probably be needed before any GEF funds came on stream.

4 Conclusions and recommendations

Although impeded by limited financial and human resources, BOBP3 has made significant progress towards its goals of awareness-raising in regard to coastal fisheries management. Awareness of the need for and benefits of management in the BOB region has increased at all levels, from coastal communities to senior government officers, as a direct result of programme activities. BOBP3 has also influenced the thinking of other donor agencies, which are increasingly basing programmes and projects on participatory management approaches.

The awareness-raising work has led to the actual establishment of management regimes only in a small number of cases. More progress in this respect could probably have been made if the Programme had had access to greater financial and human resources. However, the Programme itself was not formally oriented to the delivery of management outputs per se, only to establishing management mechanisms. In this regard BOBP3 is somewhat out of sync with the desires of its member countries, which aim to see the management process move beyond awareness-raising and into action. Management does not follow automatically once the appropriate processes have been established, usually because the implementation of management solutions requires the commitment of additional funds which may not have been accounted for at the outset. With the benefit of hindsight, it now seems that more effort should have been put into identifying and trying to meet these funding requirements as the process approach proceeded, so that the management activities identified by the participatory process could then be put in place.

In general, therefore, BOBP3’s activities have not resulted in the actual implementation of management activities or improvements to the extent that might have been wished. However, in most of the locations where BOBP3 has worked the foundations have now been laid and there is great potential to move forward into the actual implementation of management if resources can be found to allow the process to continue. Despite various criticisms of specific aspects of the Programme’s operation, all BOBP3’s member countries and all participants in the national projects, at all levels, voiced a desire to see the Programme continue. Underlying this desire was the view, which was shared by the study team, that it would be more cost-effective if the process of establishing management arrangements could be carried through to completion, than for the process to be terminated mid-stream. Some but not all member-countries felt that they would be able to complete the process without further BOBP3 assistance if necessary. However, all countries made strong and convincing arguments about the numerous extra benefits if the work begun by BOBP3 could continue.

On the basis of these conclusions, and the more detailed discussions contained in the preceding sections, the study team makes the following recommendations to FAO and to BOBP3’s member countries:

- All BOBP3 member-countries, and all participants in the pilot projects, expressed a desire for continuation, at a regional level, of the valuable work begun by BOBP3. The present arrangement, of a regional project implemented by FAO, was considered appropriate for the future. It is therefore recommended that FAO and BOBP member-countries work together to identify funding mechanisms that will allow continuation or renewal of the Programme.

- If it is agreed that the work of BOBP3 should be continued, then closure of the current Programme in December 1999, as presently scheduled, would result in considerable loss of continuity and momentum. It is recommended that, until a significant block of donor funding can be identified to allow establishment of a new or continuation
project, bridging funds be applied to extend the present Programme, even if only at a skeleton level. Any unspent funds remaining in the current BOBP3 budget should be used for this purpose.

Any extension of the current Programme for bridging purposes will by necessity result in a reduced level of staffing and activity. During such a bridging period, it is recommended that the Programme dedicate the resources it has available to (a) continued information sharing and dissemination (including continuation of Bay of Bengal News) and (b) encouraging the establishment or refinement of coastal management regimes in those pilot projects where most progress has already been made.

A prospective source of funding for a follow-on programme could be the Global Environment Facility, provided that the planned GEF-funded project to establish a Strategic Action Plan for the International Waters of the Bay of Bengal determines that this would be a valuable and legitimate way to apply incremental funding. The wishes of BOB countries as expressed during this study, and the fact that many countries are now committing national development resources to promoting the participatory management of coastal resources, suggest that it would: incremental funding could be used to ensure a regional dimension to the various national-level activities being planned or carried out. It is recommended that BOB countries ensure that this issue is emphasised during the GEF project preparation exercise.

BOBP3 has suffered from limited financial and human resources, which have significantly slowed progress and prevented it from achieving as much as it otherwise could have. It is recommended that these factors be carefully analysed as part of the design of any new Programme, and that if possible more substantial resources be secured than were available to BOBP3.

A number of BOBP3 member-countries felt that the Programme could usefully have contributed to national-scale coastal and oceanic fishery management issues, in addition to operating pilot projects on more restricted scales. In addition, the study team observed that there might be opportunities to introduce the participatory process at a higher management level in some countries, and that interventions at this level could be cost-effective and have significant flow-on effects. It is therefore recommended that any new project not be restricted to local-level interventions, but that, where possible, opportunities be taken to encourage use of the participatory approach at higher national or policy levels in member countries.

BOBP3 has focussed on the establishment of management processes, but without necessarily providing for the implementation of any management solutions that the process may identify. In some cases funding has been found to allow such solutions to be implemented, but in many others this has not been the case and stakeholders have been left frustrated by the process. It is recommended that any future Programme to continue the work begun by BOBP3 should take account of the need to move beyond the process itself, and should have the delivery of management solutions formally embedded in its goals and objectives. Programme design will need to address this in terms of funding requirements, and the roles and responsibilities of the programme’s member-countries in this regard.

Arrangements for execution of national pilot projects during BOBP3 experienced a number of weaknesses. In particular, member-countries have often been unable to commit promised counterpart funds in a timely or efficient manner. It is recommended that any future Programme should establish a formal memorandum of agreement in regard to each national project, which lays down the responsibilities and inputs of each project partner.

The arrangements under which national coordinators have been assigned to BOBP3 pilot projects have had a number of shortcomings. The individuals concerned have frequently been burdened with conflicting duties and responsibilities, and BOBP3 activities have suffered as a result. It is recommended that the design process for any new Programme identify mechanisms whereby national project coordinators can be seconded to the
Programme on a full-time basis. Such mechanisms should permit them to interact more extensively with programme staff (including by spending a substantial part of their time at Programme headquarters) and to assume greater responsibility for Programme activities (including financial management) in-country. The mechanism should also encourage greater direct exchange of technology and knowledge among national projects.

- Dispersal or re-assignment of trained national personnel has been a significant impediment to BOBP3’s impact at the national level. As part of the design process of any new or follow-on programme, it is recommended that discussion take place with participating countries or agencies to identify mechanisms that will minimise the loss of trained personnel.

- BOBP3 has attempted to involve both government and non-government agencies in the various national pilot projects that it has sponsored. In many cases there has been a reluctance for these two groups to work together, even though both groups have complementary strengths. The current trend appears to be for donor agencies to make increasing use of NGOs in the delivery of development projects. It is recommended that any BOBP3 follow-on project continue to work with both government and non-government agencies, and to actively foster and encourage closer working relationships between these two groups.

These recommendations essentially bring together the major issues that arose from the study in regard to BOBP3 and its possible future. In order not to dilute the main findings, the study team has refrained from making detailed recommendations relating to minor aspects of BOBP3’s implementation, or generic recommendations to BOB countries and the aid community at large.