

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB5466

Project Name	Integrated Coastal Zone Management
Region	SOUTH ASIA
Sector	General water, sanitation and flood protection sector (30%); General agriculture, fishing and forestry sector (25%); Solid waste management (25%); General public administration sector (10%); Ports, waterways and shipping (10%)
Project ID	P097985
Borrower(s)	GOVERNMENT OF INDIA
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Environment Category	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
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1. Country and Sector Background

India has a coastline of about 7,500km¹, which is less than 0.25 percent of the world coastline, but home to 63 million people, or approximately 11 percent of global population living in low elevation coastal areas. The 73 coastal districts (out of a total of 593) have a share of 17 percent of the national population, and nearly 250 million people live within 50km of the coastline. The coast also includes 77 cities and towns, including some of the largest and most dense urban agglomerations - Mumbai, Kolkata, Chennai, Kochi and Visakhapatnam.

Sustainable management of coastal and marine resources is essential to India's economic growth. India's coastal zone is endowed with a wide range of mangroves, coral reefs, sea grasses, salt marshes, sand dunes, estuaries, lagoons, and a unique marine and coastal flora and fauna. The abundant coastal and offshore marine ecosystems include some 6,740km² of mangroves, including part of the Sundarbans and the Bhitarkanika, which are among the largest mangroves in the world. There are major stocks of corals, fish, marine mammals, reptiles and turtles, sea grass meadows, and abundant sea weeds. Most of the oil and gas reserves in India lie in the coastal and shallow offshore areas. Thirty-five per cent of the coastal stretch is laden with substantial placer mineral and heavy metal deposits. Offshore wind, tidal, wave and future ocean thermal energy potential is huge. Cultural and archaeological sites, some with national and international significance dot the coasts. A significant share of India's economic infrastructure, including maritime facilities, petroleum industries, and import-based industries is located on the coasts, as are 197 major or

¹ Of this 5,400km belong to peninsular India and the remaining to the Andaman, Nicobar and Lakshadweep Islands.

minor ports and 308 large-scale industrial units. Coastal fishing employs a million people full time, and the post-harvest fisheries sector employs another 1.2 million people in 3,638 fishing villages and 2,251 fish landing centers.

Despite their ecological richness and the contribution to national economy, the coastal and marine areas have not received adequate protection, and are under stress. Rapid urban-industrialization, maritime transport, marine fishing, tourism, coastal and sea bed mining, offshore oil and natural gas production, aquaculture, and the recent establishment of special economic zones have led to a significant increase in demand for infrastructure, resulting in the over-exploitation of natural resources. About 34 percent of mangroves of India were destroyed in last five decades (although substantial restoration and conservation have taken place in last 10 years); almost all coral areas are threatened; marine fish stocks are declining; and several species of ornamental fish, sea cucumbers, etc., are fast disappearing. Such rapid depletion and degradation, unless arrested, will impact the livelihood, health and well being of the coastal population; affecting in turn prospects for India's sustained economic growth.

Threat of coastal hazards on economic and livelihood security is increasing. The Indian coast is subject to severe weather events, such as cyclones and super-cyclones (at an average of nine cyclones per year) inflicting great loss of lives and property, especially among the rural coastal communities that always had low resilience to extreme weather variability, mostly due to impoverishment. In recent years, accelerated erosion of coastal land has affected coastal agriculture and built habitats. The returns from traditional fishing are also diminishing due to environmental degradation and over-exploitation. Climate change aggravates the risks to coastal communities and infrastructure. Studies already reveal a significant rise in sea level, increase in the frequency and intensity of extreme weather events, and changes in mean climate variables. A one-meter sea level rise would flood nearly 6,000 km² in India, potentially triggering significant population movements among the 63 million people living in low elevation areas, the poorer among them being the most vulnerable. Climate change will also impact the large infrastructure investments in the port, industrial and urban areas. The recent tsunami (2004) also indicates that the Indian coast and marine areas are also prone to seismic related disasters.

Diverse stakes increasingly compete for coastal and marine resources. Rapid economic growth in recent years has propelled newer and larger investments in coastal zones, with more ports set up to act as gateways to the hinterland economy. Together with real estate growth in larger urban areas and unplanned tourism activities, these have contributed to a sharp increase in the demand for basic infrastructure to support the fast-growing rural, semi-urban and urban populations in the coastal zones. Numerous unplanned but competitive economic activities have resulted in conflicts among stakeholders; misuse, abuse and overuse of resources; and degradation of ecosystems with some pockets of coastal landscapes entirely destroyed by commercial aquaculture. The key challenge in coastal zone and marine management is how to accommodate such needs in a sustainable manner.

A plethora of fragmented and sectoral policies and a **weak institutional framework** had been unable to ensure balanced development. The management regime for coastal and marine areas of the country had suffered from the lack of an integrated and coordinated decision-making process. This is evidenced by a multiplicity of institutional, legal, economic and planning frameworks that exist, all narrow and sector driven. Consequently, sectoral activities and interventions in coastal and marine areas work in isolation from each other, at times with conflicting objectives and outputs. At the same time stakeholder interests are diverse and competitive, partly due to a lack of

participatory planning and management processes. Investments in large and small economic infrastructure - all critical components of national goals for growth and poverty reduction take place without systematic analysis of long term implications. The overall policy and plan responses are further crippled by lack of knowledge of coastal resources, processes, impact analyses and management options.

Up to now, the approach to managing India's coastal zone has been a purely regulatory one, as per the Coastal Regulation Zone (CRZ) Notification of 1991, promulgated under the Environment (Protection) Act of 1986. This approach does not provide adequate room to promote coastal zone conservation and the needs of improved livelihood of coastal communities or to seek convergence with other development activities. The 1991 notification prevents, restricts and regulates development activities within a landward distance of up to 500m from the high tide line along the coasts. In the last decade, as development pressures grew, there were large-scale reported violations of the regulations, along with demands from the various stakeholders for suitable modifications in the Notification.

The reform agenda for sustaining coastal and marine areas in India is to support participatory, integrated but decentralized planning and management. In July 2004, the Ministry of Environment and Forests (MoEF) constituted an Expert Committee, chaired by Prof. M. S. Swaminathan, to carry out a comprehensive review of the CRZ Notification, taking into account the findings and recommendations of previous committees, judicial pronouncements, and representations of various stakeholders, and to suggest suitable amendments. The Committee also had the mandate to recommend regulatory framework consistent with well-established scientific principles of coastal zone management that would reflect the local characteristics of the coastal zone stretches to be protected. The Committee submitted its report in February 2005. A major recommendation was to adopt an **integrated coastal zone management (ICZM) approach that would, with people's participation, promote the livelihood security of the coastal communities, and protect the ecosystems while promoting sustainable development.** The Government of India (GoI) accepted the Report in 2006, and mandated the MoEF to implement its recommendations, including initiating the process of improving the CRZ Notification, with an appropriate coastal zone management notification. The process of finalizing the notification is currently underway.

Besides recommending a shift from pure regulation to management, the reforms suggested by the Committee included the adoption of integrated coastal zone planning as a mechanism for intersectoral collaboration and decision-making, the decentralization of management responsibilities to states and local governments, the creation of an institutional architecture to foster integrated planning and management; and the establishment of an appropriate knowledge base for addressing medium and long term issues. These need to be implemented in parallel to the process of reforming the regulatory framework, so that the new notification is complemented by adequate institutional capacity and knowledge base. The Committee, therefore, proposed a national coastal zone management program to address and finance these institutional, capacity and knowledge needs.

2. Objectives

The project's *development objective* (PDO) is to assist the GoI in building national capacity for implementation of comprehensive coastal management approach in the country, and piloting the integrated coastal zone management approach in states of Gujarat, Orissa and West Bengal.

3. Rationale for Bank Involvement

The GoI has developed a vision for the long-term management of the coastal and marine areas, as articulated in the 2005 National Environment Policy, and the Swaminathan Committee report. The vision has two parts - (a) reforming the regulatory framework for integrated management of coastal and marine areas; and (b) developing the institutional arrangements, capacity and adequate knowledge systems to enable the desired shift to ICZM approaches. The GoI has already initiated steps to implement both parts of this vision, and has requested Bank support for the second part.

It should be emphasized that this reform process has been deliberated and articulated over the last five years. Only after the GOI decided to initiate implementation of the reform program, was the Bank's support requested. ICZM, as well as capacity and knowledge building for such management are international best practices to which the Bank subscribes, and which it promotes through its projects around the world. The shift from regulation to management of natural resources; decentralized management, decision-making and planning processes that involve all relevant stakeholders; institutional development for fostering intersectoral collaboration in conservation of natural and economic resources, which are other parts of the GoI reform program – are all best practices, that the Bank supports.

Integrated management of the coastal and marine areas in general and the project in particular will have long lasting benefits. Development of economic infrastructure in the coastal zone, along with protection of ecological and cultural landscapes and traditional rights is crucial to India's growth and development. Balanced, sustainable and rapid economic growth is also the fulcrum for poverty reduction. The project, and the reforms it supports, will play a vital role in reducing the vulnerability of coastal populations to current variability and disasters, both of which are expected to increase due to climate change effects.

The project will support capacity building for effective coastal zone management at the national level and in three pilot states. Once the initial demonstration is complete, the initiatives will be replicated for long-term gains and wider impacts, both at the national level and for the remaining nine coastal states and four union territories.

The Bank's involvement is significant for the GoI. By bringing in international expertise, sharing knowledge on coastal zone management issues among India and other countries, and supporting demonstration of ICZM processes and benefits, this project will help to ensure that the GoI's long term reform agenda has strong institutional and capacity underpinnings, tested experience in implementation, and relevant advanced knowledge needed for integrated planning. The lessons learnt from, and the quality of capacity created by this project will be crucial for designing and implementing future projects and program in India.

4. Description

The project consists of four components, one at the national level and one each for the three participating states. The national component focuses on expanding the institutional capacity and the knowledge base needed for integrated management of coastal zones. The state components include implementation of a range of complementary local pilot investments in select small coastal stretches (in total about 3 percent of the coastline of India) to support state level capacity building. Each of these local pilot investments were designed to demonstrate results from integrated and joint actions, and were selected based on wide stakeholder consultations. These state level pilot

investments directly benefit 1.1 million people, while the state and national capacity building activities benefit 7.65 million people directly, 35 million people indirectly in the medium term, and eventually all 63 million people living in the low elevation coastal areas in India. The project cost is estimated at Indian Rupees 1330 crore or about US\$285.67 million including contingencies.

Component One: National ICZM Capacity Building (US\$87.3 million)

The national component will include [i] mapping, delineation and demarcation of the hazard lines, and delineation of coastal sediment cells all along the mainland coast of India; [ii] mapping, delineation and demarcation, as required, of the ecologically sensitive areas (ESAs), also all along the mainland coast of India; [iii] capacity building of the MoEF as the secretariat for the National Coastal Zone Management Authority (NCZMA), and nation-wide training program for ICZM; [iv] setting up and operationalization of the new National Center for Sustainable Coastal Management (NCSCM), and [v] project management.

Component Two: Piloting ICZM Approaches in Gujarat (US\$74.1 million)

This component will support capacity building of the state level agencies and institutions, including preparation of an ICZM plan for the coastal sediment cell that includes the Gulf of Kachchh, pilot investments, and project management. The preparation and adoption of an ICZM Plan for the Gulf of Kachchh has been designed as a process of regular revolving stakeholder dialogue, supported by scientific and technical inputs related to the natural coastal and marine processes, resource endowments, potential coastal hazards and risks to coastal communities. This component will support capacity building of the Forest and Environment Department, Gujarat State Pollution Control Board, Gujarat Ecological Educational and Research Foundation, and the Bhaskaracharya Institute of Space Applications and Geo-Informatics. Pilot investments will include (a) conservation and protection of coastal resources including mangrove and coastal shelterbelt plantation, coral reef regeneration, and establishment of a marine resource information and conservation centre; (b) environment and pollution management by completing the sewerage system for Jamnagar City to prevent further degradation of the coral reefs; and (c) livelihood security of coastal communities including ecotourism and related livelihood improvement activities in the coastal villages within and outside forest areas.

Component Three: Piloting ICZM Approaches in Orissa (US\$49.3 million)

This component will include capacity building of the state level agencies and institutions, including preparation of an ICZM plan for the coastal sediment cells that include the stretches of Paradip-Dhamra and Gopalpur-Chilika, including a regional coastal process study, pilot investments, and project management. The content of the ICZM plan and the plan process that will be supported will be similar to those described under Component Two for ICZM plan preparation in Gujarat. The project will support capacity building of the Forest and Environment Department, Orissa State Pollution Control Board, and the Chilika Development Authority. The pilot investments include (a) conservation and protection of coastal resources including protection of the olive ridley turtle and other aquatic wildlife; mangrove and shelterbelt plantation; conservation of archaeological heritage some of which serve as cyclone shelters; and a pilot activity in shoreline protection for the village of Pentha; (b) environment and pollution management by completing the solid waste management system for the coastal town of Paradip to reduce pollution load on the coastal stretches known to be nesting habitats; and (c) livelihood security of coastal communities including allied farming improvement support in 60 fishing villages on the periphery of the Chilika lake and the Gahirmatha Wildlife Sanctuary; support to fisher-people groups in developing small-

scale and community-based tourism, industrial and marketing activities, such as coir-making; and provision of cyclone shelters in the thirteen remaining coastal villages, where cyclone shelters were not constructed in earlier programs.

Component Four: Piloting ICZM approaches in West Bengal (US\$75 million)

In West Bengal, the project will support capacity building of the state level agencies and institutions, including preparation of an ICZM plan for the coastal sediment cells in the coastal areas of West Bengal, pilot investments, and project management. The content of the ICZM plan and the plan process will be similar to those described under Components Two and Three for Gujarat and Orissa. A capacity-building sub-component will support the Environment Department, Calcutta University, and the Institute of Environmental Studies and Wetland Management. Pilot investments include (a) conservation and protection of coastal resources including mangrove and coastal shelterbelt plantation; pilot works in shoreline protection for Digha beach and the southern end of Sagar Island; and rehabilitation of the marine aquarium at Digha; (b) environment and pollution management by completing the sewerage system for Digha to prevent flow of sewage onto the sandy beach; cleaning and environmental improvement of the Digha beach, and solid waste management in Digha; improvement of the fish auction centre at Digha; and distribution of grid electricity on Sagar Island to replace diesel generation and prevent soil and water pollution; and (c) livelihood security of coastal communities in Sagar Island including support to CBO coordinated livelihood improvement activities; afforestation-based livelihood improvement; promotion of local small-scale tourism and ecotourism activities; and provision of cyclone shelters in the coastal villages.

Note: Carbon finance opportunities will be explored to enhance financial attractiveness of interventions such as improved sewerage systems and the mangrove plantations in Components two, three and four. The extent of greenhouse gas emission reductions that can be claimed will be established by two ongoing studies.

5. Financing

Source:	(\$m.)
BORROWER/RECIPIENT	63.71
International Development Association (IDA)	221.96
	Total 285.67

6. Implementation

The project has four implementing agencies - MoEF at the national level with lead responsibilities, and the Departments of Forests and Environment (DoFE) of the three participating states. Each of these four main partners has already set up special purpose vehicles in the form of registered societies (NPMU and SPMUs), to manage the project and achieve the PDOs; coordinate project activities on a full-time basis and directly execute some of the relevant project sub components. In addition, Steering Committees (SCs) at the national and the state levels have been set up for inter-sectoral coordination.

The NPMU and SPMUs will be responsible for all procurement, ensuring prudent financial management, quality assurance, monitoring and evaluations under the project. The NPMU and SPMUs will collaborate with a range of government departments or specialized agencies (the PEAs) that have jurisdiction, demonstrated capacity and expertise in management and execution of

the proposed pilot investments. PEAs will be responsible for contract management including signing of contracts, regular supervision, contract payments and accounting. In the cases of community procurement, force accounts, and procurement of small works, goods and incremental operating facilities through shopping, PEAs will manage the entire procurement process with necessary support from NPMU/SPMUs. The sharing of roles and responsibilities, including administrative and fiduciary arrangements between the NPMU/SPMUs and the PEAs has been agreed and documented in bilateral MOUs.

The NPMU/SPMUs will collaborate with and seek support from and partnership with a range of other agencies to strengthen the capacity of the main implementing agencies. These will include international, national and local knowledge centers; academic and research institutes; private sector business houses and industries; urban and rural local government bodies; civil society groups, NGOs, community based organizations and other government departments responsible for coastal zone development and protection.

7. Sustainability

The GoI is strongly committed to comprehensive management of the coastal and marine areas as evidenced through : (i) the setting up of the Swaminathan Committee which submitted its report in February 2005; (ii) the acceptance of the Committee's report by GoI in 2006; (iii) the issue of several draft notification for nationwide dissemination and stakeholder feedback on the revision of the CRZ Notification in 2008; and (iv) extensive nation-wide consultations with civil society, NGOs, industry groups and other stakeholders during 2008-10. This consultation process was completed in April 2010, based on which GoI intends to promulgate a final revised notification. GoI is keen to implement this new ICZM approach to balance the dual needs of conserving the ecosystems of the coastal zone and protecting the traditional rights of coastal communities, while at the same time promoting economic development and poverty reduction in the coastal areas. The states of Gujarat, Orissa and West Bengal, similarly, are committed to implementation of the project, including commitment to provide their respective share of the project cost and all other resources necessary to achieve project development objectives.

Institutional sustainability: Historically, the MoEF and the DoFE have had the mandate, budgets and responsibility for implementing the CRZ Notification and in future, they will have the responsibility for implementing the proposed ICZM approach. These regular government ministry and departments are deemed to be sustainable. New institutions in the form of registered societies have been created to develop and pilot institutional mechanisms that would be suitable for the proposed ICZM and decentralized approach. These institutions are very likely to be sustainable either in the same form or after they are converted and merged into regular ministries and departments, once the project demonstrates its successes. The prospect of sustainability will be further strengthened as the GOI desires to build on the project's success by scaling up ICZM to the rest of the coastal states.

Sustainability of pilot investments: Each pilot investment, as part of its design, has developed a detailed plan for operation and maintenance of the assets that would be created under this project. These plans have identified the institutional responsibilities as well as the funding and other resources that will be required for their long term sustainable operations.

Replicability: Replicability will be the litmus test for the project. To facilitate replication the following steps were taken: (i) careful selection of project states based on the diverse nature of

challenges they face so that lessons from these pilots would be immediately applicable to other coastal states; (ii) careful selection of small coastal stretches within each project state so that the lessons learnt from the preparation of ICZM plans and from the implementation of local pilot investments could be readily useful for other coastal stretches experiencing similar challenges within or outside the state; and, (iii) dedicating substantial resources for developing high quality ICZM plans and planning processes. Preparation and adoption of successful ICZM plans will depend on stakeholders' engagement and co-management of the ICZM planning process. Many pilot investment activities such as mangrove plantations will be co-managed by the local coastal communities and self-help groups. The successful demonstration of co-management benefits will help replicate the project, and the processes it supports.

8. Lessons Learned from Past Operations in the Country/Sector

This will be the first Bank-financed ICZM or similar project in the Region. Learning from Bank-financed environment sector projects in India does not directly relate to this project, as the scope of those projects was very different. Operational experiences from those projects, relevant to a generic capacity building project, are as follows: (a) to be sustainable or successfully implemented, capacity building projects need strong demonstration of improvements in environmental quality; (b) project impacts are achieved only if the institutional capacity created is put into practice; (c) project impacts are linked to the leverage and ability to influence environmental protection and bring about actions. Across the Bank, lessons learned show uneven results in strengthening institutional effectiveness through capacity building projects if important issues on the ground remain unaddressed. Therefore, this project explicitly links institutional capacity building directly to hands-on ICZM practices and tangible investments.

Design of this project benefitted from experiences of similar Bank projects in other regions.

In the recent past the Bank has financed a number of ICZM or similar projects. Prominent among these are: *Albania: ICZM and Clean-up*, *Brazil: Espirito Santo Water and Coastal Pollution Management*; *Croatia: Coastal Cities Pollution Control*, *Egyptian Red Sea Coastal and Marine Resource Management*; *Georgia: ICZM*, *Ghana: Coastal Wetland*, *Honduras: Sustainable Tourism*, *Indonesia: Coral Reef Rehabilitation and Management*, *Mozambique: SEACAM-Capacity Building for ICZM*, and *Tanzania –Strengthening Marine and Coastal Resource Management*. The respective implementation completion reports (ICRs) or implementation status reports (ISRs) present the following key lessons: (i) the design of the project should use and demonstrate an overall ICZM framework right from the start of the preparation period to link project components to project objectives; (ii) project implementation suffers if the design and planning do not ensure joint planning among different government agencies, who have jurisdiction over coastal zone activities; (iii) sound coastal and marine resource management is possible only if there is adequate cross-sector coordination; (iv) project design should have a very strong project outreach and communication strategy; (v) it is important to have quantifiable performance indicators; and (vi) implementation of projects suffers if counterpart funding from borrowers is not available or timely. This project incorporates each of these lessons specifically by adopting an ICZM framework to strongly link each discrete activity from the outset, through joint planning by responsible sector agencies, and by securing counterpart resources from national and state governments and from each PEA.

Many Bank ICZM projects suffered due to classical linear project design (i.e., a step by step progression from policy-making to plan preparation, and thereafter to implementation of actions),

where each next step depends on the successful implementation of earlier steps. The ICZM plan is a consensus building process - a universal lag – and follow up activities often could not be implemented in time. Integrated decision-making is best attempted through multiple simultaneous actions, rather than through such a linear design. In this project, therefore, the objective of integrated decision-making is attempted through smaller, discrete but strongly related actions, through (i) the participatory ICZM plan processes, (ii) the demonstration of cross-sector and geographical integration in a substantial number of pilot investments, (iii) the integrated capacity building and training programs, and (iv) the demonstration of integrated project management through SPMUs. The project preparation itself was a substantial stakeholder consultation process, and the project is designed to be an initial step towards the desired level of integrated decision-making.

International experiences in implementation of ICZM approaches suggest that: (a) ICZM plans are successful if the institutional structure is amenable to joint actions, and only if substantial knowledge is available; (b) improved integrated management of coastal areas requires understanding of threats, opportunities and the needs to conserve inter-generational resources; (c) success depends on the use of continuously improving science as a basis of decision-making, instead of proxies; and (d) ICZM involves multiple stakeholders and multiple simultaneous actions, and cannot be successfully implemented by artificial simplistic processes. The European Union reviews of ICZM implementation practices (1998, 2002) recommend adopting the following: (i) a broad holistic perspective, or systems approach, and delineation of the coast according to natural social boundaries; (ii) working with natural processes, such as coastal engineering, soft engineering and/or ‘setback and retreat’ options, and local specificity; (iii) a long-term view, and use of adaptive management tools; (iv) participatory planning with both powerless and powerful stakeholders; (v) ensuring the support and involvement of all relevant administrators, i.e., the horizontal integration of local agencies, and vertical integration between local and central government; and (vi) use of a combination of instruments, such as legislative measures, policy programs, economic incentives, technology solutions, research, voluntary agreements and education. The project design reflects these lessons from ICZM experience worldwide.

Project design addresses lessons from related sector investments in India. Investments in coastal zone management or protection in India have always been very small (each usually costing less than US\$ 100,000), given the focus on protection by regulation. During project preparation, a *management effectiveness study* evaluated the performance of 37 such small projects implemented in the last decade in Gujarat, Orissa and West Bengal. Although these 37 projects were completed with varying degrees of success, the study identified five weaknesses common to the majority of these projects – (i) sector departments did not attempt to collaborate with each other, as the projects were seen to be strictly sector based activities; (ii) an absence or overall lack of access to adequate technical expertise or capacity; (iii) performance was always driven by the quantity of the outputs rather than quality due to the sectoral nature of targets; (iv) an absence of adequate documentation at local or community level, including lack of planning or financial transaction records; and (v) a lack of participation of local communities in planning or M&E, and only partial participation during implementation. The design of the pilot investments in this project has taken each of these issues into account. Activities have been designed to ensure that each participating department has a stake; and resources are dedicated to ensure the timely availability of adequate human and technical resources necessary to implement the activities. Performance will be measured by the quality of outputs and the integration of outcomes in addition to quantities. Adequate financial management, procurement, and M&E systems have been planned and

resources allocated. Finally, each activity is planned to invoke the participation of stakeholders, including a number of activities implemented through the communities themselves.

Many Bank projects in India experience significant and unnecessary implementation delays largely due to the decision-making process of executing agencies. The risk of possible implementation delays has been mitigated by specific project design features, such as: (a) the creation of the national and state project management units as autonomous societies with adequate responsibilities and empowerment to efficiently implement the project; (b) the avoidance of complex procurement decision-making by concentrating procurement activities at the four implementing agencies, where adequate capacity will be created; (c) the establishment of a high level cross-sector coordination mechanism for reviewing the annual performance and action plans; and, (d) agreements with stakeholders across various sectors on the design of the three state components, which was achieved through a consultation process that started with the project reconnaissance mission.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[]
Natural Habitats (OP/BP 4.04)	[X]	[]
Pest Management (OP 4.09)	[]	[X]
Physical Cultural Resources (OP/BP 4.11)	[X]	[]
Involuntary Resettlement (OP/BP 4.12)	[X]	[]
Indigenous Peoples (OP/BP 4.10)	[X]	[]
Forests (OP/BP 4.36)	[]	[X]
Safety of Dams (OP/BP 4.37)	[]	[X]
Projects in Disputed Areas (OP/BP 7.60)	[]	[X]
Projects on International Waterways (OP/BP 7.50)	[]	[X]

Except for OP 4.01 and OP4.10, which fully apply, the other Bank safeguard policies have been triggered from a precautionary point of view. Although the project does not have any land acquisition and has absolutely minimized the potential for involuntary resettlement, a Resettlement Policy Framework has been prepared to address if any such issues arise accidentally during implementation of the project. Likewise, although the project will have no direct or indirect impacts on natural habitats, OP4.04 is triggered to accommodate future third-party risks, such as oil spill in the coastal areas or damage from future cyclones. The project does not impact any physical cultural resources, and instead supports conservation, renovation and restoration of seven dilapidated locally important cultural properties. Triggering OP4.11 has helped to ensure that the conservation, renovation and restoration works will be planned and implemented using the best professional standards.

Consultations: The design of the ICZMP and its various components, including the several pilot investment activities proposed on the ground in the three states entailed wide-ranging consultations with various stakeholder groups. In addition to stakeholder consultation at overall project level, and at the level of pilot investments, the MOEF and the states of Gujarat, Orissa and West Bengal organized additional consultation with non-government organizations, community organizations

and experts. Each of the above agencies undertook substantial consultation at state capitals and at community level with several non-government agencies, community agencies and experts. Altogether 122 non-government agencies or community organizations were consulted (86 at national level, 22 in Gujarat, 14 in Orissa and 18 in West Bengal), and a total of 118 expert consultation sessions were organized during January 2008 to September 2009. During November 2009 to March 2010 a total of 10 large regional stakeholder workshops were organized by MoEF in different parts of the country to discuss with a wide range of stakeholders including NGOs and communities on the coastal zone conservation and protection. Five of these 10 workshops were attended and led by the Union Minister of State for Environment and Forests. In each such stakeholder workshops, this project was discussed in detail. Consultations will continue throughout the project period.

10. List of Factual Technical Documents

Overall Project Management

- Project Implementation Plan
- Financial Management Manual
- Procurement Manual
- Environment & Social Assessment Report (including ESMP & RFP)
- Report on the Management Effectiveness Study
- Communication Strategy & Plan

Project Component One

- Detailed Project Report for Hazard Mapping
- Detailed Project Report for Mapping of Environment Sensitive Areas
- Detailed Project Report on Design of National Center for Sustainable Coastal Management
- Capacity Building Plan for Ministry of Environment and Forests

Project Component Two

- Gujarat Overall State Report
- Gujarat State Capacity Building Plan
- Detailed Project Report on Mangrove Plantation by Marine National Park
- Detailed Project Report on Mangrove Plantation by Gujarat Ecology Commission
- Detailed Project Report on Coral Reef Generation & Improving Research Capacity
- Detailed Project Report on Environmental Sanitation in Jamnagar
- Detailed Project Report on Pollution Monitoring
- Detailed Project Report on Studies on shoreline changes, biological changes
- Detailed Project Report on Marine Aquarium
- Detailed Project Report on Improved Livelihood of Coastal Communities

Project Component Three

- Orissa Overall State Report
- Orissa State Capacity Building Plan
- Detailed Project Report on Multi-Purpose Cyclone Shelters
- Detailed Project Report on Protection of Olive Ridley Turtles & Aquatic Wildlife
- Detailed Project Report on Shoreline Protection at Pentha
- Detailed Project Report on Mangrove Plantation
- Detailed Project Report on Species & Wetland Research
- Detailed Project Report on Fishery-based Livelihood Improvement
- Detailed Project Report on Tourism based Livelihood Improvement
- Detailed Project Report on Biodiversity-based Livelihood Improvement
- Detailed Project Report on Strengthening Pollution Monitoring & Laboratories
- Detailed Project Report on Pollution Abatement in Coastal Cities
- Detailed Project Report on Small Scale Enterprise-based Livelihood Improvement
- Detailed Project Report on Conservation of Archaeological & Cultural Assets

Project Component Four

- West Bengal Overall State Report
- West Bengal State Capacity Building Plan
- Capacity Building Report for IESWM
- Capacity Building Report for Calcutta University
- Detailed Project Report on Coastal Erosion Protection at Digha Shankarpur
- Detailed Project Report on Beach Cleaning at Digha
- Detailed Project Report on Environmental Sanitation- Digha
- Detailed Project Report on Solid Waste Management at Digha
- Detailed Project Report on Environmental Improvement of Digha Beach
- Detailed Project Report on Distribution of Grid Electricity in Sagar Island
- Detailed Project Report on Fisheries Improvement at Sagar
- Detailed Project Report on Livelihood Improvement at Sagar
- Detailed Project Report on Afforestation based Livelihood Improvement
- Detailed Project Report on Ecotourism/Tourism & Community Development at Sagar
- Improvement of Marine Aquarium
- Detailed Project Report on Coastal Bioshield in East Medinipur
- Detailed Project Report on Fish Auction Center in Digha

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