

Document of
The World Bank

Report No: 30889

IMPLEMENTATION COMPLETION REPORT
(TF-28456 TF-21424)

ON A

GRANT

FROM THE GLOBAL ENVIRONMENTAL FACILITY

IN THE AMOUNT OF SDR 2.4 MILLION

TO THE

INDIAN OCEAN COMMISSION

ON BEHALF OF L'UNION DES COMORES, MADAGASCAR, MAURITIUS AND SEYCHELLES

FOR A

WESTERN INDIAN OCEAN ISLANDS

OIL SPILL CONTINGENCY PLANNING PROJECT

December 15, 2004

CURRENCY EQUIVALENTS

(Exchange Rate Effective December 6, 2004)

Currency Unit =
SDR 1.00 = US\$ 1.5401
US\$ 1.00 = SDR .649

Comorian franc 1 = US\$0.0027
US\$1.00 = Comorian franc 369.11

Malagasy franc 1 = US\$0.0001
US\$1.00 = Malagasy franc 8,975

Mauritian rupees 1 = US\$ 0.035
US\$1.00 = Mauritian rupees 28.32

Seychelles rupees 1 = US\$ 0.185
US\$1.00 = Seychelles rupees 5.418

FISCAL YEAR

January 1 to December 31

ABBREVIATIONS AND ACRONYMS

| | |
|--------|--|
| CAS | Country assistance strategy |
| CLC | International Convention on Civil Liability for Oil Pollution Damage |
| FUND | International Fund for Compensation of Oil Pollution Damage |
| GEF | Global Environmental Facility |
| IMLI | IMO International Maritime Law Institute |
| IMO | International Maritime Organization |
| IOC | Indian Ocean Commission |
| IPIECA | International Petroleum Industry Environmental Conservation Association |
| M&E | Monitoring and evaluation |
| NGO | Nongovernmental organization |
| OPRC | International Convention on Oil Pollution Preparedness, Response and Cooperation |
| PAD | Project appraisal document |

| | |
|--------------------------------|------------------------|
| Vice President: | Gobind Nankani |
| Country Director | James P. Bond |
| Sector Manager | C. Sanjivi Rajasingham |
| Task Team Leader/Task Manager: | Abdelmoula Ghzala |

AFRICA
Western Indian Ocean Islands Oil Spill Contingency Planning Project

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|--|---|
| <i>Project ID:</i> P036037 | <i>Project Name:</i> West. Ind. Ocean Islands Oil Spill Cont. |
| <i>Team Leader:</i> Abdelmoula M. Ghzala | <i>TL Unit:</i> AFTTR |
| <i>ICR Type:</i> Core ICR | <i>Report Date:</i> December 15, 2004 |

1. Project Data

Name: West. Ind. Ocean Islands Oil Spill Cont. *L/C/TF Number:* TF-28456; TF-21424
Country/Department: AFRICA *Region:* Africa Regional Office

Sector/subsector: Central government administration (86%); Law and justice (14%)
Theme: Environmental policies and institutions (P); Pollution management and environmental health (P); Water resource management (P); Regional integration (P); Law reform (P)

| KEY DATES | <i>Original</i> | <i>Revised/Actual</i> |
|------------------------------|------------------------------|-----------------------|
| <i>PCD:</i> 10/10/1994 | <i>Effective:</i> 03/30/1999 | 03/30/1999 |
| <i>Appraisal:</i> 07/02/1998 | <i>MTR:</i> 12/31/2000 | 12/31/2000 |
| <i>Approval:</i> 12/17/1998 | <i>Closing:</i> 06/30/2003 | 06/30/2004 |

Borrower/Implementing Agency: COMOROS, MADAGASCAR, MAURITIUS AND SEYCHELLES/INDIAN OCEAN COMMISSION
Other Partners: Indian Ocean Commission, International Maritime Organization, International Petroleum Industry Environmental Conservation Association, Government of South Africa, French Development Cooperation

| STAFF | Current | At Appraisal |
|----------------------------|------------------------|----------------------|
| <i>Vice President:</i> | Gobind Nankani | Callisto E. Madavo |
| <i>Country Director:</i> | James P. Bond | Michael Sarris |
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| <i>Team Leader at ICR:</i> | Abdelmoula M. Ghzala | Abdelmoula M. Ghzala |
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2. Principal Performance Ratings

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, HU=Highly Unsatisfactory, H=High, SU=Substantial, M=Modest, N=Negligible)

Outcome: S
Sustainability: L
Institutional Development Impact: SU
Bank Performance: S
Borrower Performance: S

Quality at Entry: QAG (if available) ICR
S
Project at Risk at Any Time: No

3. Assessment of Development Objective and Design, and of Quality at Entry

3.1 Original Objective:

The project's overall development objective was to protect the environmental integrity of the coastal and marine ecosystems of a large, biologically rich and relatively pristine part of the western Indian Ocean. Specific project objectives were to: (a) establish appropriate legal and institutional frameworks to ensure compliance with relevant international conventions; (b) develop national and regional contingency planning processes; (c) set up appropriate national and regional oil spill response capacity; and (d) establish sustainable financial and institutional agreements and synergy through regional cooperation arrangements (including South Africa and Réunion). The project would achieve these objectives by supporting efforts of the small island states of Comoros, Mauritius, Madagascar, and Seychelles to ratify and comply with the International Convention on Oil Pollution Preparedness, Response and Cooperation (OPRC90) (which requires states to develop and maintain adequate capacity to respond to oil pollution emergencies), building awareness of risk of oil spills and developing capacity to address them at the national level, and establishing and organizing oil spill response capacity at the national and regional levels.

The project's global objectives were to limit the contamination of international waters and promote conservation of globally significant marine and coastal biodiversity. The project would achieve this objective by: (a) building capacity of the small island states to address the threat of oil spills in the western Indian Ocean region; (b) involving the private sector in utilizing technological advances to resolve transboundary concerns associated with such a threat, and (c) developing a financing mechanism to sustain the national and regional capacity that the project would create to deal with oil spills.

The project's development and global objectives were, and remain, appropriate. Healthy coastal and marine ecosystems of the region are increasingly important to the economies of the four island states, all of which depend on tourism and related activities for a large and growing share of gross domestic product. The project's specific objectives were also appropriate. The island states had recently ratified international conventions designed to prevent and contain contamination of the environment from oil spills and required assistance to bring national laws and regulations in conformity with the conventions. They also needed assistance to create capacity to deal with oil spill emergencies and to identify mechanisms to sustain them. The project's objectives also supported the objectives of the Bank's country assistance strategies for Mauritius and Madagascar and country program frameworks for Seychelles and Comoros to improve management of environmental resources and to promote environmental sustainability of economic activities.

The project was fully consistent with the objectives of GEF's Contaminant-Based Operational Program (number 10), which is to develop and implement international waters projects that demonstrate ways to overcome barriers to the use of best practices for limiting release of contaminants critical for the international waters focus area, and to involve the private sector in utilizing technological advances for resolving these transboundary priority concerns. It also supported the operational program's short-term objectives to (a) leverage significant private sector support to demonstrate the use of modern technology in preventing shipping accidents, oil spills, and releases of contaminants, and to demonstrate innovative measures to address issues related to international maritime conventions (International Convention on Civil Liability for Oil Pollution Damage (CLC92), OPRC90, International Fund for Compensation of Oil Pollution Damage (FUND92)); and (b) develop a regional international waters project aimed at deriving and disseminating lessons learned from projects, sharing the learning experience with groups of countries cooperating on international waters projects, and addressing the technical and institutional needs of countries cooperating on international waters projects. The project is also consistent with a key objective of the Waterbody-Based Operational Program (number 8), to help countries to work cooperatively and

collectively in addressing imminent threats to their transboundary water resources.

3.2 Revised Objective:

The objectives of the project were not formally revised during implementation. The GEF Trust Fund Grant Agreement, however, was amended on March 9, 2004 to reallocate proceeds of the Grant.

3.3 Original Components:

The project comprised five components:

(1) Legislation and regulation for conventions. This component assisted the four island nations harmonize their national legislative framework with the provisions of the CLC92, FUND92, and OPRC90. Specifically, the component supported (a) a regional workshop on the ratification and implementation of the conventions to highlight the experience of countries that have already ratified and are implementing them; (b) technical assistance to assist Comoros and Madagascar to ratify the international conventions; and (c) technical assistance to assist all four countries to draft national laws and regulations in conformity with the conventions. This component also financed the enrolment of legal officers in the master's program at the International Maritime Organization (IMO) International Maritime Law Institute (IMLI).

(2) National oil spill contingency plans. This component assisted all four participating countries to develop capacity for collecting and managing environmental data and to create national environmental sensitivity maps. It also supported the development and testing of national oil spill contingency plans by Comoros and Madagascar, and the review and testing of contingency plans by Seychelles and Mauritius.

(3) Oil spill response equipment. This component financed the: (a) assessment of baseline situation to determine equipment needs; (b) specification of equipment needed; (c) procurement of equipment, and (d) training in equipment operation and maintenance.

(4) National capacity building. This component supported: (a) training on environmental sensitivity mapping, project management, convention implementation, and other issues; (b) training of trainers; (c) technical assistance relating to risk assessment and development of appropriate response strategies; (d) participation of government officials in the main international seminars on preventing and responding to oil spills; and (e) development and testing of national oil spill response manuals.

(5) Regional institutional strengthening. This component supported development of a regional plan to coordinate response of countries in the event of a major oil spill. Specifically, it supported the creation of national capacity for project management; development of regional cooperation agreements; awareness raising, training, and joint exercises; regional contingency planning; and establishment of a regional oil spill response coordination center. The government and industry of South Africa agreed to assist in developing the plan, because of their extensive experience in dealing with oil spills.

The project was expected to be executed over four years. Overall responsibility for project execution rested with a project management unit (PMU) housed in the secretariat of the Indian Ocean Commission (IOC). The IOC had gained experience with Bank procedures and project management by implementing the US\$350,000 PDF Block B project preparation grant approved in 1997. A steering committee, chaired by the IOC and comprising senior officials responsible for environment for each participating country, guided project implementation. A project implementation coordinator within the ministry of environment for each country oversaw the implementation of the national-level activities, with technical assistance and oversight of the PMU.

3.4 Revised Components:

Project components were not formally revised during project implementation. However, funds were reallocated following the mid-term review to allow the purchase of seven additional sets of equipment to respond to an oil spill, two for Comoros to provide a set for each island, three for Madagascar (total of eight, one for each of five autonomous provinces, two for Tulear province, and one at the central level), and two for Mauritius, including one for Rodrigues. Funds were reallocated to allow purchase of communications equipment for Comoros and Madagascar, where communications proved to be a severe constraint hampering coordination among the various government departments expected to respond to oil spills. Funds were also reallocated for information campaigns to raise awareness among communities of the risks of oil spills and measures that could be taken to prevent them, and for studies. Finally, funds were provided to support the development of a specific oil spill contingency plan for Rodrigues, which planned to substantially increase its importation of oil to supply rapidly growing electricity production.

The project closing date was extended once. The extension to June 30, 2004 was granted to allow the environmental sensitivity mapping and testing of national contingency plans to be completed, and to ensure that the overall financial and institutional sustainability of the project was effective, the regional coordination center was properly established, and the agreements between the beneficiary countries and the oil industry clarifying their respective roles in preventing and responding to oil spills were finalized. Political unrest in Comoros starting in 1999, and in Madagascar following the presidential election of December 2001 delayed implementation of activities in those countries until the situation stabilized.

3.5 Quality at Entry:

Quality at entry is rated satisfactory. The project's overall development objective was reasonably clear and appropriate, although too broad to allow measurement of the project's contribution towards meeting it. The project's global objectives were also appropriate and in line with the objectives of the Nairobi convention, which are to encourage regional initiatives and cooperation among the states for the protection, management, and development of marine and coastal resources of the eastern African region. The specific project objectives were well-defined, and indicators to measure progress towards meeting them were specified. Objectives were also consistent with the development strategies of the government and of the Bank, which were broadly to promote environmentally sustainable development of the island states. The project design built on work carried out by the IMO in the mid-1990s to identify needs of the island states to establish capacity to respond to oil spills.

The project design was further enhanced by involving the IMO, the International Petroleum Industry Environmental Conservation Association (IPIECA), the oil and shipping industries, and the governments of South Africa and France (Réunion) in project preparation. The IMO provided an overview of the status of ratification of the relevant conventions, and identified the needs of countries to ratify conventions and establish the necessary legislative, regulatory, and institutional frameworks. IPIECA focused on the arrangements for institutional and financial sustainability of capacity, equipment needs, and the role of the shipping and oil industries in creating and maintaining oil spill capacity. The government of South Africa concentrated on environmental data management, sensitivity mapping, and developing national and regional oil spill contingency plans.

The project design also benefited from the activities carried out under the PDF Block B preparation grant. One study proposed arrangements to sustain the capacity of the national governments and of the proposed regional oil spill response coordination center to respond to oil spills. The high-level seminar held in May 1998 on oil spill contingency planning helped to build consensus among the governments of the island states and the shipping and oil industries on the importance of the building capacity to respond to oil spills, and to define the institutional arrangements to implement the project. Implementation of the PDF Block B

grant also confirmed the appropriateness of the IOC to be the overall project implementing agency, due to its role as representative of the Indian Ocean island states. The project included substantial resources to develop human resources and to strengthen national institutional capacity over time. Both a project implementation plan with a detailed timetable of activities, and an institutional and financial sustainability action plan had been prepared prior to effectiveness. Monitoring indicators were well specified, but focused primarily on outputs rather than impacts. This was appropriate, however, as information that could be used to measure the impact of a project whose aim was to reduce the damage from a low-frequency event does not exist, at not in the short term. For example, data on key performance indicators that would measure the extent to which the project reduced threats to sensitive ecosystems—reduction in number of oil spills from ships, or reduction in the response time to a major oil spill accident—cannot be detected in a short time frame because major oil spills in the region have never occurred more frequently than every ten years or so. Trends in insurance rates per volume of oil transported would be a good indicator of trends in the risks of oil spills, but such data do not exist. Even they did, they could reflect changes in the shipping industry or in the ability of countries to demand compensation from oil spills, rather than to the development of capacity of countries to respond to oil spills.

The design was consistent with the Bank's safeguard policies. The project was classified environmental assessment category C, because it was not expected to generate any negative environmental impacts of its own. The project appraisal document (PAD) realistically appraised the risks the project would face. In particular, it recognized that the risk posed by the uneven institutional capacity for regional cooperation and the risk posed by low financial capacity of Comoros and Madagascar to sustain capacity built under the project. It accurately assessed overall risk as modest. The only grant effectiveness condition—that a project implementation plan, in form and substance acceptable to the Bank, be adopted by the recipient—was appropriate given the need to have clear implementation arrangements in place prior to project launch. The PAD contained a detailed and well-articulated incremental cost analysis, demonstrating the importance of GEF funding to enable the island states, particularly Comoros and Madagascar, to create and maintain regional oil spill response capacity.

The timeframe given of just four years to implement the project, however, was too ambitious given the need to coordinate activities across four countries and with several partners. The involvement of two countries with exceptionally low capacity—Comoros and Madagascar—made implementation in a short period even more challenging. The Bank's Quality Assessment Group did not assess the project's quality at entry.

4. Achievement of Objective and Outputs

4.1 Outcome/achievement of objective:

Achievement of the objectives of the project is rated satisfactory. While the project's development and global objectives were broad, which makes measuring impacts difficult, the project has clearly helped to protect the environmental integrity of the coastal and marine ecosystems of the western Indian Ocean, and to limit the contamination of international waters by supporting the creation and maintenance of capacity to respond to oil spills. The project achieved all of its specific objectives. Comoros, Madagascar, Mauritius, and Seychelles have ratified CLC92, FUND92, and OPRC90. Comoros, Mauritius, and Seychelles in addition ratified the MARPOL 73/78 convention. All four countries have translated the provisions of the conventions into national legislation and regulations. All countries have established national capacity to respond to an oil spill, preparing and testing national oil spill contingency plans. The oil and shipping industries have played an active role in preparing and testing the national plans, and intend to actively participate in responding to oil spills. The project generated widespread public awareness throughout the region of the threat of oil spills and of the means to address them, assuring public support for taxes to

maintain capacity. All four countries have identified mechanisms to finance periodic oil spill exercises, maintain and replenish equipment, and update oil spill contingency plans and manuals. The regional plan has been prepared and tested. Countries of the region know their responsibilities and roles in the event of an emergency and how to mobilize the assistance of neighboring countries and the oil and shipping industries should the need arise. A regional center has been established in Madagascar with financing from the French Cooperation. At the time the project closed, its staff had been appointed and equipment procured, but a permanent location to house the center had yet to be identified. No major spills had occurred in the region since implementation of the project began. Small Tier 1 oil spills did occur in the Port Louis harbor and in Madagascar during project implementation, and all were effectively addressed without causing significant damage.

The project design is being replicated in the follow-on Western Indian Ocean Marine Electronic Highway and Coastal and Marine Protection Project. The East African coastal states of Mozambique, Tanzania, and Kenya have requested to be included in the regional oil spill contingency plan as a means of fulfilling their obligations under the Nairobi Convention. Parties to this convention agree to cooperate in responding to pollution emergencies in the convention area and to reduce or eliminate pollution or the threat of pollution, and to this end to develop and promote, individually and jointly, contingency plans for responding to incidents involving pollution or the threat of pollution. This is a very positive outcome, given that the project was developed with replicability in mind.

4.2 Outputs by components:

Component 1: Legislation and regulation for conventions *(US\$477,000 revised to US\$222,000)*

Achievement of the objectives of the project is rated satisfactory. While the project's development and global objectives were broad, which makes measuring impacts difficult, the project has clearly helped to protect the environmental integrity of the coastal and marine ecosystems of the western Indian Ocean, and to limit the contamination of international waters by supporting the creation and maintenance of capacity to respond to oil spills. The project achieved all of its specific objectives. Comoros, Madagascar, Mauritius, and Seychelles have ratified CLC92, FUND92, and OPRC90. Comoros, Mauritius, and Seychelles in addition ratified the MARPOL 73/78 convention. All four countries have translated the provisions of the conventions into national legislation and regulations. All countries have established national capacity to respond to an oil spill, preparing and testing national oil spill contingency plans. The oil and shipping industries have played an active role in preparing and testing the national plans, and intend to actively participate in responding to oil spills. All countries now have adequate oil spill response equipment to cover their major ports. The wide distribution of equipment also ensures that the time required to respond to a spill is minimal. The project generated widespread public awareness throughout the region of the threat of oil spills and of the means to address them, assuring public support for taxes to maintain capacity. All four countries have identified mechanisms to finance periodic oil spill exercises, maintain and replenish equipment, and update oil spill contingency plans and manuals. The regional plan has been prepared and tested. Countries of the region know their responsibilities and roles in the event of an emergency and how to mobilize the assistance of neighboring countries and the oil and shipping industries should the need arise. A regional center has been established in Madagascar with financing from the French Cooperation. At the time the project closed, its staff had been appointed and equipment procured, but a permanent location to house the center had yet to be identified. No major spills had occurred in the region since implementation of the project began. Small Tier 1 oil spills did occur in the Port Louis harbor in Mauritius and in Fort Dauphin in Madagascar during project implementation, and all were effectively addressed without causing significant damage.

Component 2: National oil spill contingency plans *(US\$1 million revised to US\$875,000)*

Outputs of this component are highly satisfactory. Comoros and Madagascar prepared and tested their national oil spill contingency plans, and Mauritius and Seychelles updated and tested theirs. All countries have involved the key staff of the ministries of environment and transport, the coast guard, police, port authorities, and representatives of the oil and shipping industries in the preparation of the plans and in the semi-annual national oil spill exercises. This has ensured that the capacity of all entities is available to respond to spills and that the roles and responsibilities of each are clear. All countries have produced national environmental sensitivity maps. Mauritius and Seychelles have used theirs to define areas of allowable economic activity, as well as an input to the national contingency plans.

Component 3: Oil spill response equipment (*US\$1.1 million revised to US\$1.7 million*)

Outputs of this component are satisfactory. All significant oil handling facilities in the four beneficiary countries have been equipped with the recommended set of Tier 1 oil spill equipment. Three sets of equipment have been procured for Comoros, eight sets have been procured for Madagascar, and two sets have been procured for Mauritius, including one for Rodrigues. Supplying additional equipment has ensured that the response to an oil spill is as short as possible. Properly storing equipment was a problem for some facilities shortly after acquiring the equipment, but had been largely solved by the time the project closed. Staff of the entities that would be responsible for addressing a spill have been trained in the use of the equipment through mock exercises. Not all the participants in the training, however, were the appropriate people, because countries sometimes nominated high-level officials rather than front-line staff for training. The entities responsible for maintaining the equipment have created maintenance registers.

Component 4: National capacity building (*US\$525,000 revised to US\$234,000*)

Outputs of this component are satisfactory. An institutional framework has been created in each country's ministry of environment to coordinate a response to an oil spill emergency. Staff of the ministry of environment in each country and representatives of coastal communities, with the assistance of experts from the South African Marine Pollution Division of the Department of Environment and Tourism, have learned to create and update environmental sensitivity maps. Twenty people representing primarily the ministry of environment (four each from Seychelles, Mauritius, and Comoros, and three from Madagascar) have been trained in IMO level-three courses. At the time the project closed, all were occupying key positions in the respective governments, and all were core members of teams preparing the national oil spill contingency plans. High-level government officials from all four countries attended the American Petroleum Institute/IMO/IPIECA International Oil Conference held in Tampa, Florida in 2001. Oil spill response manuals have been produced for each country. These are essentially condensed, reader-friendly versions of the national oil spill response plans. All government entities participating in the national plan have received copies. A website has been created and is operated with information on the risks of oil spills and measures to mitigate them, and activities of the project (www.ildhoi.org). A media campaign directed at coastal helped to gain their support in detecting and reporting oil spills.

Component 5: Regional institutional strengthening (*US\$1 million revised to US\$1.2 million*)

Outputs of this component are satisfactory. A regional plan to coordinate countries' response to an oil spill has been prepared and by the time the project closed had been tested twice through joint exercises. The regional plan has been significantly strengthened by drawing on the expertise of the industry and government of South Africa in responding to oil spills for its preparation. Some details of the cooperative agreements have still to be fully articulated, such as the arrangements for clearing equipment through customs. The withdrawal of Seychelles's offer to host the regional coordination center on the grounds that

its distant location from the other islands would make coordination of regional activities difficult led to a delay of nearly two years in establishing the center. The center was finally established in Madagascar in early 2004. Staff have been appointed, and equipment to operate the center has been procured. However, at the time the project closed a suitable office for the center was being identified. French Cooperation has agreed to finance the initial start-up costs of the center and operational costs for its first years of operation. The rationale for choosing Madagascar to host the regional coordination center is not clear. Some stakeholders have expressed concern that Madagascar does not have sufficient capacity to effectively coordinate countries' response to an oil spill, and believe that either Mauritius or Réunion would be more suitable locations for the center. Some observers argue that the regional coordination center with a full-time staff is not necessary. Instead the responsibilities of a regional coordinator could be added to those of a national coordinator.

4.3 Net Present Value/Economic rate of return:

Consistent with the requirements for GEF-supported projects, the PAD included an incremental cost analysis, rather than a net present value or economic rate of return. This pointed out that without the project, neither Comoros nor Madagascar would likely develop any capacity for responding to oil spills, and that Seychelles and Mauritius would develop capacity only to deal with a Tier 1 oil spill occurring in national waters. No regional capacity would be developed to enable the nations to join together to respond to accidents regardless of where they occurred in the region, including in international waters.

In retrospect, it is very likely that regional oil spill capacity. Neither Madagascar nor Comoros on their own would have developed capacity to respond to small oil spills, let alone significant spills. Neither Mauritius nor Seychelles would have developed capacity to deal with spills larger than a Tier 1 spill occurring in national waters. Agreements for regional cooperation would not have been reached.

As expected, the GEF alternative has promoted the creation and maintenance of regional oil spill response capacity in the western Indian Ocean islands. The GEF alternative has also provided the catalyst to bring governments and the local and international oil and shipping industries together in a cooperative partnership that will be sustained through the establishment of a permanent regional collaboration and financing mechanism. Further, oil companies have pledged to provide technologies and expertise to address oil spill emergencies.

The incremental cost of the GEF alternative was estimated to be US\$4.186 million. The GEF provided a grant of US\$3.152 million to finance part of the incremental costs, and donors and governments contributed the remainder.

4.4 Financial rate of return:

The PAD did not include an estimate of the financial rate of return. None of the specific activities were expected to generate revenues. The project was expected to identify sources of finance to maintain the national and regional capacity for responding to oil spills. This was done. To sustain capacity, Comoros at a cabinet meeting in March 2003 has imposed a tax of one Comorian franc per liter of petrol, Madagascar has imposed a tax of five malagasy francs per liter of petrol, Mauritius is allocating 1,000,000 Mauritian rupees (US\$35,000) per year from the general budget, and Seychelles is allocating US\$25,000 per year from the general budget.

4.5 Institutional development impact:

Institutional development impact is rated substantial. The project helped in creating the legislative and regulatory framework required to implement the key conventions aimed at protecting the marine and coastal environment from oil spills. The lawyers trained at IMLI have significantly contributed to this effort. All

but one is currently working for the government on issues related to the Law of the Sea and implementation of the conventions. The project also succeeded in creating or significantly strengthening capacity in each of the four countries to coordinate a response to an oil spill. All have formed special units in the ministries of environment for this purpose. The project has also helped to build capacity of the other entities that are directly responsible for responding to oil spills—the coast guard, police, ports authority, and oil and shipping industries—by involving them in the preparation and testing of the oil spill contingency plans. Most of the people who participated in the training courses and in the preparation and testing of plans continue to work on issues related to oil spill response and to be available to address a spill should one occur. The project has played an important role in creating partnerships with the oil and shipping industries to prepare for and respond to an oil spill emergency. It has helped countries to identify and adopt mechanisms to mobilize finance for the maintenance of capacity to respond to oil spills. Perhaps its most important achievement, the project catalyzed the creation of a regional oil spill contingency plan and the regional coordination center to lead the response of countries to a major oil spill.

5. Major Factors Affecting Implementation and Outcome

5.1 Factors outside the control of government or implementing agency:

The influence of outside factors on project outcomes has been significant. The political instability in Comoros starting in 1999 halted implementation of national-level activities for nearly one year. The agreement reached in 2000 to grant partial autonomy to each of the three islands of Comoros, each having its own parliament and local government, necessitated a change in project design. In addition to a national plan, each island required its own oil spill contingency plan, activities to build capacity, and a set of oil spill equipment. Unrest in Madagascar following the presidential elections in December 2001 delayed implementation of national-level project activities there for over nine months. The creation of six autonomous provinces also required a change to the project design to distribute equipment to each of the six provinces and to involve the local authorities in preparing provincial-level oil spill contingency plans, training personnel, and carrying out exercises.

5.2 Factors generally subject to government control:

The influence of factors within government's control on project outcomes has been substantial. The governments of all four island states followed through with their commitments to harmonize national legislation in line with the conventions, to appoint national coordinators to implement the project, and to adopt a mechanism to ensure that the capacity would be maintained once the project was complete, although with some delays in the case of Comoros and Madagascar. The governments also actively engaged in developing and testing the regional plan, sending relevant staff to the regional workshops held for this purpose. All governments appointed high-level officials to attend the key international seminars. The governments also sent ministers to open workshops and invited the media to cover meetings and events, thus giving the project a high profile in the countries. The decision by the government of Seychelles in 2002 to withdraw its offer to host the regional coordination center and to fund its associated costs delayed establishment of the center until the solution was found. In December 2002, after considerable discussion the options, Madagascar agreed to host the center with the financial and technical support of France.

5.3 Factors generally subject to implementing agency control:

The influence of factors subject to the control of the IOC on project outcomes has been highly significant. The competence, dedication, energy, and networking skills of the project coordinator, an official at the ministry of environment on leave of absence to implement the project, was critical to the successful implementation of this complex project. In addition to handling the daily responsibilities of project implementation, the project coordinator regularly visited the policymakers of all the countries to encourage them to lobby for the activities requiring the support of parliament—ratifying conventions and adopting national legislation in line with the conventions. The active involvement of the project coordinator also

helped to ensure that the political problems of Comoros and Madagascar did not delay project implementation for longer than necessary. The Secretary General of IOC also played an important role in ensuring that the project had the full support of the organization, regularly briefing the Council of Ministers on progress with project implementation and seeking their views on any issues.

5.4 Costs and financing:

The PAD estimated total project costs (including contingencies) to be US\$4.64 million over four years. Actual project costs over five years totaled about US\$4.22 million. Disbursements from the GEF grant totaled about US\$3.15 million, 100 percent of the grant. Governments contributed an estimated US\$519,000, or 12 percent of the project costs. This is slightly less than the 16 percent estimated in the PAD. Cofinanciers contributed an estimated US\$548,000, about 13 percent of the project costs. This is somewhat less than the 18 percent estimated in the PAD.

6. Sustainability

6.1 Rationale for sustainability rating:

Sustainability of project investments is likely. All the countries have ratified the relevant conventions, which provide strong incentives to maintain oil spill response capacity. As signatories to the OPRC convention, the beneficiary countries are required to establish measures for dealing with pollution incidents, either nationally or in cooperation with other countries. They are required to establish stockpiles of equipment to combat oil spills, to hold oil spill combating exercises, and to develop detailed plans for dealing with pollution incidents. They are also required to provide assistance to others in the event of a pollution emergency. As parties to CLC92 and the FUND92, the countries are entitled to compensation for damage arising from oil spills. The level of compensation to which a country is entitled, however, depends on the extent to which the country has maintained adequate capacity to respond to an oil spill and limit its damage, which provides a strong incentive to maintain adequate capacity. All countries have appointed permanent units within their ministries of environment focused on oil spill response. All have adopted a mechanism to finance the operation of these units, renew equipment, carry out regular exercises, and the like. The regional coordination mechanisms are also likely to be sustained. The government of Madagascar has pledged to finance it and the French Cooperation is providing funding to establish and operate the center for its first few years. Among other activities, the regional coordination center is expected to prepare a report each year on activities of the national and regional authorities related to oil spill response. The information will ensure that problems do not go unnoticed for long. The center is also responsible for staging a regional exercise every two years, which itself will contribute to maintenance of oil spill response capacity. The skills that have been developed at the IOC in its role as project implementing agency will almost certainly be sustained. This is because operational units of the IOC, rather than the PMU, carried out key functions of project management such as financial management. These operating units will continue to apply their skills in executing new projects.

6.2 Transition arrangement to regular operations:

Transition arrangements to regular operations are complete. As previously mentioned, all governments appointed units within their ministries of environment to early during project implementation to manage issues related to oil spill response. These units throughout project implementation took the lead in preparing, updating, and testing national oil spill response plans. The PMU of the IOC gave the units ownership of the equipment shortly after taking delivery of it, usually during a public ceremony over which a high-level government official presided. In Mauritius, the prime minister presided over the ceremony. All governments have adopted mechanisms to finance the operations of the units, renew equipment, regularly update and test the national oil spill contingency plans, and undertake other activities related to oil spill response. Responsibilities for procurement and financial management of the units' activities have been taken by the governmental entities responsible for these tasks. The regional oil spill coordination

center has been established and a source of finance to operate it adopted.

A follow-on project, the Western Indian Ocean Marine Electronic Highway and Coastal and Marine Protection Project now under preparation with support of the GEF, will bring the East African coastal countries of Mozambique, Tanzania, and Kenya into the regional oil spill response arrangements, in addition to establishing a marine electronic highway intended to guide ships through sensitive areas and to monitor the movements and activities of fishing and other vessels within countries' territorial waters. Including the East African coastal states in the regional oil spill contingency plan will enable all to fulfill their commitments under the Nairobi Convention to cooperate in responding to and preventing a pollution emergency. The project is expected to be presented to the Bank's Board during 2005.

7. Bank and Borrower Performance

Bank

7.1 Lending:

The Bank's overall performance in lending was satisfactory. The Bank's performance in identification was satisfactory. The project was identified on the basis of recommendations of a conference, Assessment of Oil Spill Response Capability in Africa, held in March 1996 in Cape Town, South Africa with the participation of representatives of government and the oil industry from some 33 African countries and from international organizations. The conference was funded in part through a GEF grant to IMO/IPIECA for the Global Initiative, designed to encourage government and industry cooperation, mobilize industry's expertise and resources, and identifying financial mechanisms to ensure that capacity to respond to oil spills was maintained. An outcome of the conference was the realization that the island states, although near the main tanker route from the production facilities in the Arabian Gulf to markets in Africa, Europe, North America, and Asia were largely unprepared to deal with a major oil spill. Agreement was reached in October 1996 among the three partners—the World Bank through the GEF, the IMO, and IPIECA—to jointly prepare and implement a western Indian Ocean oil spill contingency planning project in response to a request from the governments of the four island states.

The Bank's performance in preparation was satisfactory. Work done during preparation laid the foundation for the implementation of the project. The study on institutional and financial sustainability was particularly useful, recommending approaches to sustainability that all governments ultimately adopted. A high-level seminar helped to sensitize policymakers to the importance of creating oil spill response capacity and to generate commitment to implement the project.

Involving the IMO, IPIECA, the governments of South Africa and France (Réunion) in preparing and appraising the project not only improved the design of the project, but also led to agreements of ongoing support during project implementation. For example, the IMO agreed to provide technical advice on ratification of the conventions and on the institutional aspects of developing national and regional capacity to respond to oil spills. IPIECA offered to help to organize a high-level workshop and to facilitate the participation of industry speakers at the workshop. The government of South Africa offered trainers, equipment, and facilities for training on oil spill response; expertise for the preparation of environmental sensitivity maps; assistance to develop and test the national and regional oil spill contingency plan; and expertise to design and conduct oil spill exercises. The good working relations that the Bank developed with the IMO, however, became somewhat strained during project appraisal. The IMO sees its mandate as helping countries to create oil spill response capacity, and had partnered with the Bank to prepare the project in the expectation that it would have a significant role in project implementation, including the task management of at least the first component. It also expected to be paid for these services from project finance, rather than providing services from its own budgetary resources. The difference in understanding

between the Bank and the IMO led the IMO to withdraw its offer to send a representative to a high-level seminar to address issues related to the ratification of the conventions. Ultimately, IMLI sent a representative to speak on these issues. Relations during implementation improved over time, and the IMO participated in the midterm review and provided technical assistance to help to prepare the regional oil spill contingency plan and to establish the regional coordination center. IPIECA, by contrast, envisaged a much smaller role for itself in project preparation and implementation than did the Bank. It refused to finance technical assistance to prepare the terms of reference for the risk assessment and the institutional and financial sustainability study, agreeing only to provide names of experts who could help with various activities. After initial refusal, it ultimately sent a representative to participate in the appraisal mission. This person provided valuable advice on the project design and continued to provide technical assistance for a limited period during project implementation. Appraisal of implementation arrangements was satisfactory. Appointing the IOC as the implementing agency was appropriate, given the role of the organization in coordinating activities of the Indian Ocean island states in areas of common concern.

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7.2 Supervision:

Involving the IMO, IPIECA, the governments of South Africa and France (Réunion) in preparing and appraising the project not only improved the design of the project, but also led to agreements of ongoing support during project implementation. For example, the IMO agreed to provide technical advice on ratification of the conventions and on the institutional aspects of developing national and regional capacity to respond to oil spills. IPIECA offered to help to organize a high-level workshop and to facilitate the participation of industry speakers at the workshop. The government of South Africa offered trainers, equipment, and facilities for training on oil spill response; expertise for the preparation of environmental sensitivity maps; assistance to develop and test the national and regional oil spill contingency plan; and expertise to design and conduct oil spill exercises. The good working relations that the Bank developed with the IMO, however, became somewhat strained during project appraisal. The IMO sees its mandate as helping countries to create oil spill response capacity, and had partnered with the Bank to prepare the project in the expectation that it would have a significant role in project implementation, including the task management of at least the first component. It also expected to be paid for these services from project finance, rather than providing services from its own budgetary resources. The difference in understanding between the Bank and the IMO led the IMO to withdraw its offer to send a representative to a high-level seminar to address issues related to the ratification of the conventions. Ultimately, IMLI sent a representative to speak on these issues. Relations during implementation improved over time, and the IMO participated in the midterm review and provided technical assistance to help to prepare the regional oil spill contingency plan and to establish the regional coordination center. IPIECA, by contrast, envisaged a much smaller role for itself in project preparation and implementation than did the Bank. It refused to finance technical assistance to prepare the terms of reference for the risk assessment and the institutional and financial sustainability study, agreeing only to provide names of experts who could help with various activities. After initial refusal, it ultimately sent a representative to participate in the appraisal mission. This person provided valuable advice on the project design and continued to provide technical assistance for a limited period during project implementation. Appraisal of implementation arrangements was satisfactory. Appointing the IOC as the implementing agency was appropriate, given the role of the organization in coordinating activities of the Indian Ocean island states in areas of common concern.

The GEF Secretariat thoroughly assessed the project in August 2002 through a specially managed project review, which independently assesses implementation of project. The review focused on the extent to which

the project was being implemented in conformity with project objectives and GEF policies, standards and procedures, especially concerning attainment of global environmental objectives. The review rated the project satisfactory in most areas, and highly satisfactory with regard to project achievement at the national level in the four island countries, government commitment to the project, stakeholder participation, and sustainability. It also rated the probability of replicability as high.

7.3 Overall Bank performance:

The Bank's overall performance was satisfactory. In lending, the Bank responded to the governments' request for assistance to build national and regional oil spill capacity by obtaining a PDF Block B project preparation grant to build the knowledge base, and then by designing a project drawing on the expertise of the IMO, IPIECA, and the government and industry of South Africa. Preparation was thorough, and included obtaining commitments from the governments to adopt a mechanism to permanently finance capacity to respond to a major oil spill. It also included a commitment by the government of Seychelles to host a regional coordination center. Although the center was ultimately established in Madagascar, this was an indication that the governments were committed to the concept of regional cooperation. Supervision was regular and thorough, focusing on policy dialogue to overcome specific obstacles. The continuity of the task team leader from project inception to closing also helped to build and sustain good relationships between the Bank, the IOC, the national oil spill coordination units, and the partners.

Borrower

7.4 Preparation:

The performance of the beneficiary countries in preparation was satisfactory. The governments of all four of the countries worked closely with the Bank team to design and prepare a project that met the needs of the individual countries and of the region as a whole. They proved their commitment to the project by appointing units in the ministries of environment focusing on oil spill response, and by agreeing to implement institutional and financial sustainability action plans.

7.5 Government implementation performance:

The performance of the beneficiary countries in implementation was satisfactory. All governments ratified the conventions as agreed during appraisal. Comoros, Mauritius, and Seychelles in addition ratified the MARPOL 73/78 convention. Although this was not part of the project, the GEF Secretariat and Council at the time of project approval strongly recommended that countries ratify this convention. The governments supported implementation of the project in many other ways. They sent members of their legal teams to obtain master's degrees at the IMLI. They developed and tested the national oil spill contingency plans, appointed relevant staff members to participate in the development and testing of the regional plan, sent key government officials to attend high-level regional and international seminars, and adopted mechanisms to sustain capacity to respond to an oil spill.

The pace of implementation, however, varied among countries. Comoros and Madagascar both experienced political unrest during the project implementation period, which led the governments to reduce their contribution for the national-level project activities. During these times, funding was not provided for such routine tasks as telephone, fax, and e-mail communications, and photocopying. Funding was restored only after the situation stabilized and normal government functions were restored.

7.6 Implementing Agency:

The performance of the implementing agency was highly satisfactory. The IOC prepared a project implementation plan prior to project effectiveness that laid out in detail the activities and the timetable for their implementation. As described above, the project coordinator competently and energetically worked with all the beneficiary countries to ensure that they received the technical assistance they needed to

implement the activities in accordance with the timetable. He built excellent working relationships with the national policymakers and the national project coordinators. As soon as possible following the period of unrest, he encouraged Comoros and Madagascar to resume implementation of project activities. He also worked closely with the project's partners. Although the management of the IMO shortly after Board approval expressed reluctance to be part of the project without compensation, the project coordinator eventually persuaded its management that it was in the interests of the organization to participate in the project. The project coordinator also responded nimbly to changes in the ability of partners' to contribute to the project as planned. For example, he quickly identified alternative experts to those promised by CEDRE, a French government agency specialized in oil spills, whose participation in implementation was suspended due to a major oil spill off the French coast in December 1999 that required the attention of its staff during most of 2000. Through efficient implementation and through use of local rather than international consultants, the project coordinator was able to implement some activities for less than their estimated costs, freeing resources for procurement of additional equipment, a public awareness campaign, and additional studies. The IOC complied with all Bank procedures on procurement and financial management.

7.7 Overall Borrower performance:

The overall performance of the borrower was satisfactory. The governments of the beneficiary countries demonstrated their commitment to the broad objectives of the project and its approach from identification to completion. The implementing agency performed exceptionally well. The IOC successfully implemented the project in close coordination with the national project coordinators and the partners. It implemented all activities and handled procurement and financial management in accordance with Bank guidelines. Compliance with relevant Bank safeguard policies was satisfactory.

8. Lessons Learned

- *The choice of implementing agency and of project coordinator is key to the successful implementation of a complex project involving several countries and partner.* It is not likely that this project, involving countries with highly unequal capacities, would have been implemented successfully without the personal involvement of a particularly competent and energetic project coordinator. His understanding of both the political and environmental issues in the region, and his ability to communicate with the officials of all four island states facilitated project implementation. The IOC, whose mandate is to represent the interests of the four island states, also played an important role in maintaining the dialogue among the participating countries and in giving the project a high profile.
- *Obtaining government commitment during project preparation to specific arrangements for institutional and financial sustainability, and continuing to focus on the issue during implementation, helps to ensure that project investments will be sustained after the project closes.* A study of institutional and financial sustainability was produced during project preparation that identified options for governments' consideration. An update of the study following the midterm review further refined the recommendations. A condition of Board presentation was that all governments commit to adopting mechanisms for sustainability, and all ultimately fulfilled this commitment.
- *Building effective partnerships with relevant organizations, industry, and governments of non-beneficiary countries can help significantly improve project design and implementation.* The IMO, IPIECA, the oil and shipping industry, and the governments of South Africa and France (Réunion) all participated in designing the project, offering the insights of experience and expertise.

The involvement of these entities in project preparation also led to definition of their roles and responsibilities during project implementation.

- *Being clear early during project preparation on the scope and nature of partners' participation can help prevent conflicts later.* The IMO could have made it clear early during preparation that it expected to play a significant role during implementation and that it expected to be paid for its services. Instead it made this clear only after appraisal was complete and its role and responsibilities laid out in the PAD. At this stage governments had already agreed to the design and did not wish to reopen the discussions. Dissatisfied, the IMO then refused to participate in project implementation. Although relations later improved and IMO returned as a partner, this conflict could have been prevented had agreement been reached early during preparation on the roles and responsibilities of the various partners.
- *Pairing weaker countries with stronger ones in a regional project can help to quickly build the capacity of the weaker ones.* Mauritius and Seychelles, with much greater capacity, shared their knowledge and experience with Comoros and Madagascar. Being part of a regional plan provided a strong incentive for Comoros and Madagascar to build capacity, even during periods of political uncertainty.

9. Partner Comments

(a) Borrower/implementing agency:

IOC has taken cognizance of the ICR report and generally agrees with the appreciation and assessments of the project implementation as given therein.

(See annex 8 for IOC's own implementation completion report of the project.)

(b) Cofinanciers:

(c) Other partners (NGOs/private sector):

10. Additional Information

Annex 1. Key Performance Indicators/Log Frame Matrix

Outcome / Impact Indicators:

| Indicator/Matrix | Projected in last PSR ¹ | Actual/Latest Estimate |
|--|--|--|
| Sustainable national oil spill response capacity put into place. Sustainable regional oil spill response capacity put into place. | Units focusing on oil spill response established in all four island states. Regional oil spill coordination center established in Madagascar. | Units focusing on oil spill response established in all four island states. Regional oil spill coordination center established and operational in Madagascar. |

Output Indicators:

| Indicator/Matrix | Projected in last PSR ¹ | Actual/Latest Estimate |
|--|--|--|
| Conventions ratified and implemented | | |
| CLC92: Comoros, Madagascar, Mauritius, Seychelles. FUND92: Comoros, Madagascar, Mauritius, Seychelles. OPRC90: Comoros, Madagascar, Mauritius. Five students completed training course at IMO's IMLI in Malta. One workshop held with at least four specialists from each country participating. National oil spill contingency plans Thirty people completed the oil spill response basic training. | CLC92: Comoros, Madagascar, Mauritius, Seychelles. FUND92: Comoros, Madagascar, Mauritius, Seychelles. OPRC90: Comoros, Madagascar, Mauritius. Seven lawyers complete master's degree at IMLI in Malta. One workshop held with at least four specialists from each country participating. 49 people completed the oil spill response basic training by end of 2001. | CLC92: Comoros, Madagascar, Mauritius, Seychelles. FUND92: Comoros, Madagascar, Mauritius, Seychelles. OPRC90: Comoros, Madagascar, Mauritius. Seven lawyers complete master's degree at IMLI in Malta. One workshop held with at least four specialists from each country participating. 49 people completed the oil spill response basic training by end of 2001 (20 from Madagascar, 10 from Comoros, 9 from Mauritius, 10 from Seychelles). |
| Two exercises conducted by each country. | Each country completed two exercises by end of 2002. | Each country completed two exercises by end of 2002. |
| Each country has at least a first edition of environmental sensitivity maps, and the capabilities to update them as necessary. | All countries have produced environmental sensitivity maps. Madagascar has yet to convert its to the global information system. | All countries have produced environmental sensitivity maps. Madagascar has yet to convert its to the global information system. |
| Oil spill equipment All specified oil handling facilities equipped with fully operational Tier 1 equipment. A storage, maintenance, and exercise schedule is operating according to plan. Five people trained in equipment specification. A minimum of 20 people trained in basic operation and maintenance of equipment. | 13 sets distributed: 3 to Comoros, 8 to Madagascar, 2 to Mauritius by the end of 1992. 12 people trained by March 2000. 205 people trained, 45 in Comoros, 140 in Madagascar, and 20 in Mauritius. | 13 sets distributed: 3 to Comoros, 8 to Madagascar, 2 to Mauritius by the end of 1992. 12 people trained by March 2000. 205 people trained, 45 in Comoros, 140 in Madagascar, and 20 in Mauritius. |
| Two exercises held in each country, during which equipment is deployed and moved. | Two exercises held in each country, by end of 2002. | Two exercises held in each country, by end of 2002. |
| National capacity building Twelve workshops (3 per country) completed. Twenty people trained to teach standard IMO level 3 courses. | Completed by end of 2002. Completed by end of 2002. | Completed by end of 2002. Completed by end of 2002. |
| Experts from the region attended four key international seminars on the topic. | One high-level government official from each country attended the international oil conference in Tampa in 2001. | One high-level government official from each country attended the international oil conference in Tampa in 2001. |
| Oil spill response manuals developed for each country. | Completed in March 2004. | Completed in March 2004. |
| Regional institutional strengthening | | |

| | | |
|---|---|---|
| Regional contingency plans in place. Plans to test the plan every two years established and a source of financing identified. | Completed by the end of 2002. | Completed by October 2003. |
| Two workshops held, focusing on regional cooperation and support. | Completed by the end of 2002. | Completed by the end of 2002. |
| Two seminars on regional issues held. | Completed by the end of 2002. | Completed by the end of 2002. |
| Two exercises of the regional plan completed. | Completed by the end of 2003. | Completed by the end of 2003. |
| Regional coordination center established and operational. | Being established in Madagascar, expected operational by June 2004. | Established in Madagascar, staff appointed and equipment procured by June 2004. Office space still being identified by the time the project closed. |

¹ End of project

Annex 2. Project Costs and Financing

Project Cost by Component (in US\$ million equivalent)

| Component | Appraisal Estimate US\$ million | Actual/Latest Estimate US\$ million | Percentage of Appraisal |
|---|------------------------------------|--|-------------------------|
| Legislation and regulations for conventions | 0.48 | 0.22 | 47 |
| National oil spill contingency plans | 1.01 | 0.88 | 87 |
| Oil spill response equipment | 1.10 | 1.68 | 153 |
| National capacity building | 0.52 | 0.23 | 45 |
| Regional institutional strengthening | 0.95 | 1.20 | 126 |
| Total Baseline Cost | 4.06 | 4.21 | |
| Physical Contingencies | 0.33 | | |
| Price Contingencies | 0.25 | | |
| Total Project Costs | 4.64 | 4.21 | |
| Total Financing Required | 4.64 | 4.21 | |

| Expenditure Category | ICB | Other | Non-Bank Finance | Total Cost |
|---|---------|-----------|------------------|------------|
| 1. Equipment, goods, materials | 704.4 | 74.3 | 391.4 | 1,170.0 |
| | (704.4) | (74.3) | (0.0) | (778.7) |
| 2. Expertise and consultants' services | 0.0 | 1,567.4 | 625.9 | 2,213.4 |
| | (0.0) | (1,567.4) | (0.0) | (1,587.4) |
| 3. Training | 0.0 | 785.7 | 230.4 | 1,016.1 |
| | (0.0) | (785.7) | (0.0) | (785.7) |
| 4. Operating costs | 0.0 | 0.0 | 237.0 | 237.0 |
| | (0.0) | (0.0) | (0.0) | (0.00) |
| | | | | |
| Total | 704.4 | 2,447.4 | 1,484.7 | 4,636.5 |
| | (704.4) | (2,447.4) | (0.0) | (3,151.8) |

Note: Figures in parentheses are the amounts financed by the GEF.

| Expenditure Category | ICB | Other | Non-Bank Finance | Total Cost |
|---|-----------|-----------|------------------|------------|
| 1. Equipment, goods, materials | 1,024.7 | 24.4 | 334.0 | 1,383.1 |
| | (1,024.7) | (24.4) | (0.0) | (1,049.1) |
| 2. Expertise and consultants' services | 0.0 | 1,633.3 | 436.3 | 2,069.6 |
| | (0.0) | (1,633.3) | (0.0) | (1,633.3) |
| 3. Training | 0.0 | 465.9 | 139.5 | 605.4 |
| | (0.0) | (465.9) | (0.0) | (465.9) |
| 4. Operating costs | 0.0 | 0.0 | 157.0 | 157.0 |
| | (0.0) | (0.0) | (0.0) | (0.0) |
| | | | | |

| | | | | |
|--------------|-----------|-----------|---------|-----------|
| | | | | |
| Total | 1,024.7 | 2,123.6 | 1,066.8 | 4,215.1 |
| | (1,024.7) | (2,123.6) | (0.0) | (3,148.3) |

Note: Figures in parentheses are the amounts financed by the GEF.

Project Financing by Component (in US\$ million equivalent)

| Component | Appraisal Estimate | | | Actual/Latest Estimate | | | Percentage of Appraisal | | |
|--|--------------------|-------|------|------------------------|-------|------|-------------------------|-------|-------|
| | IDA | Govt. | CoF. | IDA | Govt. | CoF. | Bank | Govt. | CoF. |
| Legislation and regulations for conventions | 0.45 | 0.00 | 0.08 | 0.22 | 0.00 | 0.02 | 48.9 | 0.0 | 25.0 |
| National oil spill contingency plans | 0.45 | 0.40 | 0.27 | 0.39 | 0.19 | 0.30 | 86.7 | 47.5 | 111.1 |
| Oil spill response equipment | 0.81 | 0.27 | 0.19 | 1.25 | 0.27 | 0.16 | 154.3 | 100.0 | 84.2 |
| National capacity building | 0.51 | 0.01 | 0.08 | 0.22 | 0.01 | 0.00 | 43.1 | 100.0 | 0.0 |
| Regional institutional strengthening | 0.93 | 0.05 | 0.14 | 1.07 | 0.05 | 0.07 | 115.1 | 100.0 | 50.0 |
| TOTAL | 3.15 | 0.73 | 0.76 | 3.15 | 0.52 | 0.55 | 100.0 | 71.2 | 72.4 |

Annex 3. Economic Costs and Benefits

Annex 4. Bank Inputs

(a) Missions:

| Stage of Project Cycle | No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.) | | Performance Rating | | |
|-----------------------------------|--|-------|---|-------------------------|-----------------------|
| | Month/Year | Count | Specialty | Implementation Progress | Development Objective |
| Identification/Preparation | | | | | |
| | June/July 1997 | 3 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST, URBAN PLANNER | | |
| | October 1997 | 3 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST, URBAN PLANNER | | |
| | March 1998 | 2 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST | | |
| Appraisal/Negotiation | | | | | |
| | July 1998 | 2 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST | | |
| | August 1998 | 4 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST, PROGRAM ASSISTANT, LEGAL COUNSEL | | |
| Supervision | | | | | |
| | August 1999 | 2 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST | S | S |
| | January 2000 | 2 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST | S | S |
| | June 2000 | 2 | HIGHWAY ENGINEER, FINANCIAL SPECIALIST | S | S |
| | December 2000 | 2 | SENIOR HIGHWAY SPECIAL FINANCIAL SPECIALIST | S | S |
| | January 2001 (midterm review) | 2 | SENIOR HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | June 2001 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | April 2002 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | September 2002 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | December 2002 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | February 2003 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | June 2003 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | November 2003 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |
| | April 2004 | 2 | SNR. HIGHWAY SPECIALIST, FINANCIAL SPECIALIST | S | S |

| | | | | | |
|------------|----------------|---|----------------------------|---|---|
| ICR | September 2004 | 1 | ENVIRONMENTAL ECONOMIST | S | S |
|------------|----------------|---|----------------------------|---|---|

(b) Staff:

| Stage of Project Cycle | Actual/Latest Estimate | |
|----------------------------|------------------------|-------------|
| | No. Staff weeks | US\$ ('000) |
| Identification/Preparation | 71 | 267 |
| Appraisal/Negotiation | 25 | 80 |
| Supervision | 90 | 338 |
| ICR | 14 | 51 |
| Total | 200 | 736 |

Annex 5. Ratings for Achievement of Objectives/Outputs of Components

(H=High, SU=Substantial, M=Modest, N=Negligible, NA=Not Applicable)

| | <u>Rating</u> | | | | |
|--|-------------------------|-------------------------------------|-------------------------|-------------------------|-------------------------------------|
| <input type="checkbox"/> <i>Macro policies</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Sector Policies</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input type="checkbox"/> <i>Physical</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Financial</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input type="checkbox"/> <i>Institutional Development</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input type="checkbox"/> <i>Environmental</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <i>Social</i> | | | | | |
| <input type="checkbox"/> <i>Poverty Reduction</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Gender</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Other (Please specify)</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |
| <input type="checkbox"/> <i>Private sector development</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input type="checkbox"/> <i>Public sector management</i> | <input type="radio"/> H | <input checked="" type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input type="radio"/> NA |
| <input type="checkbox"/> <i>Other (Please specify)</i> | <input type="radio"/> H | <input type="radio"/> SU | <input type="radio"/> M | <input type="radio"/> N | <input checked="" type="radio"/> NA |

Annex 6. Ratings of Bank and Borrower Performance

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory)

6.1 Bank performance

Rating

- | | | | | |
|--------------------------------------|--------------------------|------------------------------------|-------------------------|--------------------------|
| <input type="checkbox"/> Lending | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input type="checkbox"/> Supervision | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input type="checkbox"/> Overall | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |

6.2 Borrower performance

Rating

- | | | | | |
|--|--------------------------|------------------------------------|-------------------------|--------------------------|
| <input type="checkbox"/> Preparation | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input type="checkbox"/> Government implementation performance | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input type="checkbox"/> Implementation agency performance | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |
| <input type="checkbox"/> Overall | <input type="radio"/> HS | <input checked="" type="radio"/> S | <input type="radio"/> U | <input type="radio"/> HU |

Annex 7. List of Supporting Documents

Project Appraisal Document, October 20, 1998 (Report 18478 AFR)
GEF Trust Fund Grant Agreement between the IBRD (acting as the implementing agency of the Global Environmental Facility) and the Indian Ocean Commission (Grant number 021424)
Project supervision reports
Mission aide memoires
Risk assessment
Institutional and Financial Sustainability and Regional Coordination Center Study
GEF Secretariat Specially Managed Project Reviews: Indian Ocean Spill Contingency Planning Project (August 22, 2002) (available in summary form on gefweb, and in full form by request to the monitoring and evaluation of the GEF.

Additional Annex 8. Indian Ocean Commission Contribution to the Implementation Completion Report

Assessment of Development Objective and Design, and of Quality at Entry

Original Objectives:

Summary of project scope and objectives.

It is estimated that over 30% of the world's petroleum production of about 60 millions barrels per day is transported through the waters of the Indian Ocean. This means that more than 500 million tons sea trade in crude oil passes near or through the coastal waters of the island states of the Indian Ocean, in transit to markets in North America, Europe and Asia. The heavy sea traffic in crude oil represents over 5,000 tanker voyages per year through the sensitive coastal waters of Comoros and Madagascar, passing in close proximity to the World Heritage site of Aldabra Atoll (Seychelles). Most of this volume passes through the Mozambique Channel and between the islands of Grand Comoros and Aldabra and involves about 1,200 very large crude carriers (250,000 ton tanker and over, VLCCs) voyages and 4,000 medium-size tanker (average 60,000 tons) voyages, each year. Smaller quantities pass to the east of Madagascar from ports in South East Asia. On average, there are over 20 large oil tankers in transit through the coastal waters of the small island states every day.

A maritime accident involving the discharge of large quantities of oil would have a considerable impact on the fragile and sensitive natural resources of the concerned countries and would severely impact any of these states, which rely heavily upon the maintenance of a pristine marine environment for their economic and social development. Tourism and fishing industries are important pillars in the national economies of the island states, and any important marine pollution incident would prove to be disastrous, as these economies are not sufficiently diversified to survive an incident of this nature.

Although the weather in the region is generally good with calm seas and good visibility during part of the year, it is recognised that weather patterns during the seasonal cyclones (which occur from December through to April, in the southern hemisphere) may contribute toward ship casualties and increased risk of marine pollution incidents. There are few navigational hazards and the historical recorded level of shipping casualties is low. However, the high level of tanker traffic, and the large size of vessels engaged in the trade (typically VLCCs) indicate that the exposure is high and, hence, the possibility of a serious casualty exists. Moreover, considering the size of these small islands, the region is entirely exposed to the consequences of any such incident, of any importance, and sensitive ecosystems and areas of World Heritage standard are at risk.

The lack of awareness, preparedness and capacity to respond to such exposure, calls upon the governments of these islands to establish and strengthen oil spill preparedness and management institutions and policies, to mitigate, prepare for and respond to the increasing range and frequency of natural and environmental accidents, and promote early warning systems for the rapid dissemination of information.

The recipients will be the following countries: Comoros, Madagascar, Mauritius and Seychelles. The beneficiaries will be: (i) the Ministries of Environment and the various executing agencies designated to implement the national components, of the countries listed above; and (ii) the Indian Ocean Commission

Secretariat.

The objective of the proposed project is to protect the environmental integrity of coastal and marine systems in the Indian Ocean sub-region. The project facilitates compliance with the International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC) which requires States to develop and maintain an adequate capacity to deal with oil pollution emergencies. This would be achieved through the establishment of sustainable national and sub-regional contingency planning procedures and arrangements.

The specific project objectives are: (i) the establishment of the appropriate legal and institutional frameworks for compliance with the relevant international conventions;
(ii) the development of national and sub-regional contingency planning processes;
(iii) the setting up of appropriate national and sub-regional oil spill response capacity;
(iv) the establishment of sustainable financial and institutional agreements, and synergy through sub-regional co-operation arrangements (particularly with South Africa and France through Reunion Island).

The objectives of the project will be achieved through (i) building up of awareness and preparedness at the national levels; and (ii) setting up and organising oil spill response capability at the national and sub-regional levels.

The project objectives were clear and realistic and supported by the Governments Members of the Indian Ocean Commission and specifically by the Ministries of the Environments of l'Union des Comores, Madagascar, Mauritius and Seychelles. The project objectives were consistent with the Government's priorities and the Global Environmental Facility own's objective to conserve and protect international seas from pollution arising from oil spills in this region where the risk of spill was high because of the large volume (over 700 millions tonnes) of oil transiting in the region.

Revised Objective:

The original project objectives were not changed though the project components and needs were revisited and revised at the midterm review in December 2000. Subsequently, minor changes were also made in the course of implementation as and when specific requests were made by the beneficiary countries and savings accrued.

Proposals for new and additional activities at The midterm review meeting in December 2000

Communications material for Comoros and Madagascar.

During the implementation of the first phase of the project, it had become clear that communication was a severe constraint that hampered liaison amongst the various departments, which would be called upon to collaborate closely in the case of a spill. For example in Comoros, the harbour radio was limited in range and it could only be used for communication between ships and the harbour.

In the context of Comoros the Gendarmerie had been identified by the authorities as the principal authority which would be called to deploy the Oil Spill Combat equipment and at that time, there was not any communication (radio or VHF) network for the Port and the Gendarmerie to work together.

For effective collaboration and implementation of the national oil spill contingency plan, communication means was identified as a key component.

In Madagascar, very similar communication problems did exist. An example was that when there was a spill in Fort Dauphin in August 2002, the Mayor of this town could not even use his phone (it had been disconnected for non-payment) to alert the capital city about a serious oil spill incident. The Ministry of Environment learnt of the news through the media. In support of the national oil spill contingency plan and the Provincial Oil spill contingency plan, it was essential that the various provincial authorities responsible for their local plans could communicate amongst themselves for the effective management of any oil spill crisis.

In the context of a spill, communication was identified as a key component for the operation as it was the key to sharing of information, management of the information and for informed decisions to be made for effective action. Moreover, it was just as much important to receive feedback from the “on scene commanders” for new decision making in line with the evolution of the spill, for monitoring, updating of records of events and record preparation for claim purposes.

The midterm review agreed that communication equipment, to be identified by an expert, would be supplied to the concerned authorities in Comoros and Madagascar.

Training and Information Material for Comoros and Madagascar

Taking into consideration the high risks to which these countries were exposed to, and the negative ecological, socio-economic catastrophic consequences of such spills, it was important to build both capacity for project management as well as ownership of the project by the nationals (inclusive by the civil society, fishermen, heads of coastal villages etc.). The other advantage of their involvement would be, through awareness, to become the agents for the protection of the marine and coastal environment.

On account of the difficult conditions prevailing on the ground in some countries with very limited resources, these coastal populations would be great assets, both in terms of the conservation and the protection of the marine resources and for combating a spill, should it occur. The coastal populations were looked upon as the first line “concerned parties” for raising the alarm and for tackling the spill in the early stages of a spill. They should be taught the technique to identify an oil spill, to identify the type of oil it might be, and to be able to notify the responsible authorities with confidence at the earliest. Secondly, they could be taught the technique of containment and confinement to limit the damage until such time as help arrived.

The project at the design stage provided for the training of trainers to train future generations of project managers and operators. It was judged essential that the project, for both information and training purposes, be formatted in such a way that it could be made accessible to all the people through existing network such as the radio, the television and also in the form of video cassette and the CD ROM so that it could be viewed widely in the countries concerned. Its aims would be to show these information materials at schools, at the village halls, in social community centers, and as appropriate in accordance to the cultures of the people and in the language of the people.

The strong message to the coastal populations was that they would be concerned as front liners and would be adversely affected first and foremost. Through the sensitization campaign, the populations of the island states would be brought to realize that spill is not something that only happened elsewhere but might also happen to them and that they should be on their guard and be prepared for.

This was adopted at the midterm review

Institutional and Financial (Oil Industry/Government) Action Plan for the sustainability of the project.

This project originated from the concept of a Global Initiative launched by IPIECA and IMO. The partnership between the Oil Industry and the Authorities of the countries involved was the very foundation of this project. This firm commitment was renewed by the oil industry and Governments, ports authorities, and IMO at the midterm review meeting. Consequently, for the future sustainability of the project, the original study of the institutional and financial study had to be revisited and a review thereof made so that remedial action, if any, could be taken. This, in fact, was proved to be necessary as some states lacked behind in honouring their commitments because of the weaknesses at institutional level as well as the difficulties in the creation of the special fund to ensure the sustainability of the project.

The midterm review agreed that a new study reviews the implementation of the existing agreements, make an assessment of its effectiveness and prepare an Action Plan which would reinforce this partnership and place it on sustainable footing for the foreseeable future.

Regional coordination center and role/responsibility and cost implications- Study with recommendations.

At the high level meeting held in Seychelles in June 1998, Seychelles had volunteered to host the regional coordination center and to fund all cost associated with the coordination activities. At the midterm review it was considered important to revisit this component in order to prepare a realistic cost estimate of the setting up and running of such a center. The regional coordination center would have, amongst other activities responsibility for the regional plan, for ensuring that all the countries respect the established program of regular updating of plans and equipment, that they carry out their national exercises as well as participate in the regional exercise; that the respective states are complying with commitments made generally and produce a yearly report for the Government of the respective countries.

It was recommended that a consultant revisited this component of the project to clearly define all the responsibilities incumbent on the host country and further defines the cost implication of hosting such a center in terms of resources required on a sustainable basis and resources available in the proposed host country.

Additional sets of equipment for Comoros, Mauritius and Madagascar.

At the time of project preparation and design, one set of equipment for Comoros and five sets for Madagascar were provided for. As at December 2000, circumstances (political, institutional and administrative) had changed in at least two beneficiary countries. Furthermore, during the preparation of environmentally sensitive areas maps, the experts had recommended that the three islands comprising Union des Comores, in view of their highly sensitive nature should each have its own plan and equipment.

As for Madagascar, given the decentralization process being implementation, each province (and there are five provinces in Madagascar) was being given autonomy of governance. Consequently, each province would be responsible for the preparation and adoption of its own oil spill contingency plan and response in case of spill along its shores. At the request of the government of Madagascar, it was decided to provide one national stock of equipment to be based at Diego Suarez, as well as seven sets for the following seven

port areas Diego Suarez, Majunga, Tuléar, Fort Dauphin, Manakara, Tamatave, Ste Marie.

It was also decided that the project would provide three sets of Tier 1 equipment for the three islands comprising the l'Union des Comores , that is, the islands of Grande Comore, Moheli and Anjouan.

What other changes: In 2002 Mauritius had requested that an oil spill contingency plan be prepared specifically for Rodrigues as the latter had acquired an autonomy status and it was anticipated that there would be a substantial increase in power production and therefore import of heavy oil. It was therefore decided that a specific plan would be prepared and that a full set of equipment would also be provided to the Rodrigues Regional Assembly.

Original Components:

The total cost of the project remained unchanged although re-allocation were made from categories where savings accrued to undertake additional activities such as providing more equipment to Comoros, Madagascar, Mauritius and Rodrigues.

The original five components of the project were:

- Component A: Ratification of relevant international conventions and protocols and development/upgrading of national legislation
- Component B: Assistance to prepare or update and test National Oil Spill Contingency Plans
- Component C: Procurement of equipment associated with Tier 1 oil spill response
- Component D: National Capacity Building---Provision of specific expertise to the national coordinating agency.
- Component E: The sub-regional component---Regional institutional strengthening.

Technical assistance was provided to support:

(i) *Indian Ocean Commission.* Technical assistance was provided to IOC in order to manage the project on behalf of its member states. Consequently, a Project Management Unit was set up at the seat of the IOC with a small secretariat, provided by IOC. The PMU was headed by the Regional Coordinator. The PMU had amongst other responsibilities to undertake day-to-day project management in liaison with the national coordinators. The PMU was also responsible for the program monitoring on behalf of IOC, to evaluate the ongoing program and follow-up on the implementation of projects and actions.

Revision to the project was brought about because of the following two reasons. First, there was political and institutional changes in the beneficiary countries in particular in l'Union des Comores and Madagascar and secondly there accrued some significant savings in the implementation of certain activities arising from good and shrewd management as a lot of activities were undertaken using regional resources or simply done in house.

Quality at Entry:

The quality at entry is rated as satisfactory for the following reasons.

Consistency of objectives with CAS and government priorities. The project objectives were consistent

with both the Government priorities and the CAS. (see para. 3.1.3)

Project preparation. The project was appropriately designed as a first step to address the high risks looming over the Western Indian Ocean due to some 7000 tankers including 1200 VLCC transiting through the region per year. Key issues were correctly identified and adequately addressed by conducting two feasibility studies through technical assistance namely (1) institutional and financial sustainability and (2) risk and impact study. The findings of these two studies were presented to a high level seminar held in Seychelles in Mai 1998. The studies confirmed that there were real risk of spill with devastating ecological-socio-economic impacts.

Project design. The project started in April 1999 and was due to be completed by June 2003. The project was made up of five distinct components, each with very specific and well defined outputs. The project benefited from good exposure and was very visible from the outset. There was high level political involvement as most activities were always preceded by a ceremony of some sort where ministers were present and the activities subject of both written and oral reporting in the local and regional media.

However, due to political instability in both l'Union des Comores and the Republic of Madagascar implementation were slowed down, not to say suspended, for a period of one year. The extension of the project implementation period enabled the project to be effectively carried out and ensured that it was on sound institutional footing.

Complementarity with Other On-going Projects. This project complemented the on-going regional initiatives such the Nairobi convention under the aegis of UNEP and IMO. Also there was the IMO's Marpol convention which was being implemented by the various governments of the region. Under the Lomé Convention, the European Union intended to finance and support a regional project called "Parsec" which in fact comprised of two distinct components namely "Pollution Marine, (polmar)" and "Securité en mer (secmer)".

Project Coordination and Management Arrangements. The project was coordinated at the regional level by a PMU headed by a regional coordinator based at the offices of the Indian Ocean Commission. Furthermore, at national level there was also a national coordinator who was responsible for technical and administrative coordination.

- (ii) the PMU provided administrative support to the project coordinator and the project steering committee.
- (iii) establishing an intensive supervision plan.

Achievement of Objective and Outputs

Outcome/achievement of objective:

The project has achieved all the goals and objectives set at the time of the project design and project launch. Indeed, over and above meeting all the goals and objectives, the project has also, in many cases, exceeded the goals and objectives as can be seen from the performance indicators table.

Although the project went through some difficult time in the year of 2000 on account of political instability in two of the beneficiary countries, it was able to catch up and completely and successfully implement all

its activities and its full programme. Albeit in doing so it had to be extended by one year, that is, from 30th June 2003 to 30th June 2004. However, the project budget remained the same, that is, the project was completed within the allocated budget.

Outputs by components:

Component A: Ratification of relevant international conventions and protocols and development/upgrading of national legislation

This component was successfully completed. All the activities and work plan and programme were completed. In fact, more was achieved under this component. For example, only five lawyers were supposed to be trained under this item. Indeed, the project was able to train 7 (Seven) lawyers, thereby providing enhanced capacity in International Maritime Law and its enforcement.

Component B: Assistance to prepare or update and test National Oil Spill Contingency Plans

Under this component, nationals were trained to prepare oil spill contingency plans, appreciate the sciences of oil and learnt to prepare sensitive areas maps. This component helped the nationals to prepare the plans themselves, thus giving confidence to them so that they might in future revisit the plans in order to update them as necessary.

Component C: Procurement of equipment associated with Tier 1 oil spill response

Under this component, training was given to the nationals to appreciate the equipments which were available on the market and currently widely used; to prepare the tender documents with detailed specifications using generic terms. They were trained to use the equipment the project provided, to maintain the equipment as per manufacturers' recommendations, to carry regular drill and also of course to carry mock spill exercises.

Component D: National Capacity Building---Provision of specific expertise to the national coordinating agency.

Various management courses were given to help nationals manage the project in areas identified by the beneficiary countries themselves. An example was to run a very high level training the trainers' course. Another was to bring in a professional international journalist to train those responsible for public relations at national level to master the art of communication with the media under crisis situations.

Component E: The sub-regional component---Regional institutional strengthening

Under this component various regional workshops were organised with the assistance of IMO for the preparation of a regional plan and the organisation of two regional exercises. A major output expected under this component was the setting up of the regional coordination center. This regional coordination center is key to the sustenance of the regional plan in as much as, it is responsible for its regular updating and for regional periodic exercises.

Institutional and Financial Arrangements:

Following the institutional and financial studies carried out at the start of the project and after mid-term review, the beneficiary countries have taken appropriate measures for the creation of special fund to ensure the continuity of the project. One of the measures taken in Mauritius was the creation of a special budget line in the Ministry of Environment which is replenished annually.

The same measure was taken by the Seychelles Government. In Madagascar, the special fund is

replenished from a tax of 5 (five) Malagasy franc per liter of petrol sold. In Comoros, the Government has undertaken to levy a tax of 1 (one) Comorian franc per liter of petrol and by contribution from fishermen. This decision was taken at the l'Union des Comores' Cabinet meeting held on the 9th March 2003.

Major Factors Affecting Implementation and Outcome

Factors outside Government Control

There were some delays in the implementation of the project in at least two countries in year 2001/2002 due to political instability.

In Comoros there were agitations for self rule in each of the islands within a federal Government. Consequently the project had to take this on board and had to prepare an oil spill plan for each Island. It also meant that human resources had to be involved in each islands, trained so that they could partake in the preparation of the plan (this was considered very important in order to create "ownership" of the project. Each island has its own plan, set of equipment and are trained to manage a Tier 1 level spill. Over and above a national plan at federal level was also prepared and representatives of all three islands were made to work together as would be the case if and when a major spill occurs, specially when the federal government would have to seek external assistance and coordinate the contingency plan.

In Madagascar, since the year 2001 there was devolution of power process being put in place whence each province would be responsible for the overall management with its own local governing council. Consequently, to comply with this reality, the project was re-designed to empower the local province authority and have them involve in the preparation of the plan, in the training of personnel and in the exercises that were organized simulating oil spills. Following the presidential elections, there were administrative and social dislocations which prevented any implementation of the project. In 2002, for over 9 months the project had to be put on hold

Factors generally subject to government control

All the beneficiary governments were highly motivated and there were very high level involvement. At the handing over of equipment, no other than the Prime Minister of Mauritius presided over the ceremony. The ministers of Environment of Comoros, Madagascar and Seychelles were very much involved in the process and put in a lot of effort and time. Most workshops were opened by ministers and regular progress reports were sent to hem. The project was also closely followed by the Council of Ministers of the Indian Ocean Commission to whom quarterly reports were circulated for information. The project was subject of close media reporting and most of the major training programmes including the exercises were widely covered by TV and radios and the written press. The governments through the ministers of environment were regularly briefed over the implementation and at all times their full cooperation and collaboration were obtained.

Factors generally subject to implementing agency control

The Secretary General of IOC was personally very keen on the project as it was considered to be a flagship project on account of its successful implementation and the high visibility it had. It bestowed a lot of credibility on the IOC. Moreover, the Secretary General of the IOC regularly briefed the Comité Permanent de Liaison and through them their national governments as well as the Council of Ministers of the IOC.

Sustainability

Despite difficult political and economic conjectures, the respective beneficiary governments kept their promises and provided the promised resources in kind. They provided all the manpower required to attend all the training, exercises, maintenance of equipment workshop.

At institutional and financial level, they, once again, created the sustainability funds through either tax per liter of fuel sold or from their national recurrent budget. There is already established a programme for regular training and maintenance of equipment and mock exercises as well as to revisit the oil spill contingency plans. More nationals were trained than were required under the performance indicator and this was due to the enthusiasm that the project aroused in the beneficiary countries.

Another major achievement of the project was that the beneficiary countries signed and ratified the three conventions. Furthermore, they took either administrative or legislative measures for the conventions to be effective.

Each country has a dedicated oil spill team comprising of personnel who were trained under the project with the responsibility to keep the plan alive. This is done through regular updating of the plan and through regular drills.

At regional level, Madagascar has undertaken to finance the regional coordination activities. Working as a team at regional Coordination Centre is a must for the updating of the regional plan, for dealing with transboundary spills, for regional training and for regional exercises.

Bank and Beneficiary Countries Performance

Bank: Lending

The Bank clearly identified, prepared and appraised the project which met the needs of the beneficiary countries and was consistent with the Bank's lending strategy. The objectives were appropriate and components provided for flexibility during implementation. The Bank's performance was very satisfactory.

Supervision:

Considerable efforts were made by the Bank, the Indian Ocean Commission and the beneficiary Governments during implementation to realize project goals and objectives in spite of the difficult economic and political environment prevailing in the region. Overall Bank supervision took place in two phases. During the project preparation phase which lasted until late 1998. Secondly, through the project implementation phase, which spanned the period April 1999 to June 2004. During this period the project was subject of a mid term review in December 2000 which was attended by all donor agencies and sponsoring states. The project was implemented as appraised.

During the second phase, which lasted between 1999 and mid 2004, that is, project closing date, continuity was maintained in the Bank's supervision team resulting in improved dialogue with the implementing agencies. Since 1996, the supervision missions contributed significantly to improved project performance. Specific actions taken by the Bank supervision missions to improve project performance included: (i) flexibility and adaptability shown by the project team to changed circumstances and restructuring of the project to suit the specific national priorities; (ii) recruitment of short-term consultants to support document

preparation and provide "hands-on" procurement training; and (iii) providing support to the PMU to assist in the preparation of a procedure manual.

Overall Bank performance:

7.3.1 Overall, Bank performance was very satisfactory.

Indian Ocean Commission and the beneficiary countries

Preparation:

The IOC and the beneficiary countries performance during identification, preparation and appraisal were satisfactory.

Government implementation performance:

The Government performance during implementation was satisfactory considering that counterpart funding (in kind) was provided from the outset despite economic difficulties in at least two of the beneficiary countries. Political upheavals in both l'Union des Comores (self rule in the islands of Grande Comore, Anjouan and Moheli) and the aftermath of the presidential election in Madagascar led to difficult times and temporary dislocation in activities during the year 2002/2003. This inevitably led to delays in the implementation in Comores and Madagascar and the project implementation period had, consequently, to be extended to enable these countries to complete the programmes. Communications between the central government in the capitals and the regional implementation agencies and authorities proved to be difficult at most times.

Implementing Agency:

The project was implemented by the Indian Ocean Commission, on behalf of the beneficiary Governments (Union des Comores, Madagascar, Mauritius and Seychelles) through the PMU, set up for this purpose. The PMU was managed by the Regional Coordinator, as provided for in the PIP. The IOC provided the project with an office, a project secretary and an accountant as part of their counterpart contribution.

The IOC was involved in the first phase of the project which was to effectively carry out two important feasibility studies which provided the basis for the project design. The risk and impact study showed that there were real risks to the island states with negative consequential impacts to the regional seas, marine ecology, marine resources, major economic disasters which would be very damaging.

The other financial and institutional study showed that some countries had institutional and financial weaknesses which had to be addressed so that the project would be on solid administrative grounds in the medium and long term. It mainly recommended that each country had a dedicated national oil spill contingency planning team as well as a dedicated budget for the sustenance of the project to ensure its continuity over time to revise and update the national plans, organise regular drills and exercises, and replace equipment subject of wear and tear and also purchase of new equipment. The special fund, furthermore, would finance the participation of nationals at regional events.

Apart for the one year period (2002-2003) which marked dislocation of activities in Comores and Madagascar due to political instability, the project implementation proceeded as per the programme and timeframe established in the PIP. All the activities scheduled under the five components were carried out as per project design.

Overall Borrower performance:

The overall Borrower performance was satisfactory.

Lessons Learned

The following lessons can be learned from the experiences arising from the project management in the region:

- During project preparation, special efforts should be made to define the profile of the national coordinators and also to spell out their responsibilities. These important project collaborators must be motivated to fulfill the role incumbent upon them as they are called to perform duties over and above their normal duties. As they often have to work outside normal working hours, their Governments must be apprised and if need be, negotiated with, so that these project collaborators are paid special duty allowances for the extra work.
- Special funds for the Project should also be created from the outset of the project so that some financial resources are available to meet local cost with regard to the organisation of meetings/workshops, and the like, and also to meet the cost of local transport for the participants.
- Without these incentives, it was hard and difficult to find “volunteer” collaborators. There were plenty though when meetings were organised outside their respective countries for which travel tickets and per diems were available.
- It is important to pay adequate attention to all aspects of the project to ensure sustainable improvements in the contingency planning process by making provision for resources to be made available during project implementation. Some exercises and drills should have been undertaken by the beneficiary countries during the project implementation period to test their capacity for self sustenance and also for quality assurance under the supervision of the PMU.
- Agreements sought from the Government as part of project preparation should be realistic and based on institutional capacity and local knowledge.
- Either the project or the beneficiary countries should make financial provisions for the steering committee to meet at least once a year to assess progress to date and to provide guidance for future activities.

The Bank and the co-sponsors of the project

Indian Ocean Commission is deeply appreciative to the:

- (1) World Bank and the Global Environmental Facility for their very valuable in cash contribution to finance the project implementation including purchase and delivery of equipment.
- (2) South Africa for organizing and running the training programmes for the preparation of sensitive maps as well as providing a broad-based training course on all aspects of oil spill management. Furthermore, they provided equipment for training purposes in Cape Town.
- (3) France (Reunion) for organising a training course on the equipment specification writing in Reunion Island; for providing resource persons for the training courses ran in the respective beneficiary countries

and for supervising the testing of the oil spill contingency plans.

(4) IMO for the implementation of the fifth component of the project whereby they brought their experience to bear in the preparation of the regional oil spill contingency plan and the regional agreement for collaboration amongst the IOC countries in case of major or trans boundary spills.

(5) IPIECA provided a consultant for the preparation of the project and at the high level seminar. They also provided technical booklets on the techniques of oil spill management.

(6) Industry, especially at local level, for their collaboration and full participation in the preparation of plans, partaking in the exercises and for providing equipment for their terminals in the context of the project.

