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Egyptian Environmental Policy Program

**RED SEA SUSTAINABLE DEVELOPMENT AND IMPROVED WATER
RESOURCES MANAGEMENT PROJECT**

VOLUME I

RED SEA SUSTAINABLE DEVELOPMENT

FINAL REPORT

for
U.S. Agency for International Development - Cairo
Ministry of Water Resources and Irrigation
Ministry of State for the Environment
Tourism Development Authority
Red Sea Governorate

By



International Resources Group and partners:

Winrock International
PA Government Services, Inc.
Development Alternatives, Inc.
Environmental Quality International
Capacity Building International

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Preface

In September 2003, The U.S. Agency for International Development (USAID) Egypt Mission awarded a thirteen-month contract to a team managed by International Resources Group, Ltd. (IRG) to support environmental and water resources management activities in Egypt. Under this contract, termed the *Red Sea Sustainable Development and Improved Water Resources Management Project*, IRG assisted USAID/Egypt with implementing those remaining parts of the Egyptian Environmental Policy Program (EEPP) not yet completed as well as cooperation activities with the Ministry of Water Resources and Irrigation (MWRI).

The EEPP program was agreed following negotiations between the Government of the United States, acting through USAID, and the Arab Republic of Egypt, acting through the Egyptian Environmental Affairs Agency (EEAA) of the Ministry of State for Environmental Affairs, the Ministry of Petroleum's Organization for Energy Planning, and the Ministry of Tourism's Tourism Development Authority. These negotiations culminated with the signing of a Memorandum of Understanding in 1999, whereby the Government of Egypt would seek to implement a set of environmental policy measures, using technical support and other assistance provided by USAID. The Egyptian Environmental Policy Program was a multi-year activity to support policy, institutional, and regulatory reforms in the environmental sector, focusing on economic and institutional constraints, cleaner and more efficient energy use, reduced air pollution, improved solid waste management, and natural resources managed for environmental sustainability. This is its final year.

The Improved Water Resources Management component of this contract continued a long-term relationship with the MWRI addressing a variety of issues on water policy and institutional strengthening but with a new focus, in this contract, on the decentralization of water resources management.

USAID engaged IRG and selected subcontractors to provide services to EEPP and to MWRI. The remaining uncompleted EEPP activities were amalgamated into one component of this contract and called the Red Sea Sustainable Development (RSSD) component. With the Improved Water Resources Management (IWRM) component, the two together comprised the project, which is known by the shorthand designation: *Red Sea Coastal/Water (RSC/W)*.

The RSC/W team included the following organizations:

Prime Contractor: International Resources Group

Subcontractors:

Winrock International

PA Government Services, Inc.

Development Alternatives, Inc.

Capacity Building International (Egypt)

Environmental Quality International (Egypt)

IRG wishes to acknowledge the leadership, cooperation and hard work of its three principal Government of Egypt counterparts: Dr. Moustafa Fouda, Director, Central Department for Nature Conservation, EEAA, Eng. Mohamed Aly Ahmed, Head, Environment Division, TDA and HE, the Governor of the Red Sea, Gen. Saad Abu Reda. In addition, IRG wishes to acknowledge the guidance, support and cooperation of the USAID/Egypt team, first and foremost, Ms. Holly Ferrette, the CTO for the contract, Mr. Richard Edwards, Chief of the

Environment Office, Eng. Seifalla Hassanein of the Environment Office and Ms. Nadine El-Hakim, Mission Economist.

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Abbreviations, Acronyms, and Glossary

AED	Academy for Educational Development (US-based firm providing USAID-funded assistance on environmental education and awareness; part of EEPP)
CMP	Conservation Management Plan
CTO	Cognizant Technical Officer, USAID officer responsible for supervising a technical assistance contractor.
EDP	Ecotourism Development Plan
EEAA	Egyptian Environmental Affairs Agency
EEPP	Egyptian Environmental Policy Program (a USAID-funded program (1999 –2004) aimed at achieving a series of environmental policy initiative/reform objectives)
EMU	Environmental Management Unit (of the governorates and TDA (q.v.))
EPF	(Egyptian) Environmental Protection Fund
GDEA	General Directorate for Environmental Affairs, a part of the RSG
GIS	geographical information system
GoE	Government of Egypt
GPS	Global Positioning System
IRG	International Resources Group (a Washington DC-based consulting firm that is prime contractor for USAID’s RSC/W contract (q.v.))
LUMP	Land Use Management Plan
MOEA	(Egyptian) Ministry of State for Environmental Affairs
MoV	Means of Verification
MVE	Monitoring, Verification, & Evaluation (MVE is the USAID-funded unit established to monitor, verify and evaluate progress of EEPP.
MWRI	Ministry of Water Resources and Irrigation
NCS	Nature Conservation Sector (of EEAA)
NCT	Nature and Culture-based Tourism
PA	Protected Area; also PA Government Services, Inc., a subcontractor in RSSD
PAMU	protected area management unit, the operational team for a protected area
PSU	Program Support Unit, the name of the IRG contract for EEPP implementation from 1999-2003
RBO	Regional Branch Office (of the EEAA)
RSC/W	Red Sea Coastal/Water, the shorthand designation for this contract
RSG	Red Sea Governorate
RSGEM	Red Sea Governorate Environmental Management, the sub-component of RSSD (q.v.) that addresses EEPP Policy Measure 6
RSNRCT	Red Sea Natural Resources Conservation Team, the sub-component of RSSD (q.v.) that addresses EEPP Policy Measure 2 as well as support for the Red Sea Rangers and other institutions
RSSTI	Red Sea Sustainable Tourism Initiative (RSSTI), the sub-component of RSSD (q.v.) that addresses EEPP Policy Measures 7, 8 and 9
RSSD	Red Sea Sustainable Development, the component of this contract that addresses remaining EEPP activities and other Red Sea tasks
SCT	Supreme Council of Tourism
SRSR	Southern Red Sea Region, area extending from Marsa Alam in the North to Wadi Lahmi in the South and the Red Sea Coast in the East to the summit of the Eastern Desert Mountains
TA	technical assistance
TDA	Tourism Development Authority (part of the Ministry of Tourism)
TOR	terms of reference
USAID	U.S. Agency for International Development
WGNP	Wadi El-Gemal National Park

EXECUTIVE SUMMARY

The Final Report of the Sustainable Development of the Red Sea and Improved Water Resources Contract (RSC-W) covers the period of September 2003 – 30 September 2004. During this period, the contract addressed three main task groupings. The first, addressed by the Red Sea Sustainable Development Component, which this Final Report discusses, deals with completion of all remaining Egyptian Environmental Policy Project (EEPP) policy initiatives and/or reforms. The second task grouping addressed the institutional capacity and management needs of the Red Sea environment and pilot activities relating to local Bedouin communities, in particular, the transition of Red Sea Ranger activities to include the Southern Red Sea Region (SRSR). The third task grouping addresses the decentralization and institutional development of water user associations and Ministry of Water Resources and Irrigation management capacity. This last task grouping is addressed in a separate report (Volume 2 of the Final Report).

All of the tasks of the EEPP and Red Sea field activities were successfully completed. The EEPP set of activities, involving remaining means of verification for policy measures to be completed by EEAA, TDA and RSG, were completed by 31 March 2004. The remaining six months of the contract were focused on field activities in the Red Sea. These consisted of the following groups: implementing EEPP reforms/initiatives, including the Wadi El-Gemal Conservation Management Plan, the revenue generation initiative, the mooring buoy strategy and the ecotourism development plan; undertaking the transition from North to South for the Red Sea Rangers, including commodity procurement, key infrastructure development for WGNP and management support, and small-scale eco-loans and ecolodge development with coastal Bedouin communities in the SRSR. All of these tasks were completed on time and within budget.

The RSC-W's RSSD component, the subject of this Volume 1 of the Final Report, dealt with a number of challenges and learned a number of useful lessons. These include the following: First, it is essential to have a firm and clear commitment to policy reform on the part of the GOE counterparts for the reforms to be successfully achieved. The Contractor cannot be a surrogate for GOE engagement in the process. Relatedly, much more frequent meetings focused on decision-making need to be held to move the process along or else it tends to get bogged down in misunderstandings and diversions. Unlike the previous contracts, the RSC-W contract benefited from having all of the teams involved in the policy process under one management. This facilitated cooperation between agencies but still required a great deal of effort at communication. It wasn't until a major policy shift in favor of ecotourism occurred by the Ministry of Tourism/TDA that a significant change leading to policy agreement between EEAA, RSG and TDA occurred.

Second, protected areas management can benefit significantly by close cooperation and integration of efforts by government counterparts, private sector, NGOs and foreign donors. This was seen in the Samadai reef management system, the small-scale eco-loans program in WGNP and in the mooring buoy program, amongst others. However, in Red Sea environmental management, too much relies upon the goodwill of the Governor or the informal cooperation between EEAA, RSG and HEPCA and too little remains institutionalized or sustainably financed. The mooring buoy system and the Red Sea Rangers operations are vulnerable to financial disruption. In addition, too much inter-agency rivalries still exist in an environment where a scarcity of resources requires mutual support and cooperation.

1. INTRODUCTION

As part of the United States Government's bilateral assistance program, the U.S. Agency for International Development (USAID) is supporting environmental management in Egypt. A Memorandum of Understanding signed by the Arab Republic of Egypt and USAID in May 1999, established the Egyptian Environmental Policy Program (EEPP), which aimed to achieve environmental policy reforms across a series of objectives. USAID also has had a long-standing relationship with MWRI. Most recently, through a Water IQC contract, IRG and DAI provided support to MWRI on sources of water pollution, market-based, more efficient water management, and institutional strengthening.

Under direction from USAID, a consortium led by International Resources Group (IRG) implemented various tasks agreed by representatives of the governments of both countries. USAID specified those tasks to IRG in Task Order No. 263-M-00-04-00004-00 of MOBIS contract number GS-10F-0076M. The purpose of the Task Order was a) to provide support for the completion of the remaining Means of Verification of the EEPP in cooperation with the Egyptian Environmental Affairs Agency (EEAA), the Tourism Development Authority (TDA) and the Red Sea Governorate (RSG); b) provide additional support to the Red Sea Rangers, TDA and other institutions (NGOs, etc) to ensure the successful transition of environmental management capability from the Northern Zone to the Southern Zone of the Red Sea; c) support the development of the Red Sea Governorate's environmental management capability; d) provide support for ecotourism and a low-income focused "ecoloans" program; and e) provide support to the MWRI for a training and technical assistance program to pilot a system of decentralized water management in four water districts as well as provide support to Cairo-based operations. The RSC/W management unit in Maadi has been responsible for administrative support to the MWRI decentralized water program and to the coordination of the remaining EEPP activities among all parties through Working Groups. The RSC/W unit also manages commodity and equipment procurement, organization of training and provision of technical assistance as well as reporting, communications and financial accountability for the whole contract.

The Red Sea Sustainable Development (RSSD) component addressed the remaining EEPP Policy Objectives in this contract. These were Numbers 2, 6, 7, 8 and 9. The Red Sea Natural Resources Conservation Team (RSNRCT) addressed Policy Measure 2 and assisted in the completion of Policy Measure 7. The Red Sea Governorate Environmental Management (RSGEM) Team addressed Policy Measure 6 and assisted other teams where their activities dealt with the RSG, as requested. The Red Sea Sustainable Tourism Initiative (RSSTI) team addressed Policy Measures 7, 8 and 9 and coordinated with RSNRCT and RSGEM to complete the various Policy Measure means of verification (MoVs). The Nature and Culture-Tourism (NCT) team tackled the non-policy related ecoloans initiative, coordinating with the other teams where relevant, mainly in the SRSR. The Integrated Water Management Team (IWMT), based in the MWRI in Imbaba, was responsible for the implementation of its workplan.

The Task Order requires that a final report be submitted to USAID summarizing the achievements and lessons learned in implementing the work plan and other deliverables. This report has the following structure:

Discussion of achievements, constraints and outcomes;
Review of lessons learned from the design and implementation of the contract;
Listing of deliverables under the workplan, which are presented separately in CD and hardcopy formats;
Annexes on consultants, training, procurement and other matters of relevance to the contract.

For the purposes of clarity and usefulness to counterparts, this Final Report has been organized into two volumes: the first deals with all activities relating to the Red Sea, i.e. the **Red Sea Sustainable Development (RSSD) component**. The second volume addresses all of the Nile River basin activities, i.e. the **Improved Water Resources Management (IWRM) component**.

2. PRINCIPAL ACHIEVEMENTS OF THE RED SEA SUSTAINABLE DEVELOPMENT (RSSD) COMPONENT

The RSSD Component of RSC/W was divided into two major task groupings: completion of remaining EEPP policy measures in one grouping and non-policy support activities and policy implementation in the Red Sea in the other grouping. The first six months of the RSSD workplan saw a heavy emphasis on completing the means of verification related to the remaining uncompleted policy measures. The second six months saw a greater focus on beginning implementation of the completed policy measures to varying extents and also achievement of non-policy matrix tasks. Of course, non-policy activities occurred throughout the workplan period but the allocation of technical assistance time more closely followed this division of labor.

2.1 Achievements of EEPP Tranche 2 (T2) Policy Measures Completion Task

At the outset of the contract, in September 2003, RSSD was responsible for assisting the various GOE counterparts to complete 11 Means of Verification (MoV) or parts of MoVs for six EEPP policy measures (2.2, 2.3, 7.1, 6.3, 8.1, and 9.1). All but two of the MoVs were submitted by the deadline, 31 March 2004. The remaining two had been completed but lacked the formal signatures of the Minister of the Environment and Red Sea Governor due to scheduling difficulties. However, the MoVs for this policy measure were submitted formally in June.

This was a substantial and difficult achievement and required the persistent support and hard work of the three Government of Egypt (GOE) counterparts and USAID in addition to the efforts of the Contractor. In order to meet the deadline, teams met frequently with each other and with counterparts, both to develop realistic workplan schedules as well as to identify core issues that required inter-agency agreement. The most difficult means of verification were in policy measures 2.3 (EEAA) and 7.1 (TDA). The Contractor set up an inter-agency Working Group to address the policy issues that required joint resolution, especially the land use and development plans for Wadi El-Gemal National Park (WGNP).

The RSC-W workplan built upon and continued the work on policy measures begun under previous IRG and PA Government Services contracts. Indeed, a number of the means of verification finalized during this contract had been submitted during the previous contract period (2002-2003) but required additional work or revision in order to meet the verification standards set by USAID and the MVE unit. Others had not been submitted previously. In the following sections (2.2 – 2.6), the work and achievements of the contract teams in the policy measures part of the workplan is summarized, followed by a discussion of the non-policy workplan activities.

2.2 Objective 2 Policy Measures

Policy Objective 2: *“Enhanced management and conservation of Red Sea coral reefs, islands, and linked ecosystems of importance”* encompassed all of the policy measures that related to EEAA and protected areas management. The remaining uncompleted policy measures for this objective were 2.2, which dealt with a revenue and expenditure system for the Red Sea protected areas and 2.3 which dealt with management of protected areas, especially the mooring buoy program and Wadi El-Gemal National Park.

2.2.1. Major Accomplishments of Policy Objective 2 Sub-Tasks.

All remaining means of verification were successfully achieved for policy measures 2.2 and 2.3. Each of these is discussed in turn.

2.2.1.1 Revenue Generation and Expenditure Plan MoVs: 2.2.1 and 2.2.2

A great deal of background work for this policy measure already had been completed during previous IRG contracts by the time the RSC-W contract began. Two means of verification (MoVs) remained uncompleted for this policy measure: a) expansion of the Northern Zone diving and snorkeler fee system to the whole of the Red Sea and its endorsement by the Supreme Council of Tourism (MoV 2.2.1), and b) the development and approval of a revenue generation and expenditure system by “appropriate GOE authorities” (MoV 2.2.2). The two MoVs were closely related and were addressed together. The strategy that was agreed was to build upon the existing fee system (renamed a “service charge”) and expand it in a way that would reduce the

likelihood of evasion and allow collection of the charge as efficiently as possible.



Significance of Achievement

Although it remains to be tested, in practice, the new revenue generation system incorporates several lessons learned from the original diving and snorkeling fee system on which it is based. **First**, all of the Red Sea diving and snorkeling sites are now covered by the plan rather than just the Red Sea Marine Protectorate lands (although these make up nearly 70% of the total).

Dolphins at Samadai Reef where an innovative service charge is levied

This, by itself, helps to reduce the possibility of fee evasion. **Second**, the system describes a division of labor for implementing the system that is potentially more sensible. The RSG administration will be in charge of collecting the revenues for both EEAA and RSG and with dividing these since they have a larger financial administrative structure in place. The Red Sea Rangers, on the other hand, will have the lead in providing services to the tourism community relating to the charge, especially management and quality control of dive sites, including some sites that are not a part of the Red Sea protectorate, e.g. Samadai Island (Dolphin House). **Third**, the new system is tied to a larger mandate, i.e. ensuring the safety and security for tourists on the Red Sea. Charges will be tied to a “boat list” disaggregated by nationality and destination and charges will be levied on the basis of the list. Moreover, the system also is supposed to employ an electronic tracking system to ensure that boats are following their navigation plan, which, in turn may link up with a search-and-rescue system to be developed in the near future. Again, this design element should reduce the level of fee evasion and identify those boat operators that are unsafe and not following best practices, which should negatively affect their business. **Fourth**, the system will be developed, using lessons and experiences gained from the current “pilot” joint management system of Samadai Island, which employs some of the features of the integrated

revenue collection system. The challenge of the next year will be deploying a synthesis of the Samadai pilot system and the larger formal but untested system across the Red Sea coast.

The system was approved by both the Minister of the Environment and HE the Red Sea Governor and submitted for approval to the Prime Minister in his capacity as Chair of the SCT. This approval was obtained in June, 2004. All tasks required for successful achievement of this policy measure were completed and certified by MVE and USAID.

Fourth Quarter Activities During the 4th quarter, RSC-W consultants completed the following tasks:

a) The Samadai experience was described in detail and evaluated. Samadai Island (or Dolphin House) is a reef complex in the Southern Red Sea Region (SRSR) famous for its large population of dolphins, which breed and rear their young pups there. These have attracted a great deal of tour boat and diver/snorkeler traffic that needs to be carefully managed to prevent serious disturbance to the population. Early in 2004, a joint management system for this area, which is not a part of the formal marine protectorate, was designed between EEAA and RSG, including a substantial fee and a daily visitor quota. In return, the Red Sea Rangers provide management, monitoring and research and information to tourists. As noted above, the system is something of a variation on the approved integrated diving and snorkeling service charge system and is being evaluated as a kind of pilot for any lessons it can yield.

b) A study of the organization of the nature conservation sector of EEAA was undertaken in order to document past attempts at reorganizing the protected areas management system to improve its management autonomy, flexibility and effectiveness and to make recommendations for the future, with special attention to the Red Sea protectorates.

Lessons Learned. A number of interesting policy lessons were gleaned from the experience of designing a new EEAA-RSG integrated revenue generation system for the Red Sea.

Diving and Snorkeling “Service Charge” System (1) First, creating this system involved overcoming a considerable amount of institutional and policy resistance, mainly from the key GOE counterparts rather than the foreign tourists who would be asked to pay the charge, since such charges are common and usually at much higher rates in most other marine protected areas around the world. However, even though the staff and consultants working on this task devoted a large amount of time to documenting the economics of the system and exhaustively analyzing all of the various types of charges and potential revenues to be gained, they initially failed to “close the deal”, i.e., they did not prepare a clear enough and simple action plan that would lead to a positive institutional outcome within the timeframe allowed for the policy measures. Hence, *the first lesson was ensuring that a proposed policy choice is the simplest and most direct of the available alternatives to implement, even if it is not necessarily the most ideal* (from the standpoint of potential maximum revenues, completeness of coverage or costs of implementation).

Diving and Snorkeling “Service Charge” System (2) The RSC/W consultants spent considerable effort with the tourism and diving community to describe the various alternatives being considered and to consult about their views and preferences. This allowed the proposed

system to be developed a) in a more transparent manner and with formal endorsement of those who would have to implement it (and also benefit from the protection of marine resources, and b) to jump-start the process of communication and awareness of the new fee system which would have to be done anyway once the system was approved. In general, much of the diving and snorkeling tourists are unaware that there is a Red Sea marine protectorate or that protection services are being provided. Partly, this is a weakness of the diving and tour operators who are the principal contacts and source of information for most tourists and partly this is a failure to communicate adequately the economic value of the marine protectorate to these very important users. The process of consultation used for this policy measure was one very important way of ensuring that these stakeholders became a part of the management system of the Red Sea protectorates.

2.2.1.2 Policy Measure – EEAA develops a Red Sea Southern Zone Conservation Management Plan, including mooring buoy strategy, for selected high priority coral reef, island and terrestrial areas.

Three means of verification (MoVs) were completed to fulfill the requirements of this policy measure. They involved (i) completion of the revised Conservation Management Plan for Wadi El-Gemal National Park (CMP-WGNP) and securing the endorsement of EEAA (2.3.1), (ii) preparation of a mooring buoy implementation plan (2.3.2), and (iii) reporting on the early activities associated with the Southern Zone CMP and dissemination of this information to stakeholders (2.3.3). Details follow:

2.2.1.3 Main Activities and Achievements

Revised CMP-WGNP (2.3.1) During the reporting period the main activities focused on the revision of the Draft Management Plan (CMP), in order to achieve the specific Means of Verification (MoV). The revision was essential to incorporate, into one integral document, the Draft CMP for WGNP and the geographical zonation system developed as part of the Land Use Management Plan (LUMP) for the TDA territory inside the Park

The primary driver for this activity was the inauguration of a Working Group on Ecotourism and Ecozoning (WGEE), comprised of members of RSC-W, including the RSNRCT and RSSTI teams and TDA staff. The WGEE was formally initiated at the review meeting of all GOE and project stakeholders in RSSD held in Hurghada 19-20 January 2004. On January 26th, the Working Group held a coordination meeting at RSC-W's Maadi Office to set a timeline for completion of the many activities, deliverables and actions. Subsequently the WGEE met regularly, in formal and informal field sessions, during the first three months of 2004 to finalize the planning process.

As required by the MVE Verification Plan, the WGNP Conservation Plan document of EEAA/NCS was exchanged with the LUMP and draft documents for the Ecotourism Development Plan of TDA. TDA and EEAA both provided comments and suggestions on each others' documents. As part of this process, the development regulations and conditions of the LUMP zones were revised, and elaborated, to reconcile them with the conservation objectives and site prescriptions for the WGNP.



Entrance and Interpretation Station for Wadi El-Gemal National Park

The EEAA/NCS and TDA agreed to a revised park zoning plan and LUMP respectively that created improved definitions and greater precision to permitted resource use and other activities within each zone. To consolidate this MoV the GoE partners in this process i.e. EEAA, TDA and the RSG, were encouraged to “endorse” a joint accord that among other things laid out a common vision for the sustainable development of the

Southern Red Sea Zone. The arrival at the common vision, by the Government partners, for the sustainable development of the Southern Red Sea Zone was formally signaled with the Marsa Alam Declaration, which announced that the area between Marsa Alam and Bernice would be reserved for ecotourism type development.

All scheduled tasks under this MoV have been completed. Nevertheless, the CMP and the TDA LUMP should be seen as “living documents”. Because there has not been any formal ecotourism development within the Park and because this kind of joint arrangement between the two agencies has not been attempted previously, the activity of refining and updating the integrated Management and Development Plan for Wadi El Gemal National Park will be a continuing and important priority into the future as management interventions are tested and mature.

The primary **lesson learned** was the importance of establishing a forum to facilitate the coordination and reconciliation of visions between the various actors and agencies involved in the production of conservation and development of plans, in this case for the Southern Zone, particularly WGNP. This was ultimately achieved through the formulation of the Working Group on Ecotourism and Ecozoning. A secondary lesson was the value of participating in joint field excursions as this allowed for sustained debate on issues and led to improved the working and personal relations between members.

Mooring Buoy Implementation (2.3.2): Copy of the EEAA-approved mooring buoy strategy and plan to implement the strategy. VoDs: (1) Mooring buoy strategy document (submitted and approved in June 2003); (2) Implementation plan for mooring buoy strategy. VoD(2) was completed and submitted by EEAA in March 2004 and subsequently was approved by MVE/USAID.

NCS/Red Sea Protectorates completed a priority deliverable in March 2004 with the preparation of a *Mooring Buoy Implementation Plan (2004)*. The Plan is a supplement to the *Red Sea Mooring Buoy Strategy*, issued in 2003. The plan calls for establishment of a full-service EEAA mooring team, further investment in mooring equipment, increased consultation with

stakeholders in the south, collaboration with HEPCA, and a program for mooring maintenance and installations in two priority areas: St. John's Reef area south of Ras Benas which is used by safari boats (liveboards), and the northern offshore islands and reefs situated NE of El Gouna which are used by daily dive boats and liveboards. Another activity recommended in the Plan is for EEAA to create a voluntary Sea Ranger Auxiliary (SRA), drawn from selected members of the dive community, to extend the "eyes and ears" of the rangers at sea by alerting rangers to improper use of the mooring system.

Background The *Mooring Buoy Implementation Plan (MBI Plan)* is an outgrowth of the previously drafted *Red Sea Mooring Buoy Strategy*. The purpose of the plan is to identify the practical steps to be taken by EEAA, in fulfilling the priority initiatives discussed in the strategy. The timeframe for plan implementation is 2003-2004, although some activities will necessarily require an additional year (2005) to complete. The most important initiatives that are highlighted in the *MBI Plan* form the basis for EEAA's accomplishments, discussed in the following section.

Main accomplishments: *Mooring Buoy Implementation Plan* completed, effecting a partial cash transfer to EEAA. The plan identified the reefs in the deep south and far north that required new moorings and dive sites in Hurghada needing maintenance. In collaboration with HEPCA, 35 replacement mooring lines and 13 new moorings were installed in Hurghada. NE of Gouna, 42 new installations were made with EEAA providing all equipment, boat rental and services of the dive supervisor. On southern missions, HEPCA replaced/installed 32 mooring lines in the Southern Far Islands and 45 installations were made at St John's. Again, EEAA provided all mooring equipment, paid for the boat rental & contributed the Supervisor for the HEPCA dive team.



Mooring buoy installation on a Red Sea reef

US-made mooring equipment was procured, shipped, cleared through customs and turned over to the Red Sea Rangers. Equipment included hydraulic power tools for UW mooring installations with accessories (hoses, seal kits, hydraulic couplers, and breakers), mooring anchors, mooring buoys, shackles, and high strength UV-resistant rope. Some Egyptian products were fabricated (stainless steel mooring pins, and heavy-duty chain). Further, RSC-W purchased and shipped an HP1 tool set for HEPCA.

- (1) Sites for proposed moorings were discussed with dive industry at Safaga, El Gouna, Hurghada, Marsa Alam, Wadi El-Gemal, Hemata and Wadi Lahmi.
- (2) A new HEPCA dive team was trained by EEAA senior commercial diver.
- (3) EEAA hired safari boats and furnished 90% of the mooring equipment.

EEAA established a cache of mooring equipment at Marsa Alam; two new EEAA boat sheds were constructed at Shams Alam and Hemata ranger stations.

(4) HEPCA received permission from RSG to establish a Marsa Alam office

Uncompleted Tasks Key tasks under this MoV were completed. Some targets have been exceeded, such as the increase in number of moorings and expansion of their geographic coverage in the far south and north. One activity that was partially fulfilled was the creation of a full-service EEAA in-house mooring unit. A mooring unit consists of seven persons, one supervisor and six commercial divers, with full personal and installation equipment. Currently the EEAA mooring unit has all the necessary equipment but only one senior supervisor who is a commercial diver. Authorization was received by the Minister of EEAA to hire an additional six commercial divers for the Red Sea Protectorates. However, recruitment efforts were unsuccessful owing to low government salaries (LE 500-600/month for this position). Divers working for the dive industry in the Red Sea can command 3 times the government salary, e.g. LE 1500-1800/month.

Lessons Learned. There are a number of operational lessons to be drawn from the Mooring Buoy experience in 2003-04: *First*, the environmental mooring system is still the primary intervention to protect the ecological integrity of Red Sea coral reefs, and warrants on-going investment. Moorings control dive boat access to the reefs and prevent anchor damage, so the presence of an extensive mooring system correlates absolutely with the health of the reef.

Second, collaboration between EEAA, HEPCA and RSG was essential to maintaining moorings and installing new ones. Every mission has been a collaborative effort between these three stakeholders with one or the other providing commercial divers, work vessels, anchoring equipment, use of hydraulic installation tools. Other stakeholders such as dive centers have provided local knowledge on where moorings are needed and how they should be maintained.

Third, most of the material costs during 2003-04 have been borne by the USAID project. Long-term sustainability for the mooring system will depend on funding from the integrated diving and snorkeling fee system, newly inaugurated.

Fourth, to reduce the government's burden, costs of doing topside maintenance of the mooring array (ropes, shackles, and buoys) can be shifted to selected dive centers, who are willing to undertake this activity in their local waters. Several dive centers have agreed to assume this responsibility in the south at Marsa Shagara, Wadi Gemal and Wadi Lahmi

Fifth, given the size of the mooring buoy network – the largest of its kind in the world – it is not realistic to expect that this system will be maintained and extended simply through the efforts of HEPCA, in the absence of an EEAA mooring unit. EEAA needs to obtain from the government a flexibility to hire outside of civil service salary restrictions for certain types of high market demand skills. If this cannot be achieved, EEAA needs to contract out – preferably with strict performance requirements and incentives – mooring buoy installation and maintenance to a private sector firm, funded by the new integrated diver and snorkeler fee.

Mov 2.3.3: A report disseminated by EEAA of results from the initiation of activities under Red Sea Southern Zone Conservation Management Plan, with special reference to the mooring buoy pilot program. VoDs: (1) Report on the results from the initiation of activities under Red Sea Southern Zone Conservation Management Plan; (2) Report on dissemination activities. Both VoDs were completed and submitted by EEAA in March 2004 and subsequently were approved by MVE/USAID.

Activities - CMP Implementation 2.3.3 The *Report on results of initiation of activities under SZCMP* discusses the launching of the Southern Zone CMP with the endorsement from the EEAA Minister and Red Sea Governor. The Wadi El-Gemal Conservation management Plan is technically an annex to this document but has since become a stand-alone document though still linked to the Southern Zone plan.

The *Report on dissemination activities* describes key activities relating to the dissemination of management objectives and strategies listed in the Southern Red Sea CMP. Activities relate to stakeholder meetings and workshops.

Accomplishments - CMP Implementation 2.3.3 The *Report on results of initiation of activities under SZCMP* presents an overview of the plan and discusses the accomplishments made during the early days of the Plan: staff development and law enforcement; marine resources monitoring; mooring buoy maintenance and installations; public awareness raising; capacity-building for terrestrial management; and operational planning. Several tables are annexed which list: training courses provided to the rangers; equipment procured to support southern operations; location and number of pilot moorings installed in the south; summary of human threats to the environment; and Conservation Management Area issues and recommended strategic approaches for their resolution.

The *Report on dissemination activities* provides contact information for those involved in development of the Southern Red Sea Conservation Management Plan. Data are summarized in a table describing: the date of the activity; the venue; the topic discussed; and persons attending the meeting. The dissemination report mentions only a few of the extensive range of meetings that took place between USAID-funded consultants and key stakeholders on issues relating to fishing, mangrove cutting, ecotourism and mining in WGNP. Outcomes of these meetings are reflected in the various consultancy reports held by RSC-W and the Egyptian Environmental Affairs Agency (EEAA). Excluded are the numerous routine informal meetings between RSC-W staff and key stakeholders.

2.3 Objective 6 Policy Measure

Objective 6 was concerned with increasing the GOE's capacity to conduct long-term strategic planning, policy formulation, analysis and coordination. Most of the policy measures related to this objective were completed or partially completed in earlier contracts. RSC-W was responsible only for one part of one means of verification, i.e. the implementation of the pilot EMU decree by the RSG. The specific target was to help the RSG to build the capacity of its existing environmental management unit (EMU) and to take the necessary institutional steps with other GOE agencies to upgrade the EMU to a General Directorate of Environmental Affairs (GDEA).

Before June 2003, the IRG team of EEPP was able to help EEAA achieve the first policy measure relating to improving environmental management capacity of the RSG. A proposal and



a draft Prime Ministerial Decree addressing organizational development of EMUs and their roles and responsibilities were endorsed by all Governorates and submitted by the Minister of Environment to the Council of Governors in August 2002. Due to the success of this work, known then as decentralization of environmental management (DEM), USAID and EEAA added a related supplementary MOV under Policy Measure 6 composed of three parts: “ i) EEAA secures Prime Ministerial approval of the EMUs Decree; ii) strengthens performance of EMUs in coordination with the Ministry of Local

Local community meeting on environmental management

Development; and iii) RSG implements pilot of the Decree.” The IRG team was expected to provide TA to RSG in the process of achieving the third part related to piloting the EMU Decree by March 2004 through provision of a RSG Institutional Development Team. In addition, non-policy matrix technical assistance was also expected. The latter category included required technical assistance to the RSG to upgrade its EMU to a GDEA, training and associated commodities and equipment to set-up the GDEA offices and implement environmental monitoring systems. The training for the GDEA was planned to cover subjects of environmental impact assessment, strategic planning, use of technical monitoring equipment, etc. The IRG team was not requested to provide technical assistance to EEAA in achieving the first two parts of the MoVs included under this policy measure.

The work-planning phase of this assignment added two more technical assistance items that also were expected from the contractor. These included clarification of roles and responsibilities of various GOE agencies involved in environmental management in the Red Sea Governorate, and policies and procedures of the GDEA. This section provides a summary of the main activities, and accomplishments, and a number of lessons learned.

2.3.1 Major Accomplishments of Policy Objective 6 Sub-Tasks.

The IRG team assisted RSG to prepare a proposal addressing organizational development of the EMU. The team also utilized the leadership of the Governor and convinced him to become personally engaged in pushing forward the reform process. This was critical to achieving the MOV swiftly (see below).

Training courses were delivered on various subjects corresponding to the functions of the GDEA (e.g., environmental law, legal pursuits, preparation of environmental profiles, participatory communication, EIA Review, environmental inspection, environmental disasters management, environmental awareness and best practices and strategic planning). Participants evaluated each

course and training documents and reference materials to be used by trainees prepared specifically for this audience. To clarify roles and responsibilities, the team prepared a study on relationships between GDEA and all other agencies engaged in environmental management, as well as a database on environmental legislation with a built in search engine. The latter is a modest contribution to the GOE's policy of promoting "e-governance". The team also developed policies and procedures of the GDEA. Comments of EEAA, TDA and RSG were solicited and integrated into revised versions of both documents.

Main Accomplishments. With the support of the institutional development team of IRG, the RSG was able to achieve the MOV in late December 2003, only three months after beginning the contract. Due to the support of the Governor and the Secretary-General, all information required to prepare the organizational development proposal of upgrading the EMU to GDEA was available in a timely fashion. The proposal utilized 37 budgeted but vacant positions in the structure of the RSG to staff up the GDEA without adding any budgetary burdens on the GOE. The Minister of Administrative Development approving the proposal of the RSG and upgrading the EMU into a GDEA issued a decree on 23 December 2003. The IRG team detailed job description cards for each position and supported the screening process of 650 applicants in March 2004. The 37 posts were formally filled with core staff, all of whom were financed by the GOE's own accounts, i.e., the reform is sustainable and not dependent on foreign donor support. HE the Governor also issued a decree in January 2004 establishing EMUs in all five cities of the RSG, thus enhancing further the environmental management capacity, and bringing the size of RSG's core staff working on environmental management to 75: a size unmatched in all other Governorates nation-wide. The institutionalized reform inside RSG also included a mechanism of receiving and processing citizens' complaints, thus contributing towards civic engagement in decentralized environmental governance.

The reform increased GDEA's access to budgetary allocations compared to its original status as an EMU. The technical EEPP assistance team working on environmental management of the RSG helped to clarify roles and responsibilities of other government and non-government stakeholders to ensure coordination and synergy. The RSG endorsed the policies and procedures of the GDEA that highlighted their enabling and educational role.

Non-policy activities of the Red Sea Governorate Environmental Management Team are discussed in Section 2.8.

Lessons Learned. It has often been observed, most recently in USAID's own worldwide EPIQ I policy program (1996-2002) that, to be successful, **a policy program needs to have a policy "champion"**: an individual in a *strategic position* who understands the issues and the importance of the policy reform/initiative and who provides the critical political backing to make it happen. In the EEPP, the most obvious policy champion who was in a strategic position to act decisively on policy reform was the Governor of the Red Sea. In a very short space of time, he was able to comprehend the strategy of the contractor team to upgrade and strengthen the capacity of his own environmental management unit using existing administrative tools. By personally becoming engaged in pushing forward the reform, he achieved success, in a matter of a few months, what no other governorate had been able to achieve. The second lesson learned is the obverse of the first: while a strong individual may be needed to push forward reforms,

especially ones that are controversial, nevertheless, in order for them to become sustainable, they need to be institutionalized and securely funded (where that is a relevant concern).

2.4 Objective 7 Policy Measure

Objective 7 was concerned with “sustainable Red Sea land use management linked to ecosystems of importance.” Despite its rather general wording, this policy measure was focused mainly on TDA’s Red Sea lands and so this agency and the contractor team working with it (which became part of the IRG MOBIS contract in the RSC-W project) had the lead in this activity. However, sustainable land use is also a vital concern of both EEAA and the RSG and this was one reason why it was essential to develop an inter-agency working group model to ensure coordination and integration for this sensitive subject. Though the wording of this policy measure is general, the subject became increasingly focused on land use in the newly-declared (2003) Wadi el-Gemal National Park (WGNP).

This policy measure addressed the development of land use management plans and zoning for the Southern Zone (but mainly WGNP); the development of an ecotourism development plan along with standards, regulations for development and land allocation, and a model for an ecotourism development (mainly an ecolodge complex), again within WGNP.

Considerable work already had been done over the previous four years, especially with respect to the inventory of resources, associated mapping and related ecotourism studies. However, a lot remained to be achieved during the past year for all three MoVs.

2.4.1 Major Accomplishments of Policy Objective 7 Sub-Tasks

2.4.1.1 Land Use Zoning Plans and Tourism Development Regulations (7.1.1)

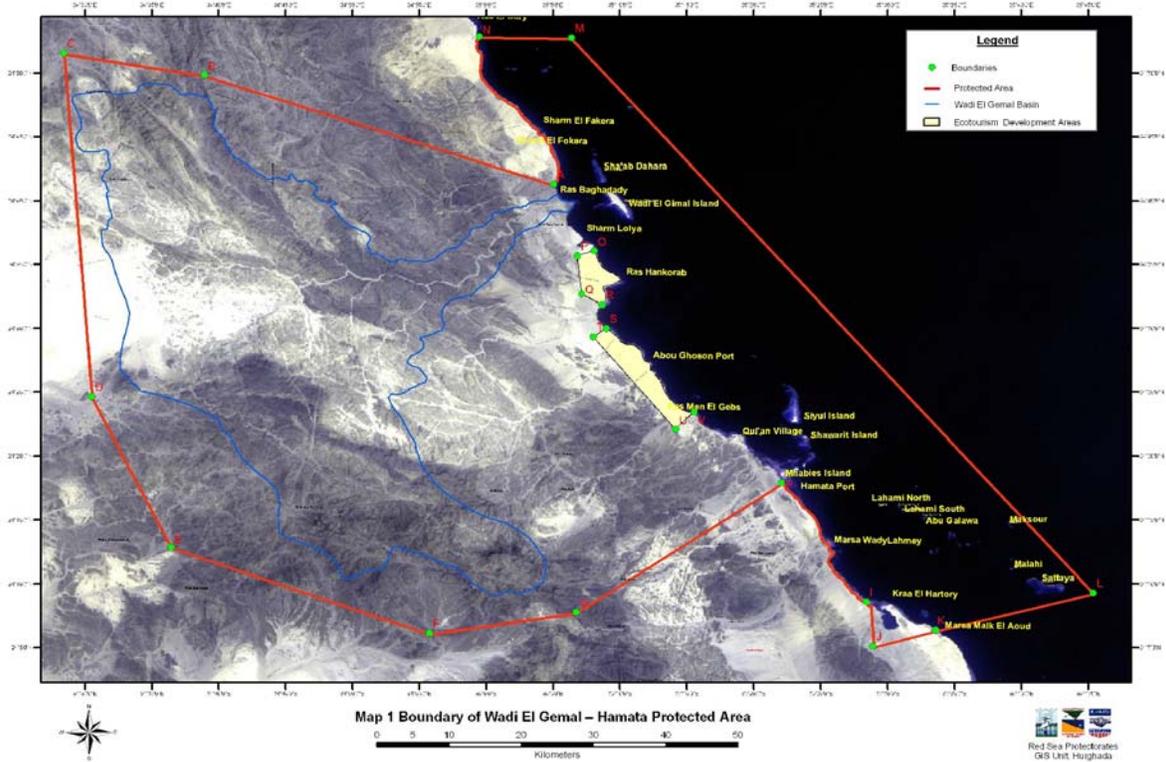
During Tranche 2, TDA with the assistance of RSSTI produced a land use management plan (LUMP) and zoning regulations for its land as well as the contiguous EEAA and RSG lands. In June 2003, The Supreme Council of Tourism (SCT) approved TDA’s proposed land use classification or zones and approved it to be implemented in coordination with the Ministry of Environment. Subsequently MVE and USAID judged this activity to be partially achieved and required it to be completed during the following phase (i.e. this contract) with required reconciliation with EEAA of several zoning definitions and regulations that were in conflict or too vague to be useful.

The main activity for 7.1.1 during this phase of EEPP was for TDA to rationalize the zoning map and development densities within specific zones in consultation with EEAA and RSG. RSSTI participated in the Ecotourism and Ecozone Working Group with representatives of other RSSD components, and advised TDA in revising the zoning regulations.

Other RSSTI/TDA activities for 7.1.1 included:

- Completing research on ecotourism resources (including ecological, cultural and heritage resources) of interest within the Southern Red Sea Region (SRSR) and plotting the location of these resources within the TDA GIS.

- Drafting ecotourism development standards applicable for the different zones in the SRSR, including allowable and prohibited activities and uses. The standards also covered ecotourism products, visitor behavior codes and tour operator standards.



As noted above efforts were made to reconcile the TDA LUMP zoning definitions and allowable activities with those of the WGNP Conservation Management Plan. As TDA gradually moved towards acceptance of an ecotourism development strategy, it became clear that a number of the categories and activities as well as densities of resorts and infrastructure needed to be changed. A compromise from both TDA and EEAA was reached eventually. A LUMP set of definitions and density limits was agreed with the help of the WGEE mentioned earlier.

A Final Land Use Management Plan (LUMP) accord (Arabic) was submitted to TDA. The LUMP accord provided the various zoning formulations and development regulations made fully compatible to EEAA’s Conservation management Plan (CMP). The Tripartite Committee of TDA, EEAA, and the RSG endorsed the LUMP accord at the end of March 2004. The committee proved to be a useful forum for discussing other environmental-related issues and has become a standing committee for the three agencies though its deliberations are not as transparent as they could be.

2.4.1.2 Ecotourism Development Standards and Related Maps (7.1.2).

The main activity for 7.1.2 during this phase of EEPP was to support TDA to prepare a comprehensive Ecotourism Development Plan (EDP) as required for MoV 7.1.2, including development standards and regulations. This included maps for the proposed locations of

gateways and visitors access, access routes and trails; assessment of the relative advantages of attraction focal points; descriptions of ecotourism activities and programs; examples of itineraries designed for land and marine based tours; identifications by type, size and locations of ecotourism facilities and services as lodging facilities, visitor centers, eco-stations, campgrounds; and descriptions of the necessary supporting infrastructure including communications, emergency and medical stations; as well as the required marketing, promotion and investment plan to support the EDP.

TDA and Ministry of Tourism approved the Ecotourism Development Plan and Ecotourism Development Standards. Based on the work done under RSSTI, the Minister of Tourism issued a national declaration that the Marsa Alam – Ras Benas region would be dedicated exclusively to ecotourism development. Over 250 high-ranking officials from the Government of Egypt, foreign embassies and bilateral and multilateral development agencies attended the declaration event.

2.4.1.3 Ecotourism Model Developed, Approved and Land Allocated (7.1.3)

The main activity for 7.1.3 during this phase of EEPP was to support TDA to prepare a conceptual model for an integrated ecotourism project for the Qulaan Fishing Village, one of two sites in WGNP identified as suitable for ecolodge development. The ecotourism model project “Conceptual Development Plan for Qulaan Ecotourism Model” is a full-fledged scheme including identified attractions, destination points, trail network, access points, ecolodge design and layout, guiding and control facilities, and other support services. The Qulaan Eco Model was designed to be comprehensive and detailed plan for ecotourism development in a specific site in the SRSR. It may serve as a model for other ecotourism development proposals for which TDA can solicit investors. TDA identified two different Egyptian investors with interest in pursuing the Qulaan Eco-Model prepared by PA/RSSTI.

2.4.2 Uncompleted Tasks/Activities

The final allocation of the Qulaan Eco-Model to one of the investors was not completed due to the lack of a precedent for allocating a large buffer area surrounding the proposed ecolodge site. Complicating the lack of a legal precedent was the fact that the buffer area would comprise EEAA managed land since the site is in Wadi El-Gemal National Park. Both TDA and EEAA have the right to allocate concessions within their respective areas of jurisdiction and so the legal



Roman ruins at Sikheit, WGNP: an ecotourism attraction

challenge for the future will be to develop concession rights procedures suitable to both agencies.

2.4.3 Lessons Learned

TDA, EEAA and RSG have historically conducted planning activities in isolation from one another. This became evident in the differences between the LUMP and the Wadi El-Gemal National Park Conservation Management Plan. A regional approach to planning is needed in order to resolve conflicts among the respective agencies' plans.

The observational study tour to South Africa was a milestone in that regard. By developing interpersonal relations between the counterparts (especially TDA and EEAA) and witnessing successful efforts in tourism development and nature conservation, key policy counterparts were able to engage in a constructive dialogue about the proposed developments in the SRSR.

2.5 Objective 8 Policy Measure: Environmental Impact Assessment and Environmental Monitoring

2.5.1 Major Activities and Accomplishments of Policy Objective 8 Sub-Tasks

RSSTI completed the EIA tracking system and trained the TDA's Environment Department in its application. The team also conducted on-the-job training with the General Environment Department of the Red Sea Governorate.

The RSSTI team continued to "populate" the TDA's Environmental Monitoring Unit's GIS with the location of specific environmental features such as wells, desalination plants, wastewater treatment plants, and solid waste disposal sites. It also conducted training with the RSG in environmental monitoring using Global Positioning System (GPS) units and remote sensing.

The team developed Egypt's sustainable tourism portfolio in support of the country's application to the International Environmental Award of the American Society of Travel Agents (ASTA). The application highlighted the USAID/EEPP achievements in the field of tourism and environmental conservation along the Red Sea coast.

RSSTI organized and conducted a training workshop on integrating shoreline management and cumulative impact considerations into current Environmental Impact Assessment (EIA) and Coastal Zone Management procedures for tourism development along the Red Sea coast.

The team organized an observational study to Australia¹ that included a workshop on environmental monitoring tools and techniques, inspection methods and tools, and use of management systems for tourism planning and environmental management; field visits to tourism resorts to experience the systems that have been developed for the purpose of environmental self monitoring procedures and legal requirements; and a visit to a world leading environmental monitoring firm specializing in marine life (particularly the Great Barrier Reef) to experience their monitoring approach, particularly for natural resources and tourism facilities in desert and arid areas. Representatives from TDA, EEAA and RSG participated.

TDA, EEAA and RSG are now beginning to conduct joint environmental monitoring activities whereby TDA and RSG report violations to EEAA for enforcement purposes.

¹ This activity was funded through Development Training 2 (DT2).

2.5.2 Lessons Learned

Information sharing represents a major obstacle for cooperation in environmental planning and monitoring. Each of the counterparts (TDA, EEAA and RSG) has their own GIS and only through the efforts of the technical assistance contractors, was sharing of baseline data made possible. However, by the end of the project, TDA had transferred its data to the RSG and EEAA for incorporation in their respective GIS.

2.6 Objective 9 Policy Measure: Best Practices

2.6.1 Major Accomplishments of Policy Objective 9 Sub-Tasks

The RSSTI team prepared a report: *Best Practices in Coastal Tourism Development Red Sea, Egypt*, summarizing the Best Practice reports for solid waste management, water and sanitation, energy management, landscape architecture, and planting. Copies of the original Best Practices reports, as well as the summary report, were translated into Arabic. Printed copies and a CD-ROM containing all of the reports were distributed through TDA, RSG, the Egyptian Federation of Tourism Chambers, and HEPCA. Copies of the reports are also available on the RSSTI website (www.rssti.org).

The team also translated the Best Practices Implementation Tracking Tool (BPITT) into Arabic and transferred this to TDA and RSG for use in continuing to monitor best practices at hotels and tourism centers on the Red Sea coast. In addition, a complete survey of all TDA tourism centers and resorts was completed and incorporated into the database.

RSSTI continued to provide support to Red Sea hotels and resorts in the adoption of best practices and implementation of environmental management systems (EMS). The team prepared a solid waste management strategy for the Red Sea Region and an integrated solid waste management plan for the Shagara Tourism Center based on the successful Nuweiba model. The strategy specifically addresses TDA's role in solid waste management. The plan includes source



Shams Alam resort near WGNP © Mindy Baha El Din

separation, collection, transfer, materials recovery (recycling), and disposal (land filling). The plan was designed to provide opportunities for the Ababda Bedouin living in the area to benefit from the availability of organic wastes for animal feed. Several options for financing, development and operation were explored, and a 10-year return on investment was calculated based on serviced fees and sale of recycled materials. *Best Practices in Coastal Tourism Development, Red Sea Egypt* and

the *Integrated Solid Waste Management Plan for Shagara Tourism Center* were both approved by TDA. The owner of Shagara Eco-Village (Hosam Helmy) and the HEPCA have expressed interest in pursuing the Integrated Solid Waste Management Plan for Shagara Tourism Center.

2.6.2 Lessons Learned

The tourism industry and environmental NGOs (e.g., HEPCA) can be powerful advocates for best practices once the benefits have been demonstrated successfully. RSSTI was able to get hotels that had adopted best practices to become champions by sharing their experience with others.

Proper solid waste management represents an on-going challenge, not due to technical reasons, but rather political and institutional. Interest in the Integrated Solid Waste Management Plan for Shagara Tourism Center gained support when it became clear that the entire project could be implemented and operated by private businesses and NGOs.

2.7 Non-Policy Activities Related to Objective 2

2.7.1 Operational Support to NCS/Red Sea Rangers

During the reporting period there was a substantial allocation of resources to meet the management needs for the southern zone of the Red Sea, particularly the newly established WGNP. The targeted re-allocation of 80% of operational resources to the southern zone during the final year of the project was not fully realized, primarily because of the limited time frame for the establishment of the necessary infrastructure to accommodate the shift of sufficient human resources to the south (see 2.7.2 below).

However much of the equipment purchased through the final procurement cycle has been directed to WGNP. This has involved the supply of additional office, scientific and monitoring equipment as well as providing logistical support in the form of two boats and a multipurpose front-loader tractor. The cumulative effect has been a significant improvement in the capacity of the present protected area management unit (PAMU) to undertake management activities within the WGNP, and there are now sufficient resources to equip and operationalise the new PAMU administrative facility at Hemata (see below). The commissioning of the Hemata base will extend consistent management effectiveness to the southern sector of the Park and the outlying islands.

Currently the WGNP PAMU has limited administrative and managerial capacity as at the time of reporting it consists of only eight staff, to manage an area of over 6,700 km². This present staffing level represent a staffing ratio of 0.83 staff/1,000 km², while the global mean for protected areas is around 27 staff/1,000 km² and the average for Africa is 70 staff/1000km² (Parks, June 1999). The Hemata facility when operational will accommodate an additional 8 to 10 staff and this will significantly strengthen the PAMU as an operational unit. The staffing plan for the WGNP management plan gives an initial target of 10 staff/1000km² of terrestrial habitats and 5 staff/1000km² of marine habitats. This plan would involve the deployment of 50 staff members for WGNP within the next 5 years. Brief job descriptions have been provided for the various staff positions but these need to be elaborated.

It should be noted, when comparing WGNP staffing to Africa and the rest of the world that a) the park is very new, b) the number of visitors is still quite small, and c) that WGNP is a remote desert environment, which would be challenging to try to staff up to high levels even without the institutional constraints facing EEAA.

Management effectiveness has been further compromised by the shortage of transportation as frequently only a single vehicle is available for operations. The new Dodge Ram vehicles purchased in April 2003 and scheduled for deployment in the Park were still not available at the time of reporting, due to GoE administrative procedures.

Lessons Learned. The proposal to increase southern zone operational support by re-allocating 80% of resources and thereby substantially reduce ranger operational support in the northern sector was not realistic in the timeframe; especially as the southern zone administrative unit was not sufficiently developed to absorb the additional resources. Furthermore, the proposal did not sufficiently acknowledge the management interdependency of the two zones, especially with regard to the common service units such as GIS, mooring and marine monitoring, which is hosted by the northern sector.

Summary information for 2.7.1

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
2.7.1.1 Transition to Southern Zone	Recruitment and training of staff Procurement of equipment Design specifications for PAMU infrastructure Support protocol for Ranger cooperation with RBO	Management capacity enhanced with trained staff on station and equipment deployed , PAMU administrative facilities installed	Additional staff recruited Detailed job descriptions Ranger cooperation with RBO
2.7.1.2 Graduation of Northern Zone	Assist EEAA to relocate rangers to Hawaii Hotel HQ	Plan & implement structural modifications of several floors to make them suitable for offices Arranged for phone lines Purchased office equipment for use in the new HQ	EEAA will need to complete refurbishment of the building, including outdoor spaces EEAA to find a home for the marine fleet in the RSG marina now under construction
2.7.1.3 Output from N. Vision Statement Report	Assist EEAA to prepare a declaration document for proposed N. Islands PA Conduct a rapid reconnaissance (terrestrial and marine) of N. islands and summarized resource information	Draft document prepared Terrestrial and marine surveys made in September '04.	During last quarter of 2004, finalize declaration document w/maps and photos
2.7.1.4 Increase in SZ Operational Support	Clarify types and amount of operational support required in the S. with particular emphasis on WG	Internal reviews made for needs assessment of personnel, supplies & equipment for Hemata office, boat sheds, and outposts;	Training of staff Prepare RSMP Business Plan Provision of vehicles is a priority need

		Assessment of existing & future mooring buoys needed in the marine environment of WG	
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Shams Alam Ranger Station © Mindy Baha El-Din

2.7.2 Infrastructure Development for Wadi El-Gemal National Park (WGPNP)

WGPNP primary infrastructure needs have been identified in the Management Plan and include both administrative and visitor facilities. In response to this Plan, a program of work was initiated and during the reporting period, considerable progress was made with addressing the infrastructure needs of the Park. It is anticipated that the infrastructure requirements will be completed under the upcoming LIFE – Red Sea project.

PAMU administrative facilities. The initial emphasis was on providing adequate office and accommodation facilities for the PAMU staff and by the time of reporting two prefabricated office and accommodation facilities have now been installed, at Shams Alam (2003) on the northern sector and Hemata (2004) in the southern sector (see Map). The Shams Alam facility has benefited from an upgrading with the installation of a porch (sunshade) around the building, repainting the exterior walls in a neutral tone and the erection of a boat maintenance shed and shaded car port.

Three Ranger Outposts (RO) also have been installed in Abu Ghousoon, Hafafeit and Sikeit (see Map) to provide bases for an efficient patrolling and monitoring system in the Park as well as providing visitor support services. The ROs have been built in a traditional style using a dry-stack stone construction technique and should serve as design models for camps and ecolodges.

Visitor Services An overlook and a Park interpretation point have been installed at the northern Shams Alam entrance to the Park. The design and dry stack stone construction of the facility reflects that of the Roman ruins found inside the Park. Entrance signs have been erected at the main entry points to the park.

Lessons Learned. The prefabricated administrative and accommodation units, though perfectly serviceable, only have a limited life span and will become increasingly difficult and expensive to maintain. The construction of a purpose-built HQ in the Park will be essential to provide permanent administrative and accommodation facilities.

The adaptation of the design and construction techniques used in the historical sites has proved very successful. Both the overlook structure and Ranger Outposts attract considerable interest and serve as architectural models for future camp and ecolodge type development within the park and the surrounding ecotourism development area.

Summary information for 2.7.2

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
Plan and construct new ranger facilities at Hemata.	Designed facility layout with PAMU staff. Contracted Nile Match Company to fabricate and install unit	Facility installed	Establishment of permanent HQ for WGNP at Abu Ghousoon
Upgrade Shams Alam facility	Plan upgrade program including porch, boat shed and carports. Commissioned installation.	Upgrading complete	
Design and construct network of Ranger Outposts	Developed design specifications for ROs Awarded design and installation contract to Gabi Mikhail for 3 ROs	3 ROs completed by time of reporting	Mark official Park boundaries, erect barriers, complete directional signage and erect monitoring enclosures
Plan and construct minor visitor facilities including entrance gates.	Develop design specifications for visitor overlook and entrance signs Awarded design and installation contract to Gabi Mikhail	Visitor entrance facility installed on overlook site at Shams Alam entrance	Interpretative trails (including signage and mangrove boardwalk), visitor campsites, toilets, and car parking



Construction of Hafafeit Ranger Outpost, WGNP, July 2004

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2.7.3 Managing Wadi El-Gemal National Park

Management Plan Significant progress has been made with the establishment of the Wadi El Gemal NP (WGNP) since its declaration in 2003. Initial efforts were concentrated on the deployment and training of staff, provision of equipment and logistical support, provision of office and accommodation facilities. Lately the major activity has been the development of an integrated management plan for the Park. The plan provides clear guidelines for protectorate staff to enable them to address conservation issues and institute interventions within the context of set management objectives and strategies.

Annual Operational Plan A general annual operational plan for the period November 2003 to November 2004 based on the General Management and Development Plan for WGNP was drafted in October 2003. This plan identified priority Park wide management issues and actions to be addressed, within the context of available resources.

Site Plans. In addition, initial site plans were developed for four areas of significant biological value or sensitivity, which also are, or will be, subject to heavy human visitation. The site plans are designed as practical and dynamic working documents to be used on a daily basis by Wadi El Gemal NP staff but they will be periodically reviewed and updated.



Discussing Wadi El-Gemal Island site management plan with local fishermen interpretative signage.

Visitor Management At present, few visitors come to WGNP but it is anticipated that this will grow as development proceeds and the Park's reputation grows as a wilderness destination. Initial planning for visitor use has been incorporated into the Site Plans, which provide clear guidance for visitor use in the particular area and provide guidelines for ecotourism development planning within the Park. The initial implementation of these plans has involved development of access restrictions and route planning to mitigate impacts and the installation of directional and

Visitor Management At present there is very limited use of the WGNP by visitors but it is anticipated that this will grow as development proceeds and the Park's reputation grows as a wilderness destination. Initial planning for visitor use has been incorporated into the Site Plans, which provide clear guidance for visitor use in the particular area and provide the basis for ecotourism development planning within the Wadi El Gemal National Park. The initial

implementation of these plans has involved development of access restrictions and route planning to mitigate impacts and the installation

Lessons Learned. Management planning for protected areas in Egypt is still in its infancy. The systematic implementation of such an integrated plan is not a straightforward process, especially with inexperienced PAMU staff that require sustained support and advice. One useful mechanism has been the development of practical and simple Site Plans for particular areas; the implementation of these plans should demonstrate to the PAMU staff the practical value and utility of management planning at different geographical scales, and should facilitate the implementation review and revision of the generic WGNP plan.

Summary information for 2.7.3

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
Consolidate and operationalize the WGNP management plan	Operational plan for WGNP prepared by PAMU staff and TA	Zoning plan refined Regular patrols scheduled Law enforcement initiated	Additional staff and vehicles deployed. Waste management strategy to be implemented. Expanding and establishing new partnerships and institutional arrangements with other Government and non-government agencies i.e. Governorate departments such as health and veterinarian services, quarry department etc.
Plan and manage the natural resource base	Develop site management plans. Survey and monitor critical habitats: turtle nesting beaches & seabird nesting islands	4 site plans drafted. Periodic surveys institutionalized. Developed and implement a quarry management scheme.	Implementation of plans with resources from LIFE project.
Train WGNP staff on monitoring and data analysis techniques	Training in camera trap techniques. Surveys of gazelles, turtles and seabird nesting. Coral reef monitoring.	Systematic monitoring programs undertaken. Established methodologies for data collection, storage and analysis with regular reporting to monitoring units in Hurghada	Further practical application is required. Clear job assignment is essential (but impossible in light of current limited manpower).
Plan and assist in visitor management	Visitor management prescriptions devised for specific sites Directional signage system and routing through sensitive areas planned Interpretative signage designed		Review of TDA land allocations and development plans Full imposition of ecotourism standards for all developments within the ecotourism development area and particularly WGNP.

2.7.4 Boat Management & Marine Patrols

Background Historically, EEAA has been unable to patrol systematically the vast reaches of the marine environment falling within their conservation purview. Instead, local patrols were concentrated in the Hurghada area, especially the Giftun Islands where ticket collecting has remained the focus. Since September 2003, EEAA's stock of boats has expanded with the addition of 2 EEAA sport boats,



Red Sea Ranger monitoring coral reef health

2 Zodiac SRMNs and the return to service of the "mollies" by replacing the original outdrive units with MerCruiser drives. Current EEAA stock consists of:

Offshore use (60km+ offshore, medium-to-heavy seas)

Two "Mollies" or Willard Marine RIBs (7m w/Cummins 210hp diesel inboard mdl. 6BT 5.9M

& MerCruiser Diesel Bravo IIX drives.

Coastal (up to 30km offshore, light-to-medium seas)

1 Zodiac 550 SRMN RIB w/single 90hp Yamaha outboard & 55hp Yamaha backup motor

1 Zodiac 600 SRMN RIB w/twin 70hp Yamaha outboards

Near shore (up to 15km offshore, light seas)

2 Egyptian-made fiberglass sport boats w/twin Honda 90hp outboards (El Gohar and El Kassas)

Protected waters and along fringing reefs (up to 15 km offshore, calm-to-light seas)

1 5m "Red" RIB w/85hp Yamaha

1 Zodiac Grand Raid III w/40hp Yamaha (portable)

Lessons Learned

First, the additional boat capacity has allowed EEAA rangers to patrol outside the Hurghada area for marine conservation purposes. Specifically, an EEAA patrol boat is now based in the S. Red Sea at Marsa Tundaba, and another at Wadi El-Gemal. Another boat-- Zodiac 600 SRMN RIB--will be assigned to Hemata within the month. For the first time, EEAA will operate in the S. marine waters where stakeholder infractions occur, such as illegal fishing, garbage disposal from safari boats, harassing marine



Dive boats anchored to a topside reef pin at Gamul Soraya (Safaga)

mammals, anchoring on reefs without moorings, and picnicking on islands closed for turtle nesting.

Second, in future, boats designed and built in Egypt should be evaluated for their suitability to the Rangers’ tasks and the structural integrity of the craft. In addition, any manufactured vessels should conform to international construction standards. Unfortunately, the two new sport boats (Gohar & Kassas) acquired by EEAA were delivered in an unsafe operating condition due to design and fabrication shortcomings. The hull is made of thin fiberglass—non-commercial grade—and the electrical and fuel systems had to be entirely replaced with upgraded components for safety reasons. Total cost for upgrading the two vessels totaled LE 50,000.

Third, EEAA must continue development of a separate boat unit to log equipment use, oversee boat and engine maintenance, ensure safety of crew and passengers, and train the operators and crew.

Fourth, more captains are needed and Rangers should be considered for these positions. Given the shortage of labor, Rangers can do double duty in operating the boat while fulfilling conservation activities. This is the approach adopted by marine park officials in Florida and the US Virgin Islands.

Summary information for 2.7.4

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
2.7.4.1 Boat procurement & repairs	(1) To procure a lightweight coastal patrol boat for SZ. WGNP, Qulaan Islands & Fury Shoals. (2) To return the two mollies to service by replacing broken out-drives with MerCruisers Bravo 3s. Serviced Cummins Marine Diesels. (3) Effected repairs on the EEAA vessels “Gohar” and “Kassas” and upgraded the EEAA Red RIB inflatable.	(1) Purchased, shipped and delivered a Zodiac 600SRMN w/twin 70hp OBMs. (2) Purchased MerCruiser Bravo 3s from US & made local installations on the mollies. (3) Repairs accomplished.	Contract with EIM Hurghada to provide periodic maintenance for the OBMs; & Eng. Sameh for MerCruisers and Cummins Diesels.
2.7.4.2 Boat sheds	To build support for southern marine operations: conservation surveys, monitoring coral reefs, stopping illegal fishing and evaluating the mooring system	Boat sheds constructed at Shams Alam-WGNP and Hemata Ranger station.	To outfit the interior of the sheds with tools; and train operators in routine boat maintenance
2.7.4.3 Boat management			(1) Provision of trained and licensed boat captains; (2) train boat captains/crew in routine boat & OMB maintenance

2.7.5 Mooring Buoy System

Background The Red Sea Mooring Buoy System comprises more than 825 environmental moorings and is now the largest publicly owned system in the world. This year was a busy one for the further development and deployment of the mooring buoy system including activities facilitated by this contract, in conjunction with EEAA and HEPCA. These activities are summarized in Table 2.7.5 below.

Lessons Learned. As discussed in the section above on MoV 2.3.2, the mooring buoy program, though impressive, is not currently sustainable. Dependent upon the goodwill of the Governor of the Red Sea and the efforts of HEPCA and the now-ending EEPP, the system requires a more robust stakeholder-managed program that would be a true private-public venture and include not only installation and maintenance but also public awareness, education, penalties against deliberate damage to the system and clear lines of financing for the system into the future.



HEPCA & EEAA divers installing manta rays at Samadai Reef

Summary information for 2.7.5

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
Planning activities (2.7.5.1)	A priority deliverable: to prepare a report on <i>Red Sea Mooring Buoy Implementation Plan – 2004</i> , a supplement to the <i>Mooring Buoy Strategy – 2003</i> (J. McEachern)	Report completed. The plan identified the reefs in the deep S. and far N. that required moorings	Annual field report on state of the mooring system
Assist EEAA to procure specialized mooring equipment (2.7.5.2)	To procure US-made mooring equipment unavailable in Egypt. A priority focus being hydraulic power tools for UW mooring installations with accessories (hoses, seal kits, hydraulic couplers, breakers), mooring anchors, mooring buoys, shackles, and high strength UV-resistant rope. Some Egyptian products were fabricated (stainless steel mooring pins, and heavy duty chain)	Delivered: 2 Stanley HP1 power units; 5,500m of 2” polypropylene mooring rope; 1000 7/8” shackles; 8 stinger drive gad sets; 4 radiused drive tip; 100 Manta Ray mooring anchors (40 MR-SRM & 60 MR-1M); 140 18” mooring buoys.	Maintain a running inventory of all unused EEAA mooring equipment in the Red Sea; log rates of consumption & reorder 6-12 months ahead
Stakeholder consultation & collaboration with HEPCA (2.7.5.3)	(1) To consult with dive operators about reefs requiring moorings, and where they should be emplaced. (2) HEPCA collaboration: in May 2004, HEPCA’s long-serving commercial mooring team resigned. A new team was hired. EEAA’s senior mooring diver provided on-the-job training to the new team over a 4-month period. (3) To assist HEPCA	(1) Sites for proposed moorings discussed with dive industry at Safaga, El Gouna, Hurghada, Marsa Alam, WG, Hemata and Wadi Lahmi. (2) New HEPCA dive team trained by EEAA senior commercial diver. (3) PSU purchased and	Design an on-going consultation program in the S. coordinated through the 3 Ranger offices at Marsa Alam, Shams Alam, and Hemata.

	to import a HP1 Stanley Hydraulic Power Unit. (4) To collaborate with HEPCA for mooring maintenance & installations.	shipped an HP1 for HEPCA. (4) EEAA hired safari boats and furnished 90% of the mooring equipment.	
N. Red Sea, maintenance & new installations (2.7.5.4)	To maintain moorings in Hurghada and expand the offshore mooring system NE of Gouna (Shaab El Erg, Shaab Abu Shibana, Tawila, Small Siyul, Siyul Kebir, Abu Nuhas, Shaab Umm-Usk	HEPCA replaced 35 lines and installed 13 new mooring in Hurghada; 42 installations were made NE of Gouna. EEAA provided all equipment, boat rental & lead diver.	(1) Initiate monitoring of moorings with local dive operators; (2) Train selected N. dive centers on periodic maintenance
S. Red Sea, maintenance & new installations (2.7.5.5)	To maintain & expand moorings in (1) Wadi Gemal, offshore Wadi Lahmi, S. Far Islands (Abu El Kizan Islands, Zabargad & Rocky) and (2) expand the offshore mooring system S. of Ras Benas at St. John's Reef.	(1) HEPCA replaced/installed 32 mooring lines in S. Far Islands and (2) 45 installations were made at St John's. EEAA provided all equipment, boat rental & lead diver.	
In WGNP build local capacity to monitor & do light maintenance (2.7.5.6)	To take preliminary steps to stockpile mooring equipment in the S, and build up a cadre of marine rangers with access to a boat. To plan for a S. office of HEPCA at Marsa Alam.	EEAA establishes a cache of mooring equipment at Marsa Alam; 2 new EEAA boat sheds constructed at Shams Alam and Hemata. HEPCA receives permission from RSG to establish a Marsa Alam office	(1) Initiate monitoring of moorings with local dive operators; (2) Train selected S. dive centers on periodic maintenance

2.7.6 Environmental Monitoring & Management

2.7.6.1 Background

The EEPP project took the important step of initiating a monitoring process of sensitive marine habitats and threatened/endangered marine species. Different monitoring programs for coral reefs, mangroves, water quality and fisheries status as well as locating and monitoring the nesting beaches of marine turtles, dugongs and the dolphin population at Samadai Reef were established and implemented, starting from the Year 2000 (see the report on the Initiation of Activities under the Red Sea Conservation Management Plan with Special Reference to the Mooring Buoy Pilot Program, 2.3.3, submitted 31 March, 2004) . This monitoring effort has been accompanied by establishing and training a group of rangers to function as a monitoring team.



Red Sea Rangers Monitoring in WGNP

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2.7.6.2 Lessons learned

1. For the purposes of sustainability, the monitoring programs at the end of the project should be totally implemented by RSR. To achieve this target, all programs established and implemented during 2001-2003 began as pilot projects aimed to selected accurate and relevant techniques, and more importantly, to train the Red Sea Rangers to extend the geographical range and improve the level of monitoring based on their capabilities and available tools. During 2004, the plan was to implement different monitoring programs by the Red Sea Rangers monitoring team and to increase the geographical range of monitoring as in the case of coral reefs, mangroves and marine turtles. The Red Sea Rangers carried out all implemented monitoring programs during 2004 completely.

In addition to maintaining sustainability by having the Rangers learn-by-doing, a related lesson learned was the importance of devoting a specialized team of rangers to becoming the monitoring unit rather than assigning this function as one amongst others for all Rangers. Nevertheless, it will be important to ensure that all Rangers, especially those in the protected areas management units (PAMUs) participate in monitoring activities periodically; acting as additional eyes and ears for the monitoring team.

Participation of the private sector in the monitoring process is very important to leveraging the limited resources of the monitoring team. Boat and tour operators can be effective adjuncts to monitoring efforts for dolphin and dugong populations, for example, becoming new sources of information, education and awareness and adding more attraction to tourists by their being involved in the monitoring. Samadai site (Dolphin House) was a successful step this year towards participation of the private sector in the conservation process.

Summary information for 2.7.6

<i>Subtask</i>	<i>Key Activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
Mangrove monitoring (2.7.6.2)	<p>Extend monitoring program in the south</p> <p>Re-survey the selected monitoring stands</p>	<p>Thirteen mangrove stands were selected and surveyed in 2003. Seven of them are located in the northern zone (Hurghada-Quseir) and six in the southern zone (Abu Ghussoon-Hemata, WGNP)</p> <p>In 2004, all selected sites in addition to the mangrove stand of Abu Manqar Island were resurveyed.</p> <p>Data gathered on permanent transects which plots trees, seedlings and saplings, phenotypic sequences (vegetative activity, flower budding, flowering, fruiting, maturation of propagules and germination) and deterioration if any. Data analysis is in progress</p>	<p>Add more parameters to the process to monitor the whole ecosystem rather than just monitoring mangrove trees e.g. soil and water characteristics, selected bio-indicators, diseases and watershed system.</p> <p>Improve the application process of GIS capabilities in the mangrove monitoring</p> <p>Train more RS rangers on data processing and reporting</p>
Monitoring threatened and endangered species (2.7.6.3)	<p>Marine turtles: Re-survey valuable turtle nesting beaches</p> <p>Data gathering on nesting activities, processing and reporting.</p> <p>Dolphins: Set-up and implement a monitoring program for dolphin populations at Samadai reef. Engage visitors in the monitoring process.</p> <p>Dugong:</p>	<p>Following the general survey of all beaches during 2001 and 2002, the highly valuable nesting beaches (inshore and offshore) were re-surveyed in 2003 and 2004.</p> <p>Data on nesting activities of marine turtles were collected including: species, number of nests/area, number of true and false nests, track length, track width, pit diameter, etc.</p> <p>Gathered data were processed and a national report on Marine Turtles In The Egyptian Coasts Of The Red Sea, A Preliminary Survey On Nesting Activities” was submitted to PERSGA.</p> <p>Implemented a monitoring program for the dolphin population in Samadai reef including: population size, population structure, pattern of movement in and out of the sheltered area and between different zones (A, B & C), number of visitors, number of boats, sea and wind conditions.</p> <p>Specific formatted sheets are provided to the visitors to collect some information on population size and dolphin behavior.</p> <p>After the general survey of the dugong</p>	<p>Establish and implement site management plan for turtle nesting beaches.</p> <p>Implement turtle tagging program within the regional framework in cooperation with PERSGA and ROMPE</p> <p>Expand the program to monitor dolphin populations outside Samadai area, to include Wadi El-Gemal and Sataiah areas. Process the gathered data to evaluate the effectiveness of the current implemented site management plan for Samadai area.</p> <p>Establish and implement a long-term research project on dolphin populations especially in the area of Samadai reef.</p>

	<p>Continue sighting of marine dugong. Encourage more divers and snorkeler to participate in the sighting program. Increase the sighting geographical range to include far south areas</p>	<p>distribution during 2001 and 2002, sighting based on diving community was continued during 2004 and 2004. Obtained data were represented on satellite images.</p>	<p>Provide more training on long term monitoring to the RS rangers including methodology, data gathering, and data processing and reporting. Expand the participation of the visitors to Samadai in the monitoring process.</p> <p>Gather data to evaluate and prepare site management plans for some valuable sites like Marsa Abu Dabab Encourage fishermen to take part in the sighting program. Extend the sighting program to the far south (south of Ras Benas).</p>
<p>Fisheries in WGNP (2.7.6.4)</p>	<p>Study the status of fisheries along the coast of the Red Sea with emphasis to WGNP.</p>	<p>During 2003, a general survey for the current status of fisheries was conducted with special reference to WGNP. Data on fisheries statistics, landing sites, fishing fleet and fishing gears, catch and target species, nursery grounds, fishermen communities, WGNP fisheries status and fish handling and marking were collected as base line data.</p>	<p>Detailed management action plan for fisheries activities in WGNP including zoning plan, licensing mechanism, fishing techniques, ways to strength law enforcement, public awareness and outreach, etc.</p>
<p>Water Quality (2.7.6.5)</p>	<p>Initiate water quality monitoring program at selected hot spots. On-the-job training for the RS Rangers</p>	<p>The coast is divided into six sectors. Each sector contained sufficient number of fixed stations to be comparable with reference stations (controls). In total, 28 stations were selected along the coast. Seawater sampling program was carried out during 2003 and 2004. All principal physicochemical parameters were measured, especially the eutrophication parameters. On job training for 4 rangers conducted.</p>	<p>Establish and implement more detailed long-term water quality monitoring program for the whole coast of the Red Sea in cooperation with the RBO (regional lab) to include hydrocarbons and heavy metals. Increase the geographical range to include more hot spots, especially in the areas of petroleum exploitation and discharge of brine water from the desalination planets along the coast. Establish a unified team for monitoring of water quality including RPO and RSP staff members</p>

2.7.7 Geographic Information System

2.7.7.1 Main Achievements

The main Objectives of the Hurghada GIS unit were to develop a system that would enhance the operational capabilities of coastal management and monitoring Red Sea protectorates using GIS,

remote sensing and cartographic facilities. The following are examples of the work that has been done:

Built readily accessible geographic database tailored to nature conservation and coastal zone management. The unit provided EEAA rangers with base maps, satellite images and data they required in their day-to-day work.

Trained EEAA rangers in GIS, GPS, remote sensing and related fields in order to strengthen their capability for field surveys.

2.7.7.2 Lessons Learned.

1. Because remote sensing and GIS techniques and technologies are rapidly evolving, staff working in the GIS unit must have frequent training courses so that they remain abreast of developments and aware of the state of art in GIS and remote sensing technologies. The number of GIS technicians should be increased from four to at least six to be able to handle day-to-day requests from EEAA field rangers and senior consultants.
2. High resolution satellite images have proven to be more suitable for mapping marine, coastal and terrestrial ecosystems and habitats (mangrove and coral reefs) than medium spatial resolution images. For this reason, extending coverage to the entire Red Sea coastal zone using high-resolution images is to be highly recommended.
3. Inter-agency cooperation on pooling GIS imagery was not very good in previous EPPP contracts. There is still a need for further cooperation and the sharing of resources data such as images and maps between different GIS units working under the umbrella of USAID. The advantages of doing so in terms of costs and efficiency will be significant especially in the LIFE – Red Sea project where field activities will be very prominent. Meeting frequently for sharing experiences, products and lessons will be mutually beneficial.

In relation to both the capacity of the equipment, the quality and number of the images and the training of the GIS staff – and this really should include TDA/RSSTI staff as well – the Hurghada PSU GIS unit has been relatively. The main work of the GIS unit was to develop and maintain a database of images primarily for illustration and spatial planning undertaken outside of a GIS context (i.e. manually). It has done this set of tasks well, though it took an unnecessarily long time to develop sharing protocols for images between the three main RSSD counterparts. One of the great values and indeed one of the main rationales for creation of GIS systems, i.e. the development of planning simulations based on the various information layers of the GIS in order to a) plan physical development (e.g. transportation and utility infrastructure location), b) support assessment of environmental impacts of planned developments, and c) measure long-term trend changes in ecological parameters from climate and/or development, and other tasks appear to have been at best minor functions of the various GIS units. The Hurghada GIS unit can be more easily justified in terms of continued investment in its maintenance and development if it has a much broader set of tasks, integrated into routine environmental management. For this to happen, decision makers need to be much more aware of the uses and potentials of the system than they now are.

Summary information for 2.7.7

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
Improve and expand development of GIS facilities and application	Expand and upgrade equipment at Hurghada	Hardware ordered & installed at the Hurghada GIS office: - 2 Dell Dimension XPS Pentium 4 desktop systems. - A3 scanner Power Look 2100XL with RGB. - HP design jet 10ps printer (C7790A)	Hardware and Software upgrading
	Acquire specific software	New software installed: Raster to Vector conversion (R2V); Photo Imaging Suite.	Order more add-on modules
	Acquire Satellite Images	1036 sq. km of QuickBird and 42 ASTER images ordered and added to GIS unit image library.	Order more satellite images
Expand technical expertise of existing ranger GIS technicians and field staff doing monitoring, and train new recruits to increase staff size of GIS unit.	Specify needs and content to assist DT2 in providing training for CZM and Advanced GIS	Remote Sensing for Coastal Zone Management Training Course (this 5-day training started at 28/1/2004)	Ranger training in use of Remote Sensing & GIS for managing & monitoring PAs & CZs
	Conduct in-service training on: Use of GPS for accurate field surveys; & how to work with GIS interfaces for image interpretation	- Advanced ArcGIS (this 4-day training started at 11/12/2003) - Image Processing and Interpretation (7 days) - Global Positioning System (4 days)	
Analyze remote sensed images and produce maps to support conservation management of marine, coastal and terrestrial ecosystems and habitats.	Satellite images processing, enhancement and Interpretation	- Mangrove stands demarcation between El-Gouna and Ras Benas. - Monitoring landfill & shoreline erosion at HRG. - Land use mapping of Wadi Qulaan Village and Mangrove Lagoon. - Mapping environmental areas, tourism resources, quarries, mines, & settlements within WGNP. - Developed a remote sensing and GIS model for selecting area suitable for landfill dumping site. - Preparing site plan maps: Ras Baghdadadi site plan El Gifon Island site plan Wadi El Gemal Site plan. - GIS provided EEAA rangers with base maps, satellite images and data required in their day-to-day work.	Analyze remote sensed images and produce maps to support conservation management of marine, coastal and terrestrial ecosystems and habitats.

<p>Extend capabilities of the GIS database and provide controlled access to Red Sea geographic information.</p>	<ul style="list-style-type: none"> - GIS Database upgrade - Website design - Upgrade the existing GIS applications - Develop new GIS based multimedia applications. 	<ul style="list-style-type: none"> - Design and deploy GIS based Website for WGNP. - Updating Mooring database and MoorPro Application. - Developed a Graphic User Interface (GUI) for all the layers and maps produced by the Hurghada GIS unite. EEAA rangers use the application to browse and print any maps they need for their day-to-day work. - Develop GUI for GEF Bio-diversity database and link it to our existing GIS database. - Design GIS based multimedia application for Samadai Area (Dolphin House). - Develop Multimedia CD for Red Sea Shipwrecks. 	<p>Develop an updatable GIS model for Red Sea coastale zone based on the existing GIS database, data interpreted from satellite images or collected during field survey</p>
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2.7.8 Management Capacity

One of the principal tasks of the RSSD component this past year has been to build management and administrative capacity within the Ranger ranks with an emphasis on the development of southern zone capabilities. This has entailed a broad range of activities including specialist and practical on-job training for staff (see 2.7.6 and 2.7.9), preparation of work plans (see 2.7.3), mentoring and empowering staff by advisors and provision of equipment and logistical support (see 2.7.1.1). Other capacity building initiatives are described briefly below.

2.7.8.1 Conservation Administration of the Red Sea

A major initiative to enhance conservation management capacity and effectiveness in the Red Sea was establishing a sensible NCS administrative arrangement for the Red Sea, which involved dividing the region into two management sectors, the Northern and Southern Red Sea Sectors. The NCS Director subsequently endorsed this decision.

Ras Toronbu is a convenient “half-way” point along the Red Sea coast, for dividing the Northern and Southern zones of the Red Sea. The Northern Red Sea Management Sector thus extends from Ras Toronbu north to Quseir, Hurghada and up through the northernmost tip of what may be included in the future Red Sea Protectorate, Ghubbet el Zeit. This Sector will be managed from the PAMU office in Hurghada, where most of the common service units such as mother GIS and mooring unit will be hosted. The Southern Red Sea Management Sector is defined as the area south of Ras Toronbu through Marsa Alam, Ras Benas and areas south. This sector will be managed from the PAMU office in Marsa Alam.



2.7.8.2 Individual staff guidance

The management capacity of PAMU staff at WGNP has been enhanced through guidance and individual mentoring by the long term Technical Advisors as well as through the provision of job descriptions for each staff member. The generic management plan and practical site plans also provide staff with clear guidelines to enable them to address existing or emerging conservation issues within the context of set management objectives and strategies.

2.7.8.3 Patrolling

Patrolling is an elementary but crucial component of the PAMU's tasks. Both marine and terrestrial patrolling schedules have been initiated within WGNP. Patrolling techniques in conjunction with monitoring

activities were a major theme in the hands-on management in the Park. Coverage of patrolling activities reached a significant level in summer 2004 despite chronic lack of vehicles and personnel. Patrolling efforts resulted in intercepting several violations, such as illegal sea cucumber collection and shark fishing, and in rapidly establishing the PAMU presence in the Park.

2.7.8.4 Monitoring inside the WGNP

Establishing meaningful monitoring schemes is a crucial tool to guide and assess management effectiveness. Monitoring efforts were initiated targeting critical natural resources, which are particularly vulnerable to anthropogenic activities in WGNP. PAMU staff, despite being limited in number, have actively participated in multiple and regular monitoring activities. Terrestrial monitoring activities have concentrated initially on species that are endangered, considered as flagship species for the Park or are readily observable species, and staff have been trained particularly in the use of camera traps, turtle and seabird nesting survey. The PAMU now has a credible capacity to carry out most of these activities independently; however, the small number of staff reduces the potential of regular monitoring programs in the light of the many other tasks the PAMU has to undertake.



The Red Sea Rangers' Molly Kux II on her sea trials

2.7.8.5 Data management

Data interpretation is crucial if monitoring is to be meaningful. WGNP staff have been introduced to basic data handling, analysis and interpretation techniques. Emphasis at this early stage was placed on data storage and management to facilitate easy access and to ensure coordination with the central GIS unit in Hurghada.

2.7.8.6 Reporting

Report writing skills are important to facilitate the transfer of information along the management chain of command. A monthly reporting format was developed with PAMU staff and reporting techniques discussed and evaluated. Monthly reporting was institutionalized; however, personnel changes have hampered the regular production of these reports.

2.7.8.9 Lessons learned.

Patrolling and monitoring are core activities for Park Rangers. These activities must be clearly defined and regimented to achieve their desired outcome. They also should be linked with regional and national level processes. In future, the links between monitoring and management will have to be emphasized and clarified.

Although the WGNP management plan provides outline job descriptions for the PAMU, the very limited number of staff has made it difficult to assign tasks to specific individuals; rather it has been a matter of necessity for staff to have responsibility for a broad spectrum of tasks. This “matrix management” approach requires that any staff that are recruited must have a flexible attitude towards their duties and be prepared to work on issues outside their recognized disciplines.

Even though Ranger staff have been carefully selected for their talent and training and represent a very signal achievement by EEAA, they are nevertheless limited in number and are likely to be so for the indefinite future. This reality means that the Rangers must adopt an outward-looking and partnership-oriented management of their many tasks. Over the years, the Rangers have developed good relationships with HEPCA and the Red Sea Association, the Coast Guard and others. This approach needs to be formalized and extended to the Red Sea Governorate and other GOE agencies. One technique would be to develop formal Ranger workplans with identified activities with outside parties and to share and discuss these workplans with these partners. This might help to clarify and educate other stakeholders as to the full range of Ranger

roles and responsibilities as well as provide a practical planning tool for pooling resources and effort.

Summary information for 2.7.8

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
2.7.8.1 General capacity building	Establishing NCS administrative arrangements for the Red Sea	Decision to divide Red Sea into 2 management sectors	Management structure for the Red sea to be fully institutionalized. Monitor management performance of staff
2.7.8.2 WGNP Monitoring	Preliminary monitoring programs initiated	First annual Park-wide sea bird and turtle nesting surveys completed Seminal sooty falcon survey completed	Extend monitoring to other species and habitats.

2.7.9 Training

Most of the training for the Red Sea Rangers had been undertaken in previous contracts of the EEPP. Hence, the training component of the Red Sea Natural Resource Conservation Team was relatively limited and focused on specific technical upgrading. Training was undertaken both through the DT2 mechanism and through training organized by the Contractor directly.

Summary information for 2.7.9

<i>Sub-tasks</i>	<i>Name of training course</i>	<i>No. of participants</i>
Environmental law and assessment	Egyptian Environment Law and PA regulations	12
	Environmental Impact Assessment	14
Geographical information systems & Global positioning	Advanced Arc GIS	8
	ARC GIS for CZM	9
	Image Processing and Interpretation	20
	Global Positioning System	24
Natural science	The Principal of Marine Biology (3 Modules)	14
	The Principles of Terrestrial Ecology and conservation	20
	Mangrove workshop in Kenya (Ranger Moh. Abass)	1
Practical field skills training	Steering Marine vessels	10
	4WD - Desert Driving and Preventive Maintenance	12
Public awareness	Techniques of public awareness	17
Office administration	Methods of business administration	14

2.7.10 Procurement of commodities

2.7.10.1 Overview

A major task of the RSC-W Contract, in general and for the RSSD component in particular over the past five years and including this final year of EEPP has been the procurement of commodities. Despite the term, what is meant by “commodities” is overwhelmingly equipment and support materials for the Red Sea Rangers development and operations. Commodities range from large items such as boats, four-wheel drive vehicles and mooring buoy materials to a range

of electronic, laboratory and other smaller items. Over the years, IRG's team has developed a relatively smooth relationship with EEAA and the Rangers on the identification of commodity needs, purchasing, import (where required) and transfer to the GOE (in this case EEAA).

Ranger activities grew substantially in keeping with their expanded role at Hurghada and particularly in the south at Marsa Shagra (Samadai), Marsa Alam, Wadi Gemal and the soon-to-be opened Hemata office. Three additional outposts have been constructed within WGNP and these are being furnished. By dollar value, about half the procurement has been in the marine sector for mooring equipment, outboard motors, a marine drive, a boat and diving equipment this past year. For terrestrial operations, the largest value items were for pickup trucks, computer equipment, GIS imagery, and office furniture.

2.7.10.2 Lessons

Large containerized sea freight shipments can be held up if one or more suppliers fail to deliver their goods in a timely fashion. Although more expensive, air freight shipments proved to be far more flexible as priority items were then delivered to the Rangers and put into service.

In April 2003, two Dodge Ram 1500 pickup trucks were purchased duty-free from the national distributor for DaimlerChrysler, Ezz El Arab. At the time of purchase, Ezz El Arab had already ordered these trucks. Due to bureaucratic delays, the trucks were cleared less than a week before the end of the contract and this situation has left the Rangers in the south without adequate transport for the past 20 months. Though no commodity procurement of U.S. vehicles is currently planned for LIFE-Red Sea, in future, duty free vehicles should be ordered by the project in the first month of operations directly from the US—as was the practice in earlier procurements—and *retained by the project team* until the end of the project when they would revert to the EEAA. A best solution would be to buy vehicles off the dealer lot, and arrange for first-available shipping. This would ensure that transport is available in Egypt within 3 months of start-up.

Summary information for 2.7.11

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
2.7.11.1 General equipment	Needs assessment; research product items; make specifications; fill-out requisition request forms; obtain 3 price quotations; issue purchase order; make payment; arrange delivery; track delivery; prepare GOE documentation; clear customs; deliver to destination; turn-over to EEAA.	Various office furnishings & equipment (computers, copiers, fax, printers, phones); 2 Dodge Ram 1500 pickups; John Deere 5420 Tractor; 60 truck tires; medical backcountry first-aid; vehicle spare parts; portable generator sets; solar power generator systems.	Priority need for transport in the S. at least 3 small 4WD SUVs and 2 crew cab intermediate pickups.
2.7.11.2 Marine vessels & diving	Needs assessment; research product items; make specifications; fill-out requisition request forms; obtain 3 price quotations; issue purchase order; make payment; arrange delivery;	MerCruiser Bravo III X 1.65 Diesel w/accessories; anode kits & marine spare parts; Zodiac 600SRMN w/anchor, Yamaha 70TLR w/spares; trailer; Yamaha service & owner manuals; Powerboat flotation	Marine radios. Various marine spare parts needed. One dedicated

	track delivery; prepare GOE documentation; clear customs; deliver to destination; turn-over to EEAA.	jackets; complete SCUBA systems w/suits	workboat needed for mooring buoy installations.
2.7.11.3 Marine mooring buoy system	Needs assessment; research product items; make specifications; fill-out requisition request forms; obtain 3 price quotations; issue purchase order; make payment; arrange delivery; track delivery; prepare GOE documentation; clear customs; deliver to destination; turn-over to EEAA.	140 mooring buoys 18"; 2" polypropylene rope @ 5500m; 1000 shackles; IW-12 impact wrench; IW16-impact wrench; seal kits; BR-67 Stanley Breaker UW/320; hydraulic couplers; HP1 Stanley hydraulic power unit w/Honda engine; stinger drive gad set SGC 18; 40 MR-SRM Manta ray anchors; 60 MR-1M Manta ray anchors	Replacement parts for marine equipment 1000 additional 7/8" HD shackles
2.7.11.4 Scientific	Needs assessment; research product items; make specifications; fill-out requisition request forms; obtain 3 price quotations; issue purchase order; make payment; arrange delivery; track delivery; prepare GOE documentation; clear customs; deliver to destination; turn-over to EEAA.	TrailMaster camera traps; Capricorn 2000 weather stations; Canon S50 cameras; Nikon fieldscopes III; backpacks & Leatherman tool 200; REI half dome 4 & half dome plus 2 tents; sleeping bags; satellite phones; scientific references	TBD
2.7.11.5 Technical (GIS)	Needs assessment; research product items; make specifications; fill-out requisition request forms; obtain 3 price quotations; issue purchase order; make payment; arrange delivery; track delivery; prepare GOE documentation; clear customs; deliver to destination; turn-over to EEAA.	QuickBird and ASTER satellite imagery; HP Designjet 10ps printer; Dell Dimension XP5; Dell monitor P1130; Dell laptop D800; GIS software; GPS Garmin eTrex Vistas	Hardware upgrades as available. Additional QuickBird imagery of WGNP, S or Ras Benas & N. Islands.



2.7.11 Stakeholder consultation

Stakeholder consultation has been a critically important part of the EEPP field program activities, both in terms of the completion of the policy measures and in terms of the development of protected areas management capacity in the Red Sea.

Extensive stakeholder consultation and seeking of consensus was a major factor in the eventual success of the revenue generation and expenditure policy measure, since the proposal that was accepted requires the active participation of the RSG, EEAA and private sector and NGOs active in the dive industry. Similarly the development of all three conservation management policy measures: the WGNP conservation management plan, the mooring buoy strategy and implementation and the Southern Zone management plan and implementation critically depended upon the participation of all of the stakeholders in the Red Sea. The processes used have been described already above.

2.7.11.1 Local community consultation

Local community consultation was one of the primary drivers behind all of the NCT activities this past year. Extensive consultations took place primarily through direct contact with locals and organized community meetings such as with local Ababda fishermen to get input for specific site management plans. The excellent relations between WGNP staff and the local community, as well as the employment of local community guards, greatly facilitated these consultations and helped build trust with the Park management. This participatory process should be extended and deepened during the follow on LIFE project

2.7.11.2 Businesses

Local businesses are important stakeholders as they have the potential of driving the future growth of the local economy. The business community is involved at several levels: through attending official consultation sessions, through informal contact and consultation with PAMU and TA and through participation in regional initiatives sponsored by PAMU.

2.7.11.3 Governmental agencies

The RSG and TDA are the two main governmental partners with direct stakes in WGNP. Extensive and constant consultation and coordination with these two governmental bodies was essential to arrive at the consensus reached during the project period. During the following LIFE – Red Sea project, the number of GOE agencies will expand as field implementation activities commence making it essential that a project coordinating mechanism be established.

2.7.11.4 Lessons learned

Community guards have repeatedly proven to be a successful conduit for communication with local communities, transmitting the wishes and concerns of the local community to PAMU and informing them of management regulations. It is important to employ individuals respected and accepted by the local inhabitants. Community guards are likely to be the most effective members of the PAMU, in essence empowering the local community of the Park to manage its resources in partnership with park staff and others.

Summary information for 2.7.11

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
Consult Red Sea stakeholders on technical and operational matters	Design and implement specific program for local Bedouin within WGNP and coastal areas further south.	Preliminary consultations with local Ababda fishermen and residents of Qulaan for site plans.	
	Monitor pilot implementation,		

Stakeholder consultation also was a feature of both the RSSTI and the RSGEM sub-components of RSSD. In the case of RSSTI, as noted above, RSSTI team members consulted frequently with hotels and resorts on implementation and follow-up monitoring of the EMS system. RSSTI team members also consulted with both EEAA and RSG on EIA guidelines and the implementation of EIAs. In the case of RSGEM, stakeholder consultation included the analysis of roles and responsibilities for environmental management in the Red Sea, an activity to provide clarification for the RSG's GDEA of the mandates and activities of EEAA, TDA and other agencies vis-à-vis those of the GDEA. Both RSSTI and RSGEM worked very closely and smoothly with their immediate agency counterparts: TDA and RSG in the course of their workplan implementation. This included regular consultation with several divisions and units within the respective counterpart organizations.

2.7.12 Public Awareness

For the RSSD component as a whole, public awareness activities took a variety of forms. Types of public awareness activities included workshops, conferences and public meetings; brochures, pamphlets and other awareness-cum-training materials; multimedia products such as videos and slide shows, and public events. The latter included extensive support to EEAA and the RSG for this year's National Environment Day in Hurghada, an event which included support for parades, floats, campaigns and other activities, not only by the RSC-W teams but also by the AED Communications Support sister project.

In the case of WGNP, the preliminary visitor interpretative program will be expanded at the sites where initial signage already has been installed and extended to all sites of visitor interest. It is recommended that future interpretation would emphasize particular biodiversity and conservation issues and involve establishing interpretative/educational trails on different themes e.g. fossil reefs and climate change at Qulaan, adaptation to desert climates at Ras Baghdadi/Wadi El Gemal; ancient trade routes at Sikeit, etc.

The program would not only emphasize Wadi El Gemal Park but the surrounding natural and cultural resources and the other parks in Egypt's system plan particularly those in the immediate area e.g. Elba, Hurghada Islands etc.

The RSSTI sub-component was active in a variety of ways with respect to public awareness. Most of their EMS and best practices were oriented towards communications with both resorts,

tour operators and others in the tourism related businesses but also materials that could be used to raise awareness in the public at large. In addition, RSSTI cooperated in the development of maps and guides for Wadi El-Gemal supplementing the work of the RSNRC Team and the AED Communications Support project.

Summary information for 2.7.13

<i>Sub-tasks</i>	<i>Key activities</i>	<i>Accomplishments</i>	<i>Future Needs</i>
Assist AED to design and implement a broadly scoped public awareness campaign to support the operational and conservation objectives of WGNP Protected Area.	Combine interpretation services and materials with approach for NCT activities in ecotourism context.	Preliminary signage scheme prepared in conjunction with site management plans. Directional signs for WGNP designed and being installed. Interpretive signs for some sites prepared and reviewed. Public awareness materials drafted.	A comprehensive public information and education plan specifically for WGNP, including signage, visitor interpretation, educational materials. This should be with marketing WGNP as an ecotourism destination.
	Identify opportunities to build in communities into park management	Community guards employed by PAMU act as an effective link with the local inhabitants. Clean up campaigns served to unite and inform locals of the importance of maintaining environmental quality	Wider involvement of community leaders. Employment of additional community guards

2.8 Non-Policy Activities Related to Objective 6

2.8.1 Technical Assistance Activities and Achievements

To clarify the legal foundations of roles and responsibilities, scope of authorities and relationships between the various agencies working in environmental management in the RSG, the IRG team developed a searchable database of related environmental legislation with a focus on four topics: solid waste management, environmental management of protected areas, environmental management outside protected areas, coastal planning and management, and fishing activities. The database enables Internet-like search by key words, and it is the first of its kind in Egypt with analytical contents contributed by leading legal experts. The database work occupied the third and fourth quarter of this contract. It was designed to run on an average PC to assist staff of GDEA, EMUs, RBOs, NCS, TDA and any other agency involved in environmental management in the RSG and beyond.

2.8.2 Training

The IRG team prepared and organized nine training courses to the RSG staff working on environmental management in both the GDEA and five EMUs. Three of these courses (strategic planning, environmental awareness and best practices, and environmental disasters management) were delivered during the fourth quarter of the contract. (See Annex__ for details of the courses.)

2.8.3 Commodities and Others

Through IRG, EEPP contributed LE130, 000 towards refurbishing the new premises of the GDEA. Due to the credibility of the program established by the IRG team, the RSG committed about LE1.2 million from its core budget towards covering various expenditures of the reform process. This level of commitment signifies the extent to which EEPP has been successful in mobilizing political support and leadership of the Governor.

2.9 Non-Policy Activities Related to Objectives 7, 8 and 9

The RSSTI team supported the TDA in a variety of non-policy support activities related to achievement of the TDA MoVs. These included:

- the South Africa Study Tour² (which also included representatives from EEAA and RSG) to see successful examples of ecotourism projects and ecolodge facilities
- preparation of posters and brochures for TDA and the Ministry of Tourism to use in promoting ecotourism on the Red Sea coast
- review and comment on the draft Wadi El-Gemal National Park Conservation Management Plan, and
- organization of a workshop on ecotourism guiding based on the South Africa experience.

RSSTI organized an observational study tour to Jamaica to understand better the Green Globe 21 certification and environmental management in nature sites and attractions.³ Two Red Sea hotels (LTI Paradisio and Coraya Beach) achieved Green Globe 21 benchmarking and certification during the Task Order period of performance. Five others were re-certified (Movenpick Quseir, Movenpick El Gouna, Sheraton Miramar, Steigenberger, Calimera, and Oberoi Sahl Hasheesh). The Sunrise Hotel in Hurgghada was undergoing its certification assessment at the close of the Task Order.

2.10 Nature and Culture-based Tourism Pilot Program

2.10.1. Objectives of the Pilot Program

The general goal of this component was to promote community-based small and medium enterprises (SME) in the southern Red Sea region (SRSR), in the area of nature and culture-based tourism (NCT), including the lodging service market and to develop a working financial system to support local business initiatives. Because the NCT pilot program was a new and untried initiative of USAID and because the tasks requested are very similar to a number of tasks of the upcoming LIFE – Red Sea project, this final report section will devote more space to describing the methodology, activities, achievements, socio-economic conditions and constraints than is the case for the previous sub-components of RSSD in order to provide USAID, the GOE partners and any future implementing contractor with a greater understanding of what has been done and what can be done in this subject area. Please note that case studies on several of the successful eco-loans and an assessment of the Shagara ecolodge can be found as Annexes to this report (nos. 6 and 7).

In order to achieve the general goal outlined above, the following objectives were established:

² This activity was funded through Development Training 2 (DT2).

³ This activity was funded through Development Training 2 (DT2).

- Mobilize local communities in the SRSR to partake actively in nature and culture based income-generating activities, thereby ensuring their integration in the ecotourism development movement currently underway.
- Promote community led and other investor ecolodge development.
- Provide means of access to ecoloans for local community entrepreneurs to be able to realize their ecobusiness ideas.
- Motivate and build capacity for suitable financial institutions to lend to local entrepreneurial residents of southern Red Sea communities, whose profile often deviates from that of classic micro loan recipients.
- Conduct a two-pronged public awareness campaign, targeting local communities as well as hotel owners/tour operators in the area. This was designed to stimulate the market for community led ecotourism products among hotel owners/tour operators by raising awareness about the marketability of ecotourism and the value of local culture within the ecotourism experience.

2.10.2 NCT Pilot Program Approach and Methodology:

This component consisted of three sub-components: small-scale ecotourism loans, support for ecolodge development, and an awareness raising campaign. Although the terms of reference for this activity were not set and the subsequent sub-contract not negotiated until well after the contract began, the NCT team managed to accomplish quite a bit in about nine months time. The tasks undertaken to implement these three components are described below.

Baseline data on the southern Red Sea Region (SRSR) and its people were gathered through the review of secondary sources as well as field surveys to identify existing nature and culture-based tourism (NCT) activities in the region and to determine the potential for small-scale ecotourism/ecolodge initiatives by local Bedouin communities and other investors. In order to assess the capacity of the existing financial infrastructure to deliver eco-loans to small NCT business entrepreneurs, local financial systems and institutions were evaluated to establish their suitability for this activity, taking into account the local conditions, and to establish their capacity building needs. A preliminary market assessment for community led eco-businesses was undertaken to identify possibilities of establishing business linkages between potential activities and the existing tourism market.

The TA team, working closely with local Ababdi and Bishari communities in the region then proceeded to identify and further develop a number of local NCT business initiatives. Project ideas for new or expanding businesses were discussed at length, evaluated and their financial and environmental feasibility assessed. For each project, legal, financial, and training requirements were reviewed and identified. Available, alternative financing mechanisms were thoroughly examined and evaluated. Several projects proposed by local entrepreneurs required only non-financial technical assistance, mostly in the form of business planning, marketing, and training for improving the quality of products and services. Others required either starting or expansion capital. For the latter projects, technical assistance was provided to identify and access available micro-lending services and ensure that these new or expanding businesses were viable.

The TA team utilized a participatory approach to eco-business concept development, engaging local communities in designing and developing community initiatives to high standards, necessarily incorporating elements of the local culture and heritage. Among these initiatives, community led ecolodges feature heavily in Shalatin, where the Bishari people envision an eco village that they aim to bring to fruition. The strategy and approach, as well as the layout for the implementation plan for this activity were developed with intensive input from local communities, bearing in mind that they are the primary beneficiaries in this activity.

Training and capacity building requirements were also determined, to facilitate implementation along realistic lines and to equip local communities adequately with the ability to convert into business the inherited traditional skills that they possess. Training and capacity building targets included both local communities and financial institutions identified as most suitable for eco-loan delivery.

An intensive public awareness campaign was then implemented to prepare individuals, communities, and the present tourism industry along the southern Red Sea coast to integrate new, small-scale community led initiatives. This campaign used a variety of activities such as community consultation meetings, workshops, fairs, and other public outreach methods. The awareness campaign also included a destination marketing activity (for Wadi El Gemal and its Bedouin-operated NCT projects), targeting tour operators and resort managers.

Through close collaboration with community members, a number of nature and culture based tourism activities have been established. These activities are managed and operated by the community members themselves, and are environmentally conscious – low capacity and low environmental impact. They aim to conserve rather than consume the resources on which these activities depend.

2.10.3 Baseline Assessments and Other Preparatory Work

Although the RSSTI and previous PSU teams had collected and analyzed a significant amount of information about the ecology, geology, archaeology and other historical aspects and general socio-economic development conditions in the SRSR and Wadi El-Gemal NP, in particular, little information about family enterprises, social structures and financial and business constraints of the local Ababda and Bishari people had been collected. In addition, any analysis of banking and other credit institutional mechanisms, including informal systems for this region and its peoples were lacking and so information needed to be collected and analyzed – in essence a market study had to be done.

Data gathering and database development A baseline study was undertaken to identify activities and types of nature and culture-based tourism business activities that were both economically feasible and environmentally sustainable in the SRSR, and to develop a number of pilot activities and loan facilities that might be expanded in the context of a future USAID follow on project. The TA team also assessed the degree of women's awareness on issues of health and hygiene, indoor and outdoor environment and on her views of her role in the community. These activities also were designed with the aim of sensitizing women and mobilizing them to become actively involved in a more comprehensive community upgrading initiative that included both indoor and outdoor environments.

Data were gathered on the Red Sea southern zone from Marsa Alam south to Shalatin, and its communities based on published information as well as field surveys. The data allowed the development of a socioeconomic profile of the sub-region and helped locate and identify marginalized Bedouin communities in the SRSR. The status of NCT in the region, in the areas of small-scale ecotourism activities such as community-based tourism, interpretation, guide services and marine recreation activities were reviewed and assessed. Data gathering and analysis also aimed to identify and assess potential, small-scale ecotourism business opportunities and to identify present and potential constraints for the development of small-scale eco-businesses in the area. The gathered data provided the basis for determining the feasibility of the development of an “eco-loans” program in this region and innovative approaches to ecotourism generally. It was also used to evaluate local people’s traditional skills, and assess their willingness to participate in the project.

Included in the scope of environmentally driven initiatives are ecolodges, the presence/absence of which was recorded and potential opportunities for further establishment of such facilities was evaluated. The TA team took an informal interview approach to establish what marginalized communities living along the coast foresaw as revenue generating opportunities for themselves within an NCT framework if a micro lending program were to be implemented.

In addition, the TA team also investigated the existing institutional infrastructure for the implementation of a small-scale ecotourism loans program and alternative approaches to ecolodge development. This included local NGOs that might qualify for participation in the project, their scope of work and geographic mandate area and assessment of their present capability. It also included extensive discussion with local banks the possibility of their participation in the loan program. The gathered information was used to identify training, institutional capacity building, and public awareness requirements for the successful implementation of the small-scale ecotourism development scheme.

The resulting profile of the study area provided a detailed description of geographic, demographic and ethnic aspects of the area and its people. Local communities in the area extending from Marsa Alam, southwards to Shalatin and including these two administrative centers were studied in more detail. These included Bernice, Awlad Baraka, Wadi El Gemal, Abu Ghousoon, Hemata, Ras Benas, Manazik, Sheikh Shazly, Sheikh Sidi Salem, and Hafafeit. Key findings of the study are summarized below.

Prevailing economic activities: Bedouin communities in the study area rely on herding and fishing as their main sources of livelihood. While most of the communities along the coast are engaged in fishing and to



“Sheep grazing” near WGNP © Mindy Baha El-Din

a lesser extent in herding, deep-range communities located further inland are exclusively herders. Fishing and herding are not restricted to men alone. Women engage in shoreline fishing and herding as well.

Most members of the local communities are **shepherds and goatherds**. Some of them also raise camels. Because of the drought over the past seven years, some families travel with their herds as far south as Shalatin and Gebel Elba in search of suitable grazing land. To make ends meet, families attempt to diversify their economic activities by engaging in charcoal production or trading as an alternative source of income-generation.



Fishing off WGNP

© Mindy Baha El-Din,

Fishing is one of the main activities of the local communities that reside along the coast between Marsa Alam and Shalatin. Before the early nineties, fishing was limited in the southern Red Sea region. The activity was concentrated in the area extending from the city of Marsa Alam to the village of Hemata. The locals mostly consumed the catch fresh, and the surplus was salted and dried for their future consumption. Some selected fishes were sold to visiting merchants for a price decided through negotiation.

Fishermen in that area face several constraints. The mushrooming of tourist resorts along the coast has limited their fishing areas, particularly for those involved in shoreline fishing. Migrant fishermen from the Nile Valley also have begun to fish intensively along the coast using better boats and fishing nets. These migrant fishermen are not only forcing local fishermen out of business but also causing extensive damage to the fish stock and the marine environment in general.

Handicraft production represents only a small fraction of the national economy. The main handicrafts in the study area are woven rugs, leather bags, and beaded jewelry. They are produced by women alongside their fishing or herding activities, mostly for household use. Goats and sheep provide the women, particularly those in herding communities, with reasonable access to raw materials such as wool and leather that is sufficient for household use or limited production for their local use. Other types of raw materials, such as yarn to make rugs, and beads to make ornamental items need to be purchased. This usually entails a trip to Edfu or Shalatin, which adds to the initial cost.



Miners in Abu Ghusoon, WGNP

Little attempt has been made to develop handicraft production into an income generating activity. This is mainly due to the fact that, other than tourist resorts, which are not in close proximity to many of the communities; there are very few marketing outlets for these products. The communities of Qulaan and Hemata are an exception. The picturesque landscape of Qulaan Bay attracts many tourists, while in Hemata; kiosks along the road sell handicrafts as well as beverages and foodstuff.

Trading is one of the largest economic activities in the area, particularly in the larger towns. The towns of Marsa Alam, Sheikh Shazly and Shalatin offer dynamic markets where traders sell their goods. Outside these towns, however, few marketing opportunities exist for locally produced goods and services. Camel and sheep trading constitute the main trading activities in the SRSR. A significant proportion of the financial transactions take place at the camel market in Shalatin, where camels are sold at LE 3,000 – 5,000 depending upon their age and general physical condition. Medicinal herbs and spices constitute another major trading activity. The Shalatin and Sheikh Shazly markets are noted for their herbs and spices and their medicinal variants.

Tourism has been growing steadily as a major income generating activity attracting a larger number of people. Currently, 2,337 local Egyptians are employed in the tourist resorts in Marsa Alam and the SRSR. No data are available on the number of local tribesmen actually employed in the industry. It is clear, however, that hotels employ only a limited number of locals, who fill menial positions. According to one of the hotel managers interviewed, members of the local community do not qualify for other positions because they do not have the necessary educational levels, language skills and work experience. Members of the local community claim that minimal attempts are made to involve them in ecotourism activities or to allow them to benefit from the increase in tourism in the region. Activities that draw on the cultural heritage of the local communities, their lifestyle, food, dance and music are almost non-existent in the SRSR.

Employment opportunities in the flourishing mining and quarrying industry of the area are accessible to a large proportion of the male population. In Marsa Alam alone, about 20% of the workforce is employed in mining. However, only jobs requiring minimal education are available to the local people.

Institutional Context The main objective of this section of the study was to review the existing institutional setup – governmental and non-governmental organizations and lending institutions and to highlight the role and responsibility of each institution and the extent to which they respond to the needs and priorities of the community.

In addition, it illustrates the experience of these institutions in micro-finance and/ or ecotourism, if any, and their perception of the proposed Small-Scale Ecotourism Loans activity. Governmental institutions covered included city councils and local units, Governorate Development Department, Directorate of Social Affairs, Red Sea Nature Protectorates, and civil society institutions. Existing and potential micro-lending institutions are covered below in more details.

2.10.4 Assessment of Potential Lending Institutions

NGOs Identified To Undertake Ecolan Activities. The presence of regional NGOs in the southern zone of the Red Sea is very limited and those that exist have a weak organizational capacity. An exception is Gamiet El Takaful Al Igtimaiya. On the other hand, local community development associations (CDAs) are well represented. The two CDAs in Marsa Alam and Shalatin have the most experience in managing and implementing activities.

Although most CDAs are limited in their scope of activities, the local communities anticipate a greater role for them, especially in identifying their needs and priorities and initiating activities to enhance their livelihoods. Key informants share the same views of the local communities, if the necessary attention is given to strengthening the capacity and capabilities of the CDAs. Among others, the CDAs need to strengthen their linkages with the tourist facilities, in order to ensure a market for community-made products. Below is a description of the geographic mandate, experience and available infrastructure for the civil society institutions identified by the research team in the southern Red Sea zone.

Gamiet El Takaful Al Igtimaiya: A limited number of NGOs operate regionally all over the Red Sea governorate. The most prominent of these is Gamiet El Takaful Al Igtimaiya, which is centrally operated through its headquarters in Hurghada. The NGO board consists of five members and is chaired by the Head of the Directorate of Social Affairs in Hurghada. A committee has been created in every town in the governorate to manage and supervise the activities of the NGO at the local level. The Head of the Directorate of Social Affairs usually chairs the committee. The heads of the Social Units assist him. A full-time staff of forty employees provides technical, financial and managerial expertise.

The NGO focuses on delivering needed services to the local communities including childcare, women and youth clubs, vocational and technical assistance, and services to the handicapped. The NGO's main sources of funds are MoSA, the annual subscriptions of General Assembly members, and fundraising activities. It is worth mentioning that the NGO's budget for the year 2003 exceeded L.E 250,000, which is huge compared to the budgets of other NGOs in the governorate.

The NGO clearly has administrative capacity as well as efficient reporting and documentation systems. The chairman of the board mentioned that they were considering providing micro-finance services in cooperation with the local CDAs.

The Marsa Alam Community Development Association The Marsa Alam CDA was established in 1991. Its geographic scope extends from Baraka, 14 km south of Marsa Alam city, to Wadi El Gemal, about 80 km south of the city. Also included is Tarambu, a community of approximately 15 families living 20 km off the road to Edfu, and Gebel Rossas, a Bedouin community of about 5-6 families living 15 km further north.



Children from Sheikh Shezli © Mindy Baha El-Din

implemented are in line with the CDA's mission. The CDA's General Assembly consists of one hundred and twenty members, who pay an annual subscription of LE 6 each. The members are mostly new settlers from Upper Egypt and the Delta. The chairman of the board stated that attempts were being made to involve members of the Ababda tribe in the CDA's activities.

The CDA runs a kindergarten and a children's club (which together benefit more than seventy children), a women's club with over thirty-five members, and a social club with a membership of about 120. The head of the women's club committee mentioned that the most important activity they were implementing was basic handicrafts training, adding that: "Women are very keen to know more about sewing and leatherwork; however, financial assistance is needed for the purchase of more equipment and tools."

Neither the Board nor the staff have benefited from any capacity building activities to date. The board members indicated they need training in community mobilization, as well as project management, project evaluation, and financial sustainability. The women's committee also cited the need for an equipped center for handicrafts, as well as marketing assistance.

Sheikh Shazly Community Development Association. The Sheikh Shazly CDA was established in 2001. Its geographic mandate includes the community of Sheikh Shazly, in addition to a number of scattered communities, such as Sheikh Salem, a community of herders made up of about 20 families, who live in shacks/ tents around 40 km east of Marsa Alam. An Executive Committee is responsible for managing day-to-day activities and implementing the decisions of the board. The committee is made up of the chairman and the secretary of the board, and three board members. The CDA's General Assembly consists of fifty members, made up for the most part of members of the Ababda tribe in addition to a number of new settlers from Upper Egypt and the Delta. The Assembly meets at least once a year to review the CDA budget and activities. Each Assembly member pays a yearly subscription of LE 3.

The CDA is located in the town of Sheikh Shazly in a one-floor building which contains the board meeting room and a handicrafts center. Another location is currently being built by the *Shorouk* program, and will include a women's club, a kindergarten and a library.

The CDA's board consists of seven full-time government employees working in the City Council, the school and the Egyptian Institute for Communication. They meet on a regular basis to discuss management issues and to plan for CDA activities. Because of their work connections, the board plays a very effective role in coordinating and networking with governmental institutions.

An Executive Committee facilitates the decision-making process and ensures that the activities

The handicrafts center was built, equipped and refurbished in 2000 by the Local Council. The Marsa Alam CDA was responsible for managing and supervising its activities. The center was handed over to the Sheikh Shazly CDA in 2001, immediately after its establishment. The two full-time employees who run the center indicated that they are training about 30 women in sewing, embroidery and crochet, and that they also supervise the production of the products. They said: “We participated in the productive families exhibition last year and our products received much praise. We are really eager to improve the quality of our production, and we are sure that with advanced training we will be able to produce better quality products and more diversified handicrafts.” A MoSA representative said that the women at the Sheikh Shazly handicrafts center were skilled and that their location was an advantage since the Sheikh Shazly festival offers a large market for a variety of products, including handicrafts.

The CDA’s financial resources are very limited. It relies on grants from the Local Unit, which are provided through the *Shorouk* program, and to a lesser extent on grants from MoSA, in addition to the revenues from the handicrafts center and the member’s subscriptions.

According to the Board and the staff, capacity-building activities are definitely needed. The Board members mentioned that they need training in how to achieve financial sustainability, as well as in stakeholder networking, fund raising, project management and implementation, including the implementation of simple awareness campaigns. Similarly, the staff at the handicrafts center indicated that they needed technical assistance and training to help them tailor their products to the needs and requirements of tourists, and to improve the marketing and distribution of their products.

Other CDAs in SRSR The CDA in Hemata was established in 1996. Its board consists of seven members while its General Assembly is made up of 40 members. The CDA runs a nursery for children. A representative at the Ministry of Social Affairs stated that the Hemata CDA had real potential for expansion and development. He added that community members in Bernice, Ras Benas and Abu Ghousoon had recently been trying to establish CDAs. “We [the MoSA] are doing what we can to help them establish their CDAs and we are sure that they will be able to play an important role in the development and well being of their communities.

Shalatin Community Development Association The Shalatin Community Development Association, the most prominent CDA in Shalatin, is located in a district called “Hagar El Assass” in the town of Shalatin. The CDA was established in 1994. Its board consists of seven members who are mainly Bisharin. The CDA’s General Assembly includes 130 members, made up of Bisharin and Ababda, as well as settlers from the Delta and Upper Egypt.

The CDA runs a handicrafts center that trains women in sewing, embroidery, crochet, and knitting. The CDA also markets the women’s products, both locally and through national exhibitions organized by the Productive Families. The training center is under the management and supervision of the Hurghada Productive Families Association, which falls under the Directorate of Social Affairs. With financial assistance from the Program, the center provides the trainee at the end of the training period with a sewing machine, which the trainee pays for in installments. The CDA also receives funding from MoSA to allow it to implement other activities and deliver needed services, such as a children’s club, a senior citizen’s club, a women’s club, and a social and cultural club.

A MoSA representative mentioned that they were careful when offering loans in Shalatin. “People, especially Bedouin tribes, are used to receiving funds and assistance and the idea of micro finance is still new to them.” He added that they had to provide a guarantee from a government employee, or, in some instances, a document that proves they are eligible for government assistance.”

From the meeting with the board members of the Shalatin CDA as well as key MoSA informants, it was clear that the Shalatin CDA’s capacities are fairly developed compared with other CDAs in Marsa Alam. Members of the board mentioned, however, that they needed training in fundraising and project management. In addition, the staff at the training center indicated that they needed assistance in improving the quality of production.

Other CDAs in Shalatin Six CDAs were registered with the Ministry of Social Affairs in 2003 to work within the administrative geographic scope of Shalatin. They are the Ezbet Aly Gomaa CDA, the Ezbet Gamoon CDA, the Amrab CDA, the Marsa Hemeira CDA, the Ezbet El Kamhatab CDA, and a women’s NGO. All six CDAs work under the supervision and management of the Shalatin CDA. From the interviews, it was apparent that all six CDAs had not yet implemented serious activities and that they had not received funds from the Ministry of Social Affairs or any other donor agency. In addition, only Ezbet Gamoon and Amrab CDAs are headquartered in concrete buildings, while the remaining four CDAs are located in wooden shacks. A MoSA representative in Shalatin stated that the Egyptian government’s strategy is to strengthen the capacities of CDAs to enable them to provide services traditionally provided by the state.

2.10.5 Training and institutional capacity building requirements for civil society institutions

The following is a breakdown of training and capacity building requirements for civil society institutions to be sufficiently upgraded to provide financial intermediation services. Unfortunately, extensive previous experience with capacity building for civil society institutions indicates that a minimum of 8 months is required in order to put the following steps into practice, a time-scale obviously not suitably accommodated by the present project. In order to build the capacity of these institutions to become full-fledged financial intermediaries, the following requirements can be put into practice in the follow-up to this project, when sufficient time is available.

Provide intensive training to the CDAs in the field of primary governance, networking and creating partnerships, project planning and evaluation, financial sustainability, and reporting and documentation. In addition, build/strengthen their capacity to implement credit extension programs.

Provide technical assistance, through existing CDAs, to improve the quality of the handicrafts produced by women. Such assistance should include introducing new designs and techniques, as well as different raw materials.

Strengthen linkages among the CDAs that fall within the geographic scope of the Marsa Alam and Shalatin administrative boundaries by setting up the Marsa Alam and Shalatin CDAs as umbrella organizations.

Build the organizational capacity of Gamiet El Takaful Al Igtimaiya, and the Marsa Alam and Shalatin CDAs with emphasis on management and utilization of resources, and developing their strategic leadership. In addition, given the scattered locations of the local communities as well as the cultural and religious taboos constraining women in marginalized communities from accessing input and product markets, CDAs capacity should be strengthened in marketing and advertising.

Encourage the participation and partnership of the various stakeholders in the planning, implementation and monitoring of the project. Special attention should be given to involving local and marginalized groups as well as the private sector. This can be achieved through the creation of a committee in Marsa Alam and another one in Shalatin made up of representatives of the CDAs, MoSA, community leaders, the City Council, the Development Department, the Tourism Development Authority and the private sector.

2.10.6 Banks Identified to Undertake Ecolan Activities

The TA team met with a number of micro-finance institutions (MFIs) in the area, and identified *Banque du Caire* as the best candidate institution to extend individual eco-loans in the Southern Red Sea region. The main reason for this choice was that the bank had the institutional infrastructure in place, including necessary micro-finance policies, procedures, systems and trained staff that would enable it to disburse loans in the shortest time possible with little or no additional cost requirements. Currently *Banque du Caire* has a micro-finance initiative in place in 98 of its bank branches, with two branches in the Red Sea area in Hurghada and Safaga. Over the past three years, the micro-finance program in *Banque du Caire* received support from USAID under the Small Enterprise Businesses (SEB) Project, in the form of funded technical assistance, training and systems. It also received funding for the actual training expenses of its micro-finance staff. The bank was therefore eager and willing to use its own resources for on-lending to small and micro entrepreneurs.

For the purpose of disbursing eco-loans in the Southern Red Sea zone, the TA team met with personnel from both the Hurghada and Safaga branches of the bank and selected the Safaga branch, due to its proximity to the target area. The TA team discussed this initiative with the Head Office and branch micro-finance personnel, and was able to reach an agreement with the bank in order to make a few modifications to the loan extension mechanism. This is to allow for the disbursement of loans from the Safaga branch to the target area entrepreneurs, since the area lies outside the branch's geographic boundaries. Modification to the policies and mechanism will also include the following:

- Forming a group among entrepreneurs to guarantee monthly repayment. Each group member would be assigned to collect the installments from other group members and take them to the bank on behalf of the group, at least once over the loan term, and depending on the number of borrowers.
- Loans can be used for both working capital as well as for refurbishing
- Some exceptions have been made regarding the funding of startups, as opposed to just the existing enterprises

- Loan officers have been encouraged to give loans to nature-based tourism activities in the area
- Some exceptions have been made regarding the documentation required from the loan recipient, such as waiving the requirement for the electricity bill, since most of these entrepreneurs do not have access to electric power.

The TA team also conducted an orientation session for potential borrowers in the area to inform them about the best uses of borrowed funds, and possible ways to maximize the benefits and uses of their loans. The TA team has been receiving a lot of support from the Banque du Caire Micro-finance Product Manager, who is currently preparing a memorandum for the Board of Directors' approval, expected to take place on September 13, 2004, outlining the deviations from the established policies of the bank's current micro-finance program. He is confident that loan disbursements will commence as of September 14, 2004.

The TA team also met with *Bank Misr* officials to explain to them the nature of this project. They were very enthusiastic in supporting this project but elected not to participate in this initiative at this time, since the bank's current strategy is to operate in underserved areas in Upper Egypt.

The following table illustrates the two banks' status for potential participation:

<i>Criterion</i>	<i>Banque du Caire</i>	<i>Banque Misr</i>
Willingness to Participate	Yes	No
Geographical Mandate	All Governorates	All Governorates
Experience	3 Years	Under 1 Year
Institutional Infrastructure in Micro-finance	Policies, Procedures, and systems in place, plus trained staff in 98 branches	Policies, Procedures, and systems in place, plus trained staff in 5 branches
Training Needs	Orientation session on the nature and types of enterprises operating in Southern Red Sea Zone and briefing on ecotourism activities	Orientation session on the nature and types of enterprises operating in Southern Red Sea Zone and briefing on ecotourism activities

Levels and types of funding required by selected institutions After carefully reviewing the status of the eleven NGOs and two banks in the area, the following section addresses the levels and types of funding requirements of the selected institutions, for both extension of eco-loans and the financing of ecolodges in the Southern Red Sea zone:

Micro-finance – Eco-loans. The NCT TA team managed to reach an agreement with Banque du Caire to start extending loans in the Southern Red Sea Zone. The Product Manager was very supportive of the idea and was willing to use unconventional methods of financing to try to overcome some of the hurdles (distance between the target area and the bank's branch and the

nomadic nature of its inhabitants) in order to disburse loans in the target area. Since the micro-finance program in the bank is ongoing and is being supported by USAID under the Small Enterprise Businesses (SEB) Project, through the funding of TA and training costs, no funding requirements are foreseen to support the banks operational expenses or loan fund capital, since the bank has been covering its own operational costs and onlending from its own resources.

Ecolodges. The TA team met with *Banque Du Caire* officials at the Safaga and Hurghada branches to discuss the possibility of disbursing loans to potential investors that wished to construct and operate ecolodges in the area. The TA team explained to the bank the nature of activities that would be undertaken by these ecolodges and the importance of supporting and promoting these projects in the area. The bank informed the TA team that they would be very supportive in extending loans to the construction/operation of ecolodges provided that they meet the bank's due diligence and paperwork requirements (financials requirements, collateral, etc). They also informed the TA team that each loan applicant would be evaluated, like other investors that approach the bank for loans, but they would encourage investors and support them in any way necessary to facilitate the approval of their financially viable projects

Over the past nine months, the technical assistance team has worked on identifying the most suitable ecoloan products that can be extended to entrepreneurs in the Southern Red Sea area communities, in terms of loan policies, mechanisms, management, and follow-up, as well as loan procedures and financing terms. Two types of credits schemes were deemed the most appropriate for this area; namely Individual Lending and Group Lending.

Individual Lending schemes have been designed to fund working capital loans for micro and small enterprises (MSE), these loans start at LE1,000 and reach a ceiling of LE10,000. If the loan recipient repays the loan in a timely manner, he/she becomes eligible to apply for a higher loan amount, pending the approval of the loan officer and supervisor in the bank/NGO. This scheme is based on making funding available for individuals who have been considered high-risk clients by formal financial institutions. The lack of complicated paperwork and constant support from the loan officers encourage MSEs to apply for loans and more often than not, receive them. On the Bank level, the process of loan acceptance and disbursement is decentralized, where the loan officer and supervisors are responsible for loan disbursements. This enables the bank to issue new loans in less than 10 days and renewed loans in less than 5 days. In order to better meet the needs of the potential institutions and the entrepreneurs in the area, minor modification to the loan disbursement and repayment policies and procedures may be required, as mentioned above.

As for the Group-lending program, it targets mostly women who would form a group of five, with one being elected as the head of the group. Each member is then given a small loan to conduct her own income-generating activity. The loan, which starts at LE50 or LE100, is paid back in weekly installments. The group leader collects the money from the women and has it ready for timely repayment. If one of the group members is late, the others take over her payment and she pays them back as soon as she can. In order to ensure that women are not burdened with hefty installments, the loans are repaid on a weekly basis. The fact that the women are in weekly contact with the loan coordinators ensures that problems encountered in their activities are not allowed to build up over a long period. At any time that the client feels the activity she has undertaken is not worthwhile, steps are taken to come up with alternative suggestions of other more suitable income generating activities. Once the loan is fully paid-up, the group members can apply for the same size loan or for a larger one. Loan sizes start at LE50

and reach a ceiling of LE1,000. This methodology is based on group collateral as the members of the group guarantee each other's ability to repay the loan. The design of this program suits the nature and needs of the women in the community, as is foreseen to be undertaken by NGOs.

It was found that for the Group Lending Program, a start up fund of approximately US \$12,000 would be required for each NGO to support the operating expenses until breakeven point was reached. Furthermore, a loan capital fund totaling approximately US \$56,000 is needed to serve the entire area over a period of four years. These figures are based on an estimated target of 150 – 200 groups (5 members per group) with an average loan size of LE400. As for the Individual Lending Program 250 – 300 individuals should be targeted over a period of four years with an average loan size of LE3, 000. These would be distributed amongst the NGOs and Banque Du Caire, but if served partly by the NGOs, a necessary projection would need to be made to account for additional funding requirements to meet program needs.

2.10.7 NCT Loan Projects Undertaken During the Contract Period

EQI's NCT TA team assisted individuals to set up small initiatives professionally and to high standards, so that services provided were of high quality and at the same time incorporated elements of the local culture and heritage. Among these small initiatives that are currently being established are an Ababda refreshments tent in the village of Qulaan, an Ababda camel safari through Wadi Gemal, and a Bishari eco-village in the wilderness around Shalatin that will serve as a rest station as well as a central location from which to conduct nature tours. Each of these projects is described in detail in Annex 6.

2.10.8 Rapid Assessment of Marsa Shagra Ecolodge

The NCT workplan called for the Contractor to provide stand-by support services to assist any prospective ecolodge developers to improve their technical and financial feasibility vis-à-vis lending institutions. Only one developer made use of the facility during the project period, i.e., Mr. Hammam, the developer of the Marsa Shagara ecolodge resort. EQI TA team visited Mr. Hammam's development site and toured the premises to make a rapid assessment of the basic site plan, what already had been built, and the potential for 'greening' the existing structures and providing guidance where future expansion was concerned. The team identified areas that would require more in-depth attention about environmental and structural issues, to be addressed in a future field visit. Annex 6 provides a summary of the findings of the rapid assessment as an example of the kind of service that can be offered to a potential developer. It should be remembered that this was an initial reconnaissance. By the time of the contract's end, the developer had not yet followed up with any further assistance requests

2.10.9 Training and Public Awareness Requirements

The aim in this section of activities was to conduct a two-pronged public awareness/training campaign, targeting local communities as well as hotel owners/tour operators in the area. The campaign was designed to prepare Bedouin entrepreneurs to provide marketable, quality ecotourism services and products, and to stimulate the market for community led ecotourism products among hotel owners/tour operators. The training/ awareness raising campaign outreach requirements were structured as messages to be conveyed at informal workshops. It was first planned to introduce the local communities in the Southern Red Sea Area (our first target group/ audience) to eco-loan opportunities, ecotourism prospects and ecolodge values and philosophy. Second, it was designed to persuade and convince the prospective investors, hotel owners, tourist

agencies and tour leaders (our second target group/ audience) to involve the local communities in the existing tourist industry thus launching the concept of “market share and fair trade” for everybody.



Public awareness event in Qulaan Village, WGNP, July 2004

For the abovementioned public awareness training workshops, the TA team made several trips to the southern Red Sea area in order to meet and interview both target groups/ audiences. The interviews and meetings conducted were informative and strengthened the enthusiasm of both target groups to participate in the workshops. On the Marsa Alam trips the training P/A team included extensive meetings with the Wadi el Gemal rangers to make sure that they “buying into” the abovementioned P/A messages and workshops.

After several meetings with the first target group (Bedouin entrepreneurs and their communities at large), training/ awareness programs to address the following most pressing issues were identified:

- Standards of tourist oriented services.
- Cleanliness and hygiene
- Solid waste management
- Potential ecotourism activities and opportunities
- Available financial mechanisms
- The ecolodge concept
- Handicraft product improvement
- Marketing

For the second target group (prospective investors, hotel owners, tourist agencies and tour leaders), the P/A messages to be expressed to them were as follows:

- Conservation and protection of the local cultural heritage and natural resources
- Support the local community eco-tourist projects and programs
- Attract tourist operators and travel agencies to sell visits to Wadi El-Gemal and Bedouin operated tourist initiatives
- Market share and fair trade premises
- Ecotourism principles of sustainable tourism
- Share the benefits of tourist developments and industry with the local community

Training and public awareness workshops and community meetings The TA team chose to perform training and public awareness events targeting local communities in an informal manner. This included the major event that took place on the inauguration day of the Qulaan refreshments tent. The thrust of these community meetings was on an exchange of ideas between

the local community and the TA team using creative and interactive means. Both Ababdi tribesmen and Bishari community members from Shalatin attended these functions. In addition, numerous meetings were held between individual community members, and members of the TA team. These meetings enhanced interpersonal communication between the two groups and created an atmosphere of mutual understanding and trust which proved invaluable for the awareness raising and training efforts. The TA team, therefore, worked closely with numerous individuals, providing technical advice and training on new aspects of their business activities. In fact, a major part of the training and awareness activities, as well as the provision of technical advice and assistance to tribesmen was most effectively undertaken through these personal meetings of individual Bedouin entrepreneurs. In some cases, (e.g. the Qulaan village projects) this consultation process between the Bedouin entrepreneur and the TA continued on almost daily basis through phone conversations, and proved to be extremely effective in assisting the entrepreneur dealing with day-to-day business problems.

The following is a brief description of awareness raising and training workshops carried out during this project:

Qulaan village eco-loan workshops The first of these public awareness/ training events targeting local communities took place in an informal setting on the inauguration day of the Qulaan refreshments tent, inside the new tent itself. To promote the exchange of ideas, caricatures were used depicting objectives of the ecoloan and ecolodge components of this activity, as well as important messages the project team deemed necessary to bring across to community members based on feedback and impressions gleaned by the public awareness/ training team on several previous occasions. These caricatures were passed around the audience and discussed at length, with presentations given by EQI experts on the different components that required in-depth coverage, such as eco loan eligibility criteria and delivery mechanisms, supported by an ample



Awareness Meeting in Qulaan, July 2004, courtesy EQI

question and answer session. Full immersion in the community meeting proceedings by community participants was evident when many suggested ideas for new and ongoing projects in order to gain insights from the EQI team on how to prepare preliminary feasibility studies and on how to establish whether they are eligible to apply for a loan or not.

After caricatures were shared with the participants, all community members were asked to offer their insights and feedback to the day's proceedings and to the theme of what the natural environment means to them for livelihood creation. This feedback was collected in the form of freehand sketches created by each of the community members using colored pencils on plain white paper. The resulting sketches have been printed on postcards for sale at the Qulaan

community during their crafts training day (discussed in the coming sections), to promote the Qulaan Bay area.

Critical to the success of this community meeting was the presence of Hamdallah Macarona, who on that day hosted the opening of his business venture for public use. He spoke about his experience with the establishment of the Qulaan refreshments tent, and illustrated to attending community members an example of an ecotourism initiative that has established itself in the southern Red Sea zone as a result of the direct efforts of this project and the enthusiasm of local communities for self-development. Furthermore, conducting the community meeting activity in Hamdallah's tent provided a demonstration of how Hamdallah constructed the tent from natural and local products i.e. *Borsh*, wood and ropes, and decorated the seating area with simple traditional items like *kelims* and wooden tables.

Awlad Baraka ecolodge workshop An open-air workshop was held at the dive center located at Awlad Baraka, owned by Mr. Karim Nour, who operates across the way from the Awlad Baraka alternative lodge. The aims of this workshop were to promote a useful exchange between relevant government representatives and community members who may be interested in establishing ecolodges, and also to take interested community members on a tour of the Awlad Baraka alternative lodge to observe an environmentally low impact initiative in operation. Both Bishari and Ababdi community members were in attendance, as well as the Head of the Marsa Alam City Council, and the planning advisor to the governor.

Bishari community members made up the larger portion of attendees to this function. Participants were able to present their ideas for new projects, discuss the eco loan application process, and ask for advice about project marketing. Mr. Karim Nour also gave a presentation on ecolodge construction, and on his experience as part of a community of environmentally low impact developers. Marketing and solid waste management were also key issues discussed during workshop proceedings.

Achievements attained during this workshop include creating linkages between relevant government representatives and potential community ecolodge investors, as well as providing a working model of a successful alternative lodge already in operation in Marsa Alam.

Hotel owner/tour operator orientation awareness workshop. (Brayka Bay Workshop). The third awareness workshop was conducted in a completely different manner to the community meeting, as the target audience comprised hotel owners, tour operators and representatives of government institutions, as well as other professional persons. The workshop was conducted in a formal setting within the conference room of the Brayka Bay hotel, situated in the dense tourism development area just north of Marsa Alam city.

The workshop outlined the project's objectives and major goals, alongside slideshow presentations by key EQI team members. The community meeting public awareness activity conducted at Qulaan was brought to light during the proceedings to illustrate how awareness must reach all target groups in order to be effective at establishing the necessary linkages between communities and the existing tourism industry.

Proceedings of this public awareness activity were well received by attendees, with very positive feedback from a number of people promoting the theme of the workshop, including Mr. Tamer Azmi, owner of Brayka Bay hotel, Mr. Karim Nour, who owns and operates a dive centre and

alternative lodge, Mr. Samir Sedky, hotel owner, and Ms. Karen Opstal, a safari guide operator. A significant breakthrough achieved through this workshop was Mr. Tamer Azmi's resulting willingness to participate in taking an active role to promote community ecotourism initiatives. He is keen to send tourists to Qulaan, as well as to host Ababda evenings across from his resort (where he owns additional land) to share elements of the local culture with tourists.

Handicrafts training event On 18 September, Qulaan hosted a large training event designed to improve the quality of crafts produced by the people of Qulaan Bay. Professional trainers trained local artisans in quality improvement as well as product diversification using the same local materials. The training sessions were complemented by a tourist visitation from Brayka Bay resort, owned by Mr. Tamer Azmi, who has in a previous public awareness activity expressed enthusiastic interest in exposing his guests to local culture.

Bedouin women awareness workshop This workshop on the 19th of September at Qulaan village following the training workshops held the day before. The workshop targeted women of the Ababdi community and addressed the following issues:

- Basic health, sanitation and environmental issues, particularly as related to their indoor environment/homes.
- Women's role in the upgrading of their immediate environment (homes) and outdoor environment (village at large).
- Women's role in addressing issues of hygiene, cleanliness and waste management for indoor environment.
- Quality improvement of handicrafts and the successful sustainability of their income-generating activities.

2.10.10 NCT Lessons Learned

A number of useful lessons for the future were gleaned from the experiences of the NCT TA team. Some of these are common to the larger world of micro-finance and some derive mainly from the conditions in the SRSR at this time.

Small-scale eco-loans. The time spent by the TA team at the start of the NCT activity in collecting data and especially interviewing the local Bishari and Ababda people about their daily lives, understanding of tourism and the environment and socio-economic constraints was not only necessary to enable the team to focus on those activities and tourism services that could be economically feasible at this very early stage of ecotourism business development but also as important so that the local people would have a better understanding – through the dialogue – of what those possibilities might be. Ecotourism attractions and services are necessarily very specific to the environmental and cultural conditions of the site. There may be generic types of business activities – ecolodges, travel services, sightseeing, etc. but how these are expressed depend upon the local circumstances. The early dialogue and interview process was a very important educational and awareness stage for both



Ababda girls in WGNP

sides: the TA team and the potential loan recipients and reinforce the lesson learned that it is unwise to go into a new situation such as this with a pre-planned menu of business packages.

At this stage of development, the most feasible ecoloans were ones that a) built upon skills and experiences that were part of the Bedouin daily life and therefore did not require them to learn new technical skills but rather how to manage a small loan, and b) ones that required very little capital for new equipment or fixed plant. This meant that the likelihood of success would be much greater, reducing the experiential learning curve so that the next round of loans could be for more ambitious and perhaps more technically – demanding types of activities.

The third lesson is that, in the absence of well-developed civic and financial institutions in the target community, it is unrealistic and dangerous to expect to market a large amount of loan money in a short space of time. A large body of experience world-wide suggests that it is best to introduce loans and a money economy to communities only for where it is really needed, especially communities that are dependent primarily on their own primary production for their subsistence, as is the case for the Bedouin communities in the SRSR. The NCT TA team has identified some active CDAs and few NGOs that have a good possibility for developing as partners in helping to manage business development in ecotourism and community services (health, education, utilities) which are also essential for a successful ecotourism experience. These institutions are at least as important if not more important in the early stages than are the banks loaning the money.

Ecolodges and Public Awareness. Although much attention has focused on “high-end” or moderately priced ecolodges, such as some that already exist in Egypt and the SRSR, the experience of the NCT team suggests that community-based ecolodges are a viable addition or even alternative to the conventional market. This is especially the case for instances where a community ecolodge can be combined with community or multi-family housing upgrades. This has the potential of helping an extended family to develop a “family business” that also has the potential of improving their own quality of life as well as generating income.

Public awareness campaigns, in the NCT activity, were mostly combined with actual programmatic activities, especially the ecoloans. This can sometimes be a more effective strategy than developing awareness campaigns that function independently. In the case of the ecoloans, the awareness activities covered a great deal of ground related to the development of the “market”, i.e., the tourists and their expectations that would also be beneficial for the future development of the target communities themselves.

2.11 RSSD Management Lessons Learned: Coordination within EEPP

Coordination of the policy measures completion process was a difficult problem throughout the project and, to a lesser extent, this continued to be the case after 31 March 2004 when virtually all of the policy measures were completed. The reasons for the coordination difficulty were several:

1. There was an implicit assumption that the Contractor would take primary responsibility for coordination of the delivery of the means of verification according to the requirements of the MVE and USAID, as agreed by the GOE counterparts. If this were the only dimension to coordination, then there would not have been much of a problem of coordination. However, a

number of the MoVs entailed very serious policy issues that were unresolved at the GOE agency level, particularly land use allocation and zoning within WGNP. These issues were not ones that any Contractor could resolve. The Contractor could – and did -- provide expert analysis, data and experience from other country contexts but the resolution of these basic policy differences required regular meetings of key policy makers at EEAA, TDA and RSG. This did not occur frequently enough to prevent problems of coordination.

2. At the time of the start of RSC/W, there was no established, formal mechanism for coordinating the work of the contractor teams, especially the RSSTI and RSNRC teams, despite the fact that both teams had been working on the MoV-related matters for more than three years previous. The absence of such a mechanism meant that each team tended to operate independently and with little reference to the work of the other, increasing the risk of duplication of effort, inadequate sharing of vital information (e.g. GIS) and unnecessarily complicating communication and resolution of conflicts. For this reason, the IRG management team set up “working groups”, primarily for the RSSTI/TDA and RSNRC/EEAA teams. This mechanism, after some delay in start-up, proved to be a useful communication forum that sped up the process of MoV completion where previously an apparent logjam had prevented resolution.

3. The ‘working group’ concept was set up for other areas of coordination, e.g. solid waste management and maps, guides and other ecotourism information for WGNP. Here the approach was not successful. The reasons for this were that:

- Issues were more technical in nature and it was easier for individuals to coordinate one-on-one as needed;
- Unlike the policy measure meetings, which mainly took place in Cairo, the other working group parties were mainly in Cairo (RSSTI, AED), Hurghada and Wadi Gemal (RSNRCT). This made routine meetings impractical for these groups.

In future activities, like LIFE, serious consideration should be given to:

- a) Setting up an implementation secretariat to provide information management, communications and coordination services to USAID and all counterparts. Ideally, this body would be seated in the Red Sea Governorate (probably Hurghada);
- b) Developing an interactive web site to be used for uploading and downloading project information to facilitate the exchange of discussions, documents, databases and so forth.

2.12 Non-Training Workshops and Other Events.

See Annex 3 for a complete listing of trainings and non-training events.

2.13 Staffing and STTA

A complete staffing list of the project is provided in Annex 4. A complete listing of short-term consultants by subject, number of days and Egyptian/expat breakdown is provided in Annex 2.

3. Lessons Learned on the Design and Implementation of the RSSD Component of the Project.

3.1 Interagency Integration of Policy Measures

The design of the EEPP's Red Sea activities did not integrate policy measures based on common inter-agency environmental objectives as effectively as it could have. As a result, inter-agency overlaps in Cairo delayed achievement of MoVs, increased redundancy in some outputs and made policy implementation more difficult. If field implementation of policies had been the driver, inter-agency rivalry might have been less prominent.

a. The predominant form of development in the Red Sea region for at least 20 years has been tourism. The reason almost all tourists come to the Red Sea is not mainly because of its antiquities or for specific cultural or historical reasons but because of the region's climate and environmental resources, especially marine resources. Hence, from the beginning of EEPP, there was an inherent inter-dependency of the institutional and policy interests of the three main counterparts in the Red Sea portion of the EEPP: EEAA, TDA and the RSG.

b. Given the degree of interdependency between the three counterparts, the logical design should have been to formulate policy measures or outcomes to which all three counterparts could contribute and which would depend on all three working together to be successful. This was not done. Instead, each counterpart had individual policy measures that corresponded to individual agency priorities but did not necessarily provide any integration or synergy with each other. In fact, in the case of the development of the Wadi El-Gemal National Park (WGNP) ecotourism development plan under TDA and the development of the WGNP conservation management plan by EEAA, there turned out to be considerable duplication of information collection effort but with different objectives and very different policies regarding fundamental issues such as land use and land allocation rights. At the same time, tourism, environment and economic development issues in land controlled neither by EEAA nor TDA i.e. land under direct RSG administration was not addressed at all or only weakly so (dependent upon voluntary technology sharing and training from the other two agencies).

c. The result of the segmentation of the policy program by counterpart agency interests rather than outcome in terms of development was to give rise to institutional conflicts that were not addressed until the end of the policy measures program (June 2003 and later March 2004).

3.2. EEPP Policy and Field Activity Integration.

The EEPP Red Sea activities were designed to achieve a relatively small number of linked general policy objectives, e.g. "Enhanced management and conservation of [the] Red Sea...." or "Sustainable Red Sea land use management linked to ecosystems of importance" through a large number of very specific plans, institutional measures, capacity building and training activities, i.e. the means of verification. This is a logical framework but it focuses more on outputs than on outcomes. While it is necessary and useful to relate policy objectives to specific means of achieving them, the focus on the MoVs meant that the paperwork output and its verification and relationship to cash transfers became more important than whether the MoVs themselves were achieving the intended outcomes. Partly, this was also an issue of timeframe. USAID's Red Sea related policy objectives were long-term and general in nature, while USAID's and GOE's institutional interests were relatively short-term and targeted on the cash disbursement process.

Nevertheless, it may have been more productive if the project had been designed to incorporate more performance-related measures and indicators linked to a rolling policy formulation and implementation design. In this way, outcomes and policies might have been more closely linked and the project periodically refined to react to learning what worked and didn't work. A few MoVs did attempt to achieve this, e.g. the hiring of a specific target figure of Red Sea Rangers as a proxy for capacity building or the regular monitoring of the use of Best Practices by TDA clients in the Red Sea. However, most MoVs focused on internal guidelines, rules and similar "paper measures". Another "lost opportunity" in this respect was to link the cash disbursements (fully or partially at least) to the actual implementation of the intended policy changes (measures). This would have more realistically facilitated better achievement of the intended outcomes of EEPP.

3.3 Planning and Coordination Mechanism for EEPP

EEPP lacked a mechanism for routine planning and coordination of activities between the three counterparts involved in the Red Sea policy measures. As a result, USAID became the "default" coordination and planning mechanism. However, this could never be as effective as a mechanism made up of the counterparts themselves.

- a. Many of the points of conflict concerned basic agency mandates and interpretations of Egyptian law over those mandates. EEPP contractors could provide advice but could not impose solutions to these problems.
- b. USAID possessed only the relatively blunt instruments of policy measure tranche deadlines and the threat of agencies' losing promised funding or receiving partial payments. This implied sanction increased the level of tension but did not necessarily result in solutions to inter-agency problems.
- c. The primary, formal, inter-agency planning, coordination and dispute resolution mechanism for EEPP's Red Sea activities was the "Tripartite Committee", an occasional meeting of the three counterparts hosted by TDA, since it appeared to be loosely linked to the Supreme Council of Tourism. This mechanism was not a model for good project management. The "committee" met too infrequently to be useful for either management or coordination. The meetings were closed and the minutes were not distributed to other stakeholders, not even to the implementing contractor.
- d. For effective management, counterpart coordination and monitoring and adjustments to work planning, meetings should be held quarterly, keeping to a strict schedule. These meetings should include counterparts, USAID and the implementing contractor. The contractor can act as a kind of "secretariat", preparing agendas and presentations, defining issues to be resolved and suggesting alternatives and adjustments but decisions on direction and outcomes need to come from the counterparts and USAID. Quarterly meetings should be designed to make decisions and not simply to make presentations of work-in-progress.
- e. In the current contract, USAID chose to pull into one contract mechanism all of the previous contracts working on the Red Sea under EEPP. This provided an opportunity at least to allow the Contractor to coordinate and integrate the methodologies and outputs of the various policy measures across the different counterparts, though, as noted, even this was difficult without a formal mechanism for coordination at the counterpart level itself. In

addition, coming in the final year of a four-year effort, coordination and integration was much harder to achieve than it would have been had this approach been used from the start.

ANNEX 1. LIST OF ALL REPORTS AND OTHER DELIVERABLES OF THE RSSD COMPONENT

Red Sea Natural Resources Conservation Team

TECHNICAL AND POLICY RELATED DOCUMENTS

- 1. Signage Plan for Wadi El Gemal National Park**, by Sherif Baha El Din, November 2003
2. “Revenue Generation and Expenditure Plan Presentation”, J.Tarrant for Hurghada Workplan Meeting, January 2004
- 3. Report on Mooring Buoy Implementation Plan (2.3.2): A Supplement to the Red Sea Mooring Buoy Strategy**, prepared by John McEachern, 31 March 2004
- 4. Report on the Initiation of Activities under the Red Sea Conservation Management Plan with Special Reference to the Mooring Buoy Pilot Program (2.3.3)**, by Mahmoud H. Hanafy, PhD, March 2004
- 5. Report on the Development of an Integrated Revenue and Expenditure Plan for the Red Sea Marine Environment (MoVs 2.2.1 and 2.2.2)**, prepared by Myrette El-Sokkari and Ahmed Shehatta, March 2004
- 6. Report on Record of Dissemination (2.3.3) for the Document: Activities Initiated under the Southern Zone Conservation Management Plan**, submitted by J. McEachern, 31 March 2004
- 7. Discussion of Major Environmental Relationships of the Wadi El Gemal National park Entrance Gate, Ranger Outposts, Hemata Ranger Station and Landfill Site**. Analysis for WGNP Infrastructure IEE, prepared by Jim Tarrant and John Grainger, 22 April 2004.
- 8. Stakeholder Consultation and Consensus Report in Support of the Red Sea Integrated Fee System Component of the Revenue and Expenditure Plan (MoV 2.2.2)**, prepared by Myrette El-Sokkari, May 2004
- 9. Report on Marine Turtles of Wadi El Gemal-Hemata Park, Southern Red Sea Coast, Egypt**, prepared by Jeff Miller, PhD, The American University in Cairo, May 2004
- 10. Wadi El-Gemal Priority Site Management Plans**, by Sherif Baha El Din, Revised, June 2004,
- 11. Management Plan for Wadi El Gemal National Park**, Final Revision, July 2004
12. “Actual and Projected Revenue Streams from Application of the Integrated Diving and Snorkeling Fee System in the Red Sea”, by Myrette El-Sokkari, July 2004
- 13. Economics of Samadai Reef “Dolphin House”, Marsa Alam, Red Sea Egypt**, by Mahmoud Sarhan, Mahmoud H. Hanafy and Moustafa M. Fouda, July 2004
- 14. Assessment of the Organizational Structure of the Central Department for Nature Conservation**, Final Report, September 2004.
- 15. Samadai “Dolphin House” Red Sea: Report on Samadai as a Case study of Partnership in Environmental and Financial Management**, by Myrette El-Sokkari and Ahmed Shehatta, August 2004
16. “Scope of Work for the Development of a Successful Protected Area Business Plan for Wadi El Gemal National Park and Template Design for Broader Use”, by Philip Voorhees, CPM, NPCA, August 2004
17. “Wadi El Gemal Business Plan requirements and Suggestions for Managers for Preparatory Work” by Philip Voorhees, CPM, NPCA, August 2004
- 18. Solid Waste Management Strategy for the Southern Zone of the Red Sea**, draft, September 2004

19. "Preliminary Report, Sooty Falcon Breeding Survey, Wadi El Gemal National Park", September 2004
20. Overview of the Red Sea Sustainable Development (RSSD) Component of the Red Sea and Improved Water Resources Contract, Hurghada 10 May 2004: presentation to the USAID Mission Director
21. **Analysis Report for Trip Visits to South Sinai, Red Sea and Wadi El Rian**, By Myrette El Sokkari, September 2004
22. Impact of Business Plans on National Parks, by Phillip Voorhees, CPM-NPCA, August 2004

Other Major RSNRC Team Deliverables

1. Three Ranger Outpost Building complexes near Abu Ghusoon, Hafafeet and Sikeit, Wadi El Gemal National Park
2. One Ranger Station at Hemata with boatshed and carport and a boatshed and carport for the Shams Alam Ranger Station
3. Commodities and Equipment Delivered under Commodity Procurement (see Annex 5 for details).

Red Sea Sustainable Tourism Initiative Team

TECHNICAL AND POLICY RELATED DOCUMENTS

1. **Best Practices Manual**, Updated Version, March 22, 2004
2. **Best Practices for Red Sea Resorts: Implementation Status Report**, March 2004
3. **List of New Best Practices: Design, Construction & Operation**, March 22, 2004
4. **Practical Guide to Environmental Management for Red Sea Resorts**, March 22, 2004
5. **Ecotourism Development Standards in the Southern Red Sea Region**, March 2004
6. **Ecotourism Development in the Southern Red Sea Region: Ecotourism Resources and Ecotourism Development Plan**, March 2004
7. **Conceptual Development Plan for Qulaan Ecotourism Model, Southern Red Sea Region**, March 2004

Red Sea Governorate Environmental Management Team

TRAINING COURSES

1. **Training Course on Environmental Laws and Legal Pursuits**, Marriott Hurghada, 11-12 October 2003
Report of Training Course on Environmental Laws and Legal Pursuits, Marriott Hurghada, 11-12 October 2003
2. **Training Course on Environmental Profile**, Intercontinental Hurghada, 21-22 October 2003
Report of Training Course on Environmental Profile, Intercontinental Hurghada, 21-22 October 2003
3. **Training Course on Environmental Inspection**, Intercontinental Hurghada, 16-17 December 2003
Report of Training Course on Environmental Inspection, Intercontinental Hurghada, 16-17 December 2003
4. **Training Course on Participatory Communication**, Intercontinental Hurghada, 24-25 March 2004

Report of Training Course on Participatory Communication, Intercontinental Hurghada, 24-25 March 2004

5. Training Course on Environmental Disasters Management, Marriott Hurghada, 23-24 June 2004

Report of Training Course on Environmental Disasters Management, Marriott Hurghada, 23-24 June 2004

6. Workshop on Environmental Awareness and Best Practices, Intercontinental Hurghada 28-29 July 2004

Report of Workshop on Environmental Awareness and Best Practices, Intercontinental Hurghada 28-29 July 2004

7. Training Workshop on Strategic Planning and Preparation of Annual Work Plans RSG, 24-25 August 2004

Report of Training Workshop on Strategic Planning and Preparation of Annual Work Plans RSG, 24-25 August 2004

TECHNICAL REPORTS

1. Policies and Procedures of the General Department of Environmental Affairs in the Red Sea Governorate, June 2004 (Arabic with English language summary)

2. A Municipal Finance Perspective of Revenue Enhancement for Protected Areas in the Red Sea Governorate, April 2004 (Arabic with English language summary)

3. Proposed Procedures of the Implementation Plan of Revenue Enhancement for Environmental Management in the Red Sea Governorate, August 2004 (Arabic with English language summary)

4. Relationships Manual of the General Department of Environmental Affairs: Roles and Responsibilities of Environmental Management in the Red Sea (Arabic with English language summary)

5. "Draft Proposal of Implementation Mechanism of MoVs in the Red Sea", March 2004

6. Building the Capacity of the Nature Conservation sector in the Red Sea, March 2004

Nature and Culture-based Tourism Team

1. Trip Report: Reconnaissance Field Investigation South Red Sea Coast, 4-8 January 2004

2. RSSD NCT 2nd and 3rd Trip Reports, 16 May 2004

3. Southern Zone Red Sea Trip Report, 17 – 20 May 2004

4. Ecolodge Development and Awareness Raising Components Status Report, 2 June 2004

5. The Wadi El Gemal Public Awareness Gatherings and Workshop, July 2004

6. NCT Baseline Data Report: 1. the Socio-Economic Setting, March 2004

7. EQI Trip Report, 26-29 July 2004

8. EQI Trip Report, September, 2004

RSC-W Management

1. Nature and Culture-Based Tourism (NCT) Activities Workplan, Revised March 2004

2. Policy, Technical Assistance and Operational Support for EEAA's Nature Conservation Sector at the Red Sea Workplan, November 2003

3. RSGEM Workplan, October 2003

4. RSSTI Workplan, November 2003

- 6. Quarterly Report 1 of the Red Sea Sustainable Development and Improved Water Resources Management Project, September – December 2003**
- 7. Quarterly Report 2 of the Red Sea Sustainable Development and Improved Water Resources Management Project, January – March 2004**
- 8. Quarterly Report 3 of the Red Sea Sustainable Development and Improved Water Resources Management Project, April – June 2004**
- 9. Final Report of the Red Sea Sustainable Development and Improved Water Resources Management Project, (and incorporating 4th Quarter activities)**
- 10. Demobilization Plan July 1 2004**
- 11. Briefing for USAID Mission Director on the Red Sea Sustainable Development Activities, May 2004, (PowerPoint presentation)**
- 12. RSC-W Monthly Reports for January – June, 2004**

ANNEX 2: LIST OF ALL CONSULTANCIES BY DATE AND TOPIC IN THE RSC/W CONTRACT

RSC/W CONTRACT USE OF SHORT-TERM EXPATRIATE AND LOCAL CONSULTANTS					
SHORT-TERM TECHNICAL ASSISTANCE EXPATS:					
Tech Unit	MOBIS Category	Consultant	Subject	Days Budgeted	Days Expended
RSC	EMS- Env Science	Jeff Miller	WGNP Turtle Mgmt	20.00	20.00
RSC	Sr. Tech Specialist	Philip Vorhees	NPCA Scoping	14.00	14.00
Subtotal				34.00	34.00
Water	Sr. Specialist	Greg Olson	Organization Water	50.00	50.00
Water	Sr. Pr Director	Tom Sheng	Water Database Mgmt	35.00	35.00
Water	Sr. Pr Director	Mark Svendsen	Water Participation	30.00	30.00
Water	Sr. Pr Director	Steve Romanoff	Water M&E	15.00	15.00
Subtotal					
RSSTI	Sr. Pro Director	Hector Caballos-Lucarian	Ecotourism Stds. & Regs	30.00	30.00
RSSTI	Sr. Pro Director	Niel Crawford	Ecolodge Design	30.00	30.00
RSSTI	Sr. Pro Director	Meier Gerald	GIS and Land Use	25.00	25.00
RSSTI	Sr. Pro Director	John Snyder	Resource Inventories	53.00	10.00
RSSTI	Sr. Pro Director	Manuel Knight		25.00	
RSSTI	Sr. Pro Director	Peter Engle	SWM and EMS	15.00	15.00
RSSTI	Sr. Pro Director	Chris Howell		10.00	10.00
RSSTI	Sr. Pro Director	Amy Doll	RSSTI Editing	5.00	5.00
RSSTI	Sr. Specialist - Eco	James Massey		15.00	15.00
Subtotal				208.00	
Admin	Editor-Formatting	Grover, Bonnie	Final Document Editing	15.00	15.00
Subtotal				223.00	
TOTAL Expat				372.00	
SHORT-TERM TECHNICAL ASSISTANCE CCN EXPERTS:					
Tech Unit	MOBIS Category	Consultant	Subject	Days Budgeted	Days Expended
Red Sea	EMS- Econ	Myrette Sokkari	Rev. & Expend. Spec.	167.00	167.00
Red Sea	TM- Rev gen	Ahmed Shehatta	EEAA Organ. Spec.	126.00	126.00
Red Sea	EMS-ES	El Arabi El Hendi Shendi	Landfill & Geophysical	8.00	0.00
Eco Loans	EMS- Env econ	Saleh, Mostafa (EQI)	Ecoloans Mgr.	220.00	220.00
Eco Loans	EMS- Env econ	Emad Farid (EQI)	Ecotourism & Ecoloans	95.00	95.00
Eco Loans	EMS- Env econ	Ramez Azmy	Ecology Support	105.00	105.00
Subtotal				420.00	420.00

RSSTI	EMS	El Gazzar, Assam	Resource Mapping	260.00	
RSSTI	EMS	Mansour, Ayman		35.00	
RSSTI	EMS	Selim, Mohamed		10.00	
RSSTI	EMS	El Massry, Ihab		10.00	
RSSTI	EMS	Mohamed Azim		3.00	
RSSTI	Task mgr- eco	Linda Braun	EMS Training	10.00	10.00
RSSTI	EMS- EMS	Ahmed Farouk		12.00	
RSSTI	Task mgr -eco	Khaled Arafa		69.00	
RSSTI	EMS- EMS	Samir Soukari		17.00	
RSSTI	EMS- EMS	Sherin Mostafa		17.00	
		El Sharkawy,			
Water	TS- Legal	Moemen	Water Engineering	72.00	72.00
Water	TS - IT	Hassan, Alaa	Water	72.00	72.00
Water	TS - Legal	El Diasty, Amira	Water	72.00	72.00
	EMS- Water				
Water	Resources	Shehab, Hisham	Water	72.00	72.00
Water	TS- Legal	Barakat, Essam	Water	90.00	90.00
Water	TS- Legal	Ibrahim, Ahmed	Water	45.00	45.00
Water	TS- Legal	El Kashef, Atef	Water	90.00	90.00
Water	TS-Legal	Saddik, Abdalla	Water	45.00	45.00
	EMS- Water				
Water	Resources	Abdel Azim, Ragab	Water	82.00	82.00
Water	TS - IT	Osman, Safaa	Water	98.00	98.00
Water	TS-Legal	Maksoud, Ahmed	Water	35.00	35.00
Water	TS- IT	Mahmoud, Hanan	Water	35.00	35.00
Water	TS-IT	Mostafa, Magda	Water	21.00	21.00
Water	TS-Legal	El Atfy, Hussein	Water	12.00	12.00
Water	TS- IT	Mahoud, Rami	Water	23.00	23.00
	EMS- Water				
Water	Resources	Khaled Wassef	Water	20.00	20.00
Water	TS- Training and HR	Hassan Dorah	Water	30.00	30.00
RSG	TS - OTE	Rabi El Saadawi		40.00	40.00
RSG	EMS - Legal	El Guindi		30.00	30.00
RSG	TS - OTE	Mohamed Ezz		35.00	35.00
RSG	EMS- Legal	Saad Hakim		35.00	35.00
Admin	TS - editor	Moustafa, Mahmoud	Translation	30.00	30.00
Total CCN				2248.00	

Annex 3. List of All Training for the RSSD Component

1. DT2 Training for Red Sea Rangers from Sept. 2003 to Sept. 2004:

#	Course Name	Dates	Male	Female	Provider
1	Advanced Arc GIS	7 December, 2003			GRC
2	Steering Marine Crafts	April 3			Arab Academy
3	Principles of Marine Biology	Jan. 14-19	8	5	Arab Academy
4	Principles of Marine Biology	Feb 14-19			Arab Academy
5	Principles of Marine Biology	Feb 21-26			Arab Academy
6	GIS for Coastal Management	January 24 - January 28, 2004.	6	1	Dr. Scot Smith/ Florida University
7	Dugong and Dolphin Management	February 3 to February 9, 2004.	10		Dr. Ivan Lawler
8	Egyptian Environmental Law & PA Regulations	January 24-29	12		AUC/ Counselor Mr. A. Gindy
9	Vehicle Maintenance & Driving	March 24-25	12		Daimler Chrysler
10	Terrestrial Ecology course I	April 19-23	9		Arab Academy
11	Terrestrial Ecology course II	April 24-30			Arab Academy
12	Global Positioning System	April 13	23	1	GISNOUR
13	Business Administration (focused on Governmental Systems)	May 15-20	11	3	AUC
14	Environmental Impact Assessment: Procedures & Techniques	June 19	11		Dr. Gaber Nassar, Legal Consultancy Services Center.
15	Image processing and interpretation (2 iterations)	January 17-21	7	2	Dr. Scot Smith/ Florida University

2. Non-DT2 Program:

Commercial Diving

August 15 – Oct. 15

ArabAcademy

3. The Red Sea Capacity Building training courses and workshops from Sept. 2003 – Sept. 2004:

Target Group: Red Sea Governorate Staff

#	Course Name	Dates	Male	Female	Provider
1	Environmental Laws and Regulations	October 11-12	35	10	Dr. Saeed El Hakim
2	Preparing Environmental Profile	Oct. 21-22	34	11	Dr. Ayman El Hefnawy
3	Environmental Inspection Course	December 16-17, 2003	33	11	Mohamed Lotfy
4	Participatory Communication	March 24-25	44	16	Rawya El Daby
5	Disaster Management	June 23-24	54	15	Eng. Mohamed Rashed
6	Strategic Planning	August 24-25			Dr. Mostafa El Fouly

4. General Workshops

Hurghada RSSD Workplan Review Meeting

January 19-20 2004

Environmental Awareness & Best Practices Workshop

July 28-29 2004

Annex 4: RSC/W Contract Staffing Pattern

Name	Title
RED SEA PROTECTED AREAS TEAM (IRG/WINROCK)	
Jim Tarrant*	Program Manager/Chief of Party (expatriate)
John Grainger	Red Sea Marine Park Management Expert (expatriate)
John McEachern	Red Sea Marine Operations Specialist (expatriate)
Mahmoud Hanafy	Red Sea Marine Park local expert I (Egyptian)
Sherif Baha el Din	Red Sea Marine Park local expert II (Egyptian)
Myrette El-Sokkary	Red Sea Revenue Generation Specialist (Egyptian)
Mohamed Habib	Diver Training and Safety Expert (Egyptian)
Hesham Abdel Rasol	G.I.S. Specialist (Egyptian)
Khairy Soliman	Red Sea Accountant (Egyptian)
Salwa El Halwani	Admin Support (Egyptian)
Nermine Hussein	Admin Support-NCS EEAA (Egyptian)
RED SEA GOVERNORATE TEAM (CBI)	
Ossama Salem	Senior Environmental Policy Specialist & RSG Team Leader (Egyptian)
Mohamed Ezzat El-Sayed	Local Development Specialist & RSG Liaison Officer (Egyptian)
Kadry Abu Hussein	Institutional Development Specialist (Egyptian)
Sally Nasr	Administrative Support Specialist (Egyptian)
IMPROVED WATER RESOURCES TEAM (IRG/Nile/DAI)	
Jeff Fredericks	Integrated Water Resources Management Advisor (Expat)
Ibrahim El Assiouty	Integrated Water Resources Management Specialist (Egyptian)
TBD	Administrative Support Specialist (Egyptian)
TBD	Water Resources and Irrigation Specialist (STTA)
TBD	Agricultural Economist/Irrigation Systems Specialist (STTA)
TBD	Water Policy Specialist (STTA)
Gene Owens	Environmental Institutions and Policy Specialist (Home Office – STTA)
TBD	Legal, Institutional and Organizational Specialist (STTA)
TBD	Info Tech/Mgr (STTA)
TBD	Other Technical Expertise (STTA)
RSSTI TEAM (PA)	
Hoda Hamdy	Administrative Manager and RSSTI Project Coordinator (Egyptian)
Hani El Nahlawy	RSSTI Geographic Information Systems (GIS) Specialist (Egyptian)
Mohamed El Khatib	Senior Urban Planner (Egyptian)
Ihab Shaalan	Environmental Management Systems (EMS) Specialist (Egyptian)
Amir Gohar	Environmental Impact Assessment (EIA) Specialist (Egyptian)
Rania Farid	Accountant (Egyptian)
Bill Meade	Environmental Management Expert (Home Office – STTA)
Baca Szell-Salmon	Info Tech Mgr/HO Admin (STTA)

Name	Title
RED SEA NCT ACTIVITY	
Mostafa Saleh	Other Technical Expertise – Eco Loans (STTA)
Ramez Azmy	Other Technical Expertise – Ecolodge (STTA)
Emid Farid	Other Technical Expertise –Awareness Campaign
RED SEA COASTAL/WATER PROJECT MANAGEMENT	
Jim Tarrant*	Program Manager/Chief of Party (expatriate)
Dione Cotrill	Admin/Finance Officer (expat)
Sylvia Fahmy	Admin/Finance Assist (Egyptian)
Zeinab Abdel Razek	Workshop/Training Coordinator (Egyptian)
Somaya Anwar/Mahmoud Said*	Sr. Accountant (Egyptian)
Russell Misheloff	Technical Project Manager (Home Office – STTA)
Sarah Durso	Program Specialist (Home Office – STTA)

Note (*): Somaya Anwar resigned in Feb 2004

ANNEX 5: LIST AND SPECIFICATIONS OF COMMODITIES AND PROCUREMENT PURCHASED AND TRANSFERRED TO THE GOVERNMENT OF EGYPT UNDER THE RSC/W CONTRACT

This annex consists of a list of all equipment and commodities procured by IRG on behalf of USAID and transferred to the Government of Egypt EEPP counterparts during the period of the RSC-W project (September 2003 – September 2004). A separate Attachment with the List Of Commodities Purchased and Transferred to :

**EEAA
MWRI
TDA, and
RSG**

along with signed and stamped Transfer Forms has been provided to USAID in their copies of the Final Report

ANNEX 6: ECOLOAN AND ECOLODGE PROJECTS UNDERTAKEN BY EQI DURING THE NCT PILOT PROGRAM

Eco-loan Projects:

I. Ababda refreshments tent

Project status: Operating. Self-financed upgrading is in progress.

Operators and micro-finance recipients: Four individuals from the Ababdi village of Qulaan have expressed interest in loans to finance the upgrading and expansion of this project.

Loan status: Loan application documents have been prepared for *Banque du Caire*. Disbursal is awaiting final adoption of new micro loan regulations due on or shortly after 13 September 2004



Project background and concept: Qulaan is a small Ababdi village located on the Red Sea coast, south of the mining town of Abu Ghusoon at a prime location in the midst of a lush mangrove stand. The community living at this village comprises 16 families, all of who are from the Ababda tribe, and engage in fishing activities and small-scale handicraft production. Trinkets bought from Aswani traders usually supplement the local handicrafts, and makeshift

Hamdallah Macarona's Refreshment Tent for Tourists in Qulaan tables are set up to display the various trinkets for tourists. A small, plywood and driftwood hut, owned by Hamdallah was used before the opening of the Qulaan refreshments tent, to offer traditional Ababdi coffee (*gabana*) and tea to visitors and tourists.

Tourists visit the area to see the mangroves and enjoy the outstanding beauty of the Qulaan Bay. Interaction between these tourists and community members is generally limited. Tourists may buy trinkets from the girls standing at the tables or sometimes have *gabana* at Hamdallah's hut. Therefore, the Ababda community living in Qulaan did not benefit to any great extent from the frequent visitation of tourist buses and they remained an underdeveloped community with almost no basic services and no avenues of income generation besides their traditional activity of fishing and the infrequent sale of handicrafts.

Hamdallah Macarona, one of the members of the Qulaan community, is keen to see his community benefit from the flow of tourists to the area, and therefore came up with the idea of establishing a small Ababdi refreshments tent in Qulaan, built in the traditional Ababda style and using traditional materials. This refreshments tent would serve typical Ababda beverages served in the traditional manner, like the *gabana*. The tent would also provide other refreshments so as not to limit their business potential.

The way Hamdallah envisioned the tent is that it would be made out of a material called *borsh*, which is a pliable palm leaf sheet and is used to construct traditional Ababda homes. *Borsh* comes in rolls, each containing about 10 sheets. The floor of the tent would be decorated with

homespun rugs made by the women of the community. He estimates that the tent would require five *borsh* rolls to cover the area, and about 12 hand woven rugs to cover the floor. Seating will be on the floor, with specially designed back-supports to blend with the style of the tent. This back-support was envisioned as U-shaped. The wood to be used as the skeleton of the structure would be taken from dead branches of *siyal* (*Acacia spp.*) *gazwarina* (*Casuarina equisetifolia*) and *kafur* (*Eucalyptus spp.*) trees. Dead branches of *Aushar* trees (*Calotropis procera*) are used to construct the dome-shaped roof of the tent. Ropes used to secure the wood skeleton will be handspun from livestock wool. Hamdallah described his vision for the structure to our team of architects, who then helped him to develop the design to the highest standards.

The EQI architects, following the advice of the EEAA, and the protected area management team, established the location and capacity of the café within the Qulaan area. They also assisted in the overall design concept, guiding the construction to blend optimally with the beach location at Qulaan, and advising on the use of traditional building materials and styles.

Hamdallah provided a rough estimate of about LE 3500-4000 as the amount necessary to establish the refreshments tent, with the associated equipment and other items. He suggested that the cost of the project should ideally be shared by a number of individuals. Hamdallah introduced to us 3 other men as willing partners (Eid Abdel Rassoul, Mohamed Abdel Kheir, Said Saleh). It appears that a group-lending model would be most suitable for this type of setup.

The micro finance manager of the Safaga branch of *Banque du Caire* accompanied the EQI team to the project area and held several meetings with potential borrowers, including Mr. Macarona. Subsequent to these meetings, the appropriate paperwork for loan disbursal was prepared and is awaiting final approval due on or shortly after 14 September 2004. At this time, four loans will be disbursed to Hamdallah and his three partners who have so far assumed the burden of construction costs and are awaiting sufficient fund coverage to finish the refreshments tent to the original specification.

Meanwhile, Hamdallah and his partners have undertaken the construction of the tent and have personally assumed the responsibility for funding its construction but now have to wait until bank funds are mobilized to take the finishing touches of the tent to completion. For example, hand woven rugs presently cover only a quarter of the tent floor space, and the rest is covered with cheaper commercially available *kelims*. Once micro-loans are mobilized, Hamdallah will be able to complete the tent to the original specifications that fully adhere to Ababda styles and materials.

The tent itself was constructed in the Ababda style, complete with *borsh* sheets for the walls and ceiling, natural wood and rope making up the tent skeleton and hand-woven rugs for the floor. The dimensions of the tent are approximately 10x7m and could comfortably seat about 30-35 people. The finishing of the work was tidy, and the layout of the tent was neat and clean. The tent provides the only spot of shade on the beach in Qulaan, and is already attracting tourists who seek refuge from the sun in its shade, and order drinks and food from Hamdallah. In recent weeks, Hamdallah has been reporting a steady increase in business, and has even added a kitchen extension to his tent to cater to the demand for locally made fish dishes. Hamdallah also serves the traditional Ababda coffee, or *gabana*, which he prepares on coals in a metal vessel in the tent, as well as tea, an assortment of soft drinks, and water.

II. Camel tours in Wadi El Gemal National Park:

Project status: Operating on irregular basis. Major upgrading is required.

Operators and micro-finance recipients: Six to ten individuals from the Wadi El Gemal area have expressed interest in loans to finance the upgrading of their activities pending the availability of marketing support. Support by the Wadi El Gemal Park management will be crucial to give these native entrepreneurs the badly needed competitive edge over the better equipped competitors of the Nile valley who are not operating in nearby areas.

Loan status: Loan application documents have been examined and evaluated for possible submission to *Banque du Caire*. Disbursal is awaiting final adoption of new micro loan regulations due on or shortly after 13 September 2004.

Project background and concept: This activity is closely linked to the plan made by the park management to ban all vehicles from the lower part of Wadi Gemal, which is known for its wealth of wildlife and other natural attractions. This lent a direct opportunity for the local Ababda community to fill the transportation gap in the Wadi, to offer camel tours for areas not traversable by motor vehicles. This activity is being developed with input of the protectorate management team to identify trails, camel paths, and stops along the tour.

Through extended dialogue with the group who expressed interest in these tours to assess requirements for the proper setup of this activity, we collectively came up with a long-list of upgrading activities that need to be addressed. The following upgrading and capacity building, and administrative activities have been identified:

- Procurement of the necessary camel paraphernalia so that tourists can comfortably ride on them (saddle, stirrups, etc.).
- Familiarizing camel tour operators with the routes and stops set by both TA team and the protectorate management team.
- Develop a licensing and management scheme in collaboration with the park management.
- Train camel tour operators to provide a professional service, complete with hospitality training and image upgrading (cleanliness and presentability).
- Organize and arrange for a 'coffee break' along the way, where tourists can stop under the shade of an Acacia and have the traditional *gabana* coffee and a bite to eat. This can develop into a special project requiring its own financing through the eco-loan program.
- A veterinary check-up for camels and treatment for identified camel ailments, if any.
- Continue creating market linkages between community-led ecotourism services and the tourism industry and tour operators;

III. Boat trip using traditional fishing boats:

Project status: New activity Startup fund is required.

Operators and micro-finance recipients: Four fishermen from the Qulaan Village and one from Hemata have expressed interest in loans to finance setting up their fishing boats for this activity.

Loan status: Loan application has been examined and by the TA team and discussed with the micro finance officer of *Banque du Caire*.

Project background and concept: A group of Ababdi fishermen from the Qulaan Village, who own a six-meter fiberglass fishing boat, expressed their interest in operating fishing and eco-

sightseeing trips for tourists using their boat. Similarly, a fisherman from Hemata, who owns a fishing boat has expressed his interest in operating his boat for the same activity in the waters off Hemata. The fishermen envisioned the following activities during these boat trips:

Islands visits: The two islands visited, Shawarid, which hosts a small mangrove stand in the middle of the island, and Umm Sheikh, infused us with a sense of isolation and tranquility. The surrounding clear blue shallows allowed the observation of a whole array of species ranging from brilliantly colored crabs, to hordes of hermit crabs moving in great colonies along the white sandy beaches, and large numbers of nesting and breeding birds. Clearly, the islands can offer small groups of tourists an intimate nature based experience with options of wildlife observation, specifically bird watching, or simply relaxing and wading in the shallows in a setting truly representative of the Egyptian Red Sea coast.

Sports fishing: En route to the different islands, fishing can be an exciting activity. A variety of premium game fish is found in these waters. Developing this activity into a full-fledged sports fishing activity geared towards tourists is a lucrative option for local fishermen, and may allow them an avenue away from fishing for quantity to satisfy fish trader quotas. In exchange, the fisherman can opt for a lower catch, richer experience setup designed for tourists, to yield better monetary returns than fishing for trade, at the same time decreasing catch quantity, which eases pressure on fish stocks.

Other attractions: Fishermen also mentioned the possibility of taking tourist on tours to dolphin watching areas (similar to the one now operating off Samadai) and even dugong grazing areas.

The interior of the traditional fishing boat is equipped solely for fishing, with a below-deck cabin/berth for the fishermen to sleep and to store fish on short trips. A small outboard motor powers the boat, but is not especially powerful, so that traditional boats move along a lot more slowly than typical tourist boats. However, the boat can accommodate a sail, which can be used instead of the motor to provide a different kind of experience. Above deck, there is little comfortable seating space and nothing that can be taken as a proper seating area. There is also no shade from the sun, which is particularly unhealthy for those not accustomed to extreme exposure, and no safety measures on the boat, such as a first aid kit, life jackets, and handrails, all-important features for any vessel to be able carry passengers. In addition, because of the boat's small size and relatively slow speed, side-to-side movement is felt more acutely than on a large dive boat, and this may be unpleasant for those who are not especially comfortable at sea. All the above observations would require upgrading adjustment before these trips can be conducted in a licensed, organized fashion.

Due to insufficient time for implementation during this project's duration, and the time intensive nature of the technical assistance requirements for this activity, it was felt best to postpone the realization of this activity to a later stage. Furthermore, this activity may require larger sums of money than available within the small eco loan program for upgrading and adjustment, for which there may be special considerations at a later stage. One option is to allow time to reap returns from currently progressing ecotourism initiatives in order to bolster micro loans with personal funds.

However, it must be acknowledged that this activity has great potential for income generation for local communities, as well as the potential for high appeal to the nature minded traveler who seeks a locally tailored, culturally immersed ecotourism experience.

This initiative has been discussed with the relevant parties and an outline for implementation drafted to accommodate for future consideration.

IV. Glass bottom boats:

Project status: New project, startup fund is required.

Operators and micro-finance recipients: Four fishermen from the Qulaan Village.

Loan status: Financial and operational aspects have been investigated by the TA team and discussed with the micro finance officer of *Banque du Caire*. Approval by the EEAA and WGNP management before the project area can be further developed.

Project background and concept: Four fishermen from the Qulaan Village have expressed interest in loans to finance purchasing a glass bottom boat to operate in the Qulaan bay and surrounding waters. A similar project has been suggested to the Nature Conservation Sector of the EPPP by the EQI, TA team for operation by the Awlad Baraka, Ababdi fishermen in the Samadai dolphin area. Approval by the EEAA and WGNP management before the project area can be further developed.

Ecolodge Projects:

I. The Bishari Village Project:

Project status: New project. Self-financed, but additional startup fund may be required.

Operators and micro-finance recipients: Three individual from Shalatin are taking the lead for the realization of this project on behalf of a number of Bishari families now residing in the area.

Loan status: Financial and operational aspects have been investigated by the TA team and discussed with the micro finance officer of *Banque du Caire*..

Project background and concept: Following a similar example observed in Kruger National Park, Mr. Mohamed Gad (Director of the Southern Red Sea Protected Areas) established dialogue with Shalatin community members to see whether the idea appealed to them. The basic premise of the idea is for a small number of Bishari families to cooperate in building a typical Bishari village to cater for day-visits by eco-tourists, and eventually to receive overnight guests. Around six Bishari families will live in the village in traditional homes and continue with their life as they normally would. The tourists who will visit the village will be offered the experience of the authentic, day-to-day life and culture of the Bishari people and actively participate in their daily activities. Short trips on camel back or on foot to the adjacent wilderness areas as well as learning about local arts, crafts and other aspects of the local culture will form part of the experience offered to the guest.

The Bishari project proponents have selected an area of an exceptional natural beauty for their proposed project in Wadi El Gahliya about 40 km north of Shalatin. They expressed their desire to acquire co-financing for the project from a bank, although they clearly expressed their readiness to finance completely the project on their own if bank financing is not available.

The three Bishari tribesmen came up with a concept design for the physical structure of the settlement, which would accommodate 6 families in individual private housing, with a *diwan* (meant as meeting place) to connect the 6 that would also serve as the 'meeting place' for tourist visitors. The building style would adhere to the Bishari style, again made with *borsh* and a wood

skeletal structure, somewhat akin to the Ababda building style. All the daily equipment, clothing, and Bishari Village associated items will also remain true to the Bishari style.

The Bishari Tourist Village will aim to serve as a low-end ecolodge destination that is community owned and operated. In order to ensure the best chances of success for this initiative, the tourist village will serve only as a day-trip destination during the early stages of the project (a kind of incubation phase), so that ample time is allowed for feedback by tourists on the attractiveness of the place in terms of style, atmosphere, and service. Based on feedback and progress, the future expansion of the initiative to accommodate tourists for overnight stays will be gradually incorporated and phased in. Phasing-in the overnight stays (and hence the conversion to an ecolodge proper) is felt to be the best approach at this stage, because this community led project will be the first of its kind in the whole of the southern Red Sea zone, and therefore, the organizational and setup stages of this activity are absolutely critical.

The Bishari see their village as a way of extending hospitality to tourists in a culturally immersed way; tourists will experience the Bishari culture and customs by sharing first-hand in their day-to-day lives. The tourist would eat with them, participate in their dance and song, wear their clothing style, and take part in all other activities. Additionally, they would like an added source of income from this activity. The income would be both through a one-time fee per person per

day in the Bishari Village and through income for auxiliary activities, like nature tours.

The *diwan* is envisioned as covering an area of 10x6m and will probably require 10 *borsh* of 3x1m to cover it. The *diwan* would connect the five family houses in such a way that it can be broken down into several smaller areas, each headed by a different family and offering a different activity. For example, in one section, food can be served, whereas in another, Bishari arts and crafts could be shared. Besides *borsh* for building material, mud brick structures were seen in Shalatin as well. This is a relatively new building method for the Bisharin, but it has been successfully incorporated into many of their buildings and they find it in keeping with their building style.

The TA team of architects has sat at length with these three men to capture their vision for the structure, and developed a basic layout of the new

Bishari Village. The team has also identified the



Organizers of the Shalatin community ecolodge

most suitable and most readily available building materials with which to construct the ecolodge. The importance of this activity is to identify materials that are readily available and that can be extracted from the same environment in which the ecolodge will be constructed. This is to ensure a maximal blend between the ecolodge building structure and its natural surroundings.

In terms of the environmental cost for constructing this ecolodge, the building materials will draw on traditional Bishari building methods, which are all extracts from the surrounding

environment. These include sheets of *borsh* (natural twine-like fiber), wood from dead trees (both *Casuarina* and *Acacia*), and naturally handcrafted rugs made by local women from livestock wool. Furthermore, the lodge will be constructed near the Gacheleya Well, which will be the source of non-potable water. One of the men had the idea of establishing a well in the middle of the lodge space to accommodate a sufficient volume of water to cover usage needs for set number of days, rather than resorting to constant vehicle transport and storage in an unsightly container. The lodge will also be equipped with dry toilets, or an environmentally friendly variant thereof (options are still being looked into), and the protected area management team is presently addressing solutions for the challenges presented by solid waste.

ANNEX 7: EXAMPLE OF ECOLOGE DESIGN SUPPORT ACTIVITY UNDER THE NCT WORKPLAN

Mr. Samir Hammam, an investor in a lodge development project along the southern Red Sea coast, has visited EQI on a number of occasions to discuss how EQI can extend its services, under the auspices of the RSSD Component of the RSC-W project to help guide the further construction of his lodge in Marsa Shagra in a more environmentally aware direction, and also to discuss how EQI can facilitate access to appropriate loan funds for the completion of his project. Mr. Hammam submitted to EQI copies of the site plan to his lodge, along with a business plan report for his lodge construction. The site is bounded eastward by the Red Sea and westward by the Marsa Alam – Quseir road. It hosts a number of administrative, commercial, and tourist lodging buildings, in addition to athletic and service areas.

The TA team visited the lodge development site in Marsa Shagra, which is an area that currently hosts the densest tourism development in the Marsa Alam area and is situated approximately 25km north of the town of Marsa Alam proper. Based on the site plans given to TA team prior to the field visit, some noticeable changes from the site plan were observed during the site visit. The particulars of the original site plan have already been subject to an Environmental Impact Assessment, and have been approved by the Egyptian Environmental Affairs Agency (EEAA).

The building site includes a main building, built in the style of the fortress at Quseir, 30 chalets located near the main building, designed in an eclectic style, and 15 others built near the northern periphery of the property, to which another 5 are currently being added. Cutting across the property runs a natural ‘wadi’ that has been planted with olive trees acacia trees and some other desert plants.

Observed building materials used in construction include limestone casts of fossilized corals quarried on-site, wood, and cement. Water is supplied through a local desalinization plant situated near to the development site. No coastline development is observed, and the required coastal setback had not been determined as construction is as yet not complete.



Based on the examination of the project site plans as well as the results

Example of an ecolodge near WGNP © Mindy Baha El Din

of the site visit, the following recommendation are made to help improving the resort image as an ecolodge and to ensure the strict compliance with environmental criteria for ecolodge design, construction and operation.

To accentuate the greenery intended for the wadi running through the property, native flora should be used to enhance the landscape rather than introducing species that are not native to the area. Landscaping elements should reflect the local conditions in the Eastern Desert or the Red Sea coastal areas as much as practically possible. A number of trees and other plant species (e.g. *Acacia raddiana*, *Balanites aegyptiaca*, *Moringa peregrina*, and *Dracaena ombet*) that grow naturally in the area can be used. The use of trees that are not native to the area such as the olive and Nile acacia trees should be minimized.

- The main building architecture is based on a style that vividly represents a unique Red Sea architectural heritage based on the building style at Quseir and its famous fortress. Further construction could draw on such local designs, to capture the feel of the southern Red Sea.
- Passive heating and cooling systems should be a primary design objective. The use of *malaqef* could be considered, and local expertise exists to integrate such passive systems into architecture, since this system can be observed in operation as near as Quseir.
- If electricity is a necessity for operating the premises, then precaution should be taken to minimize pollution resulting from electricity generation (noise and air).
- Sewage treatment can be undertaken through the construction of a wetland system, which is a natural, odorless, and effective way to treat sewage effluent, and renders the treated water safe for irrigation purposes.
- There should be a clear, main path or spine for the guest movement through the resort. The path should be designed to introduce the guests not only to the resort and its amenities, but also to the entire Red Sea area and its environment. The existing path requires major reconsideration giving more careful attention to the spectacular sea view, the imposing mountains in the background and the rich topography of the site. Landscaping using native flora and local natural materials would be most crucial for creating a highly attractive path for exploring interesting elements of its desert life. Any artificial structural and other elements that will be used along the path, such as stairs, seats, etc. should be made using natural material. Accordingly, substituting concrete for naturally available material is recommended, unless concrete is absolutely essential. For example, the path constructed around the premises should preferably be leveled and compacted earth, or graveled ground, rather than concrete.
- A shallow reef table of about 100 to 400 meters width fronts the site. Although mostly made of dead and fossil coral, a wealth of marine life exists on and around the surface of this reef. The outer reef edge is where the spectacular marine life which characterizes the Red Sea is found. For a swimmer to reach deeper water suitable for swimming and snorkeling, he/she would have to walk on the reef table for hundreds of meters. In addition to the hazards associated with walking over the jagged reef, considerable damage to reef-associated fauna and flora will take place. A safer and more environmentally sound means for crossing over the reef table is essential for the safety of the guests and marine life alike. Accordingly, a walkway should be constructed across the reef table to take swimmers directly to the deep water. This walkway can be a wooden construction supported on steel piles, and built parallel to the beach and connected to the beach with a number of wide walkways. It is essential to select the right location for this walkway according to the environmental concerns and the marine life.

- The possibility of using a constructed wetland system for wastewater treatment should be considered. This passive, environmentally sound system would provide clean treated water that can be used for irrigating green areas and would greatly enhance the environmental image of the resort as an Ecolodge.

Locally quarried, fossil-rich limestone is used to build the bearing walls of this impressive building. Wooden beams and planks are used for roofing. Although the use of these natural materials is generally in line with the basic ecolodge concept, some structural aspects of the building may have to be re-examined. Most obvious is the roofing, which appears to be rather weak. Strengthening the ceilings with an additional layer and beam support is necessary. The double layer roof will considerably improve insulation and will allow a much better placement of electric wiring and lighting.



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