

**Final Evaluation
of the UNDP/GEF Project LEB/95/G31/1/1G/99**

**Lebanon: Strengthening of National Capacity
and Grassroots In-Situ Conservation
for Sustainable Biodiversity Protection**

Known more commonly as the

Protected Areas Project (PAP)

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ABBREVIATIONS AND ACRONYMS

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|--------|---|
| ARD | Arab Resources Development S.A.L. |
| ASC | Al Shouf Cedar Society |
| AUB | American University of Beirut |
| C&D | <i>Conseil et Développement S.A.L.</i> |
| CDR | Council for Development and Reconstruction |
| EPC | Environmental Protection Committee |
| FOHE | Friends of Horsh Ehdén |
| GAC | Government Appointed Committee |
| GEF | Global Environmental Facility |
| GIS | Geographic Information System |
| GOL | Government of Lebanon |
| GPS | Global Positioning system |
| IO | Immediate objective |
| IO-1 | Immediate objective n°1 |
| IUCN | The World Conservation Union |
| LP | Lebanese pound |
| LU | Lebanese University |
| M&E | Monitoring and evaluation |
| METT | Monitoring Effectiveness Tracking Tool |
| MOE | Ministry of Environment |
| MP | Management plan |
| MT | Management Team |
| NBSAP | National Biodiversity Strategy and Action Plan |
| NGO | Non Governmental Organization |
| NRM | Natural Resource Management |
| PA | Protected Area |
| PAP | Protected Area Project |
| PAW | Department of Protected Areas and Wildlife, planned but not created |
| Prodoc | Project document (UNDP terminology) |
| SISPAM | Stable Institutional Structures for Protected Areas Management |
| SPNL | Society for Protection of Nature in Lebanon |
| UNDP | United Nations Development Program |
| WB | World bank |
| WWF | World Wide Fund for Nature |

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Executive Summary

The Protected Areas Project's (PAP) overall development objective is to conserve endemic and endangered wildlife and their habitats, incorporate wildlife conservation as an integral part of sustainable human development, strengthen the institutional capacity of governmental agencies and non-government institutions, and promote national reconciliation. The Evaluation Team finds the overall project design to have been highly relevant and pertinent for Lebanon. The lack of impact indicators in the design document, however, has been an important constraint for both project implementation and for this final evaluation.

The development objective places the first and primary focus on conservation of biodiversity. All of the available information indicates the project has been very successful at this most basic level of protecting the biodiversity and habitats of the reserves from well-known human pressures – although there is almost no monitoring data to document this. There is clearly a strong base of support for conservation of the reserves amongst a wide range of stakeholders and authorities.

There has been very significant progress on the development of capacities to manage PA. However, capacity development has been far below what it could have been. This is especially true for the Ministry of Environment. During project preparation, the GOL committed itself to the creation and staffing of a Department of Protected Areas and Wildlife (PAW) within the MOE. A significant part of the capacity building by this project was to have been focused on the PAW. This department has not been created

The three reserves all have functional management systems and are managed by local management teams. Management plans were prepared and approved for all three reserves. However, the plans are very general and lacking in much of the detail that is critical for effective management. Some of the key weaknesses of the management plans are the following:

- Little or no identification of the spatial priorities for conservation within the PA.
- Little or no identification of threats to the reserves and their biodiversity nor analysis of the root causes of these threats;
- No zoning of the reserves -- no definition of what types of activities are to be permitted in each part of each reserve.
- No plan for enforcement
- No plan for visitor management
- No identification of the infrastructure and equipment needs for the reserve;
- No specifics on natural resources management (control of invasive species, fire management, restoration and recovery programs, buffer zone management, etc.)
- No identification of the specific types of research needed to better manage each reserve;
- No definition of the specific needs for monitoring – Why monitoring is important, what should be monitored, by whom, at what cost and when?
- No definition of the number and types of staff needed to manage each reserve.
- No plan for awareness raising
- No plan for revenue generating or development activities for the benefit of local communities;
- No business plan with analysis of recurrent costs, investment costs, financing plan and budget.
- No timetable for sequenced implementation of the planned activities.

National institutions have been heavily involved in a number of studies in support of the three PAs. However, the studies have been poorly organized (major delays) and poorly defined in relation to the key information needed for PA management. It is not clear that significant capacity has been built within these national institutions.

One of the project objective calls for efforts for defining an overall strategy of conservation in Lebanon. This has not been achieved. There is no overall conservation strategy defining conservation priorities and the means for conserving them.

None of the site-level capacity building was focused on the enhancing the internal systems of management and governance of the local NGOs that were responsible for hiring and overseeing the Management Teams at each reserve for the first five years. The Evaluation Team believes that this may have been a strategic error in project design and implementation.

The awareness raising at the local level has been quite successful. The reserves are generally respected by the local populations and are increasingly a source of pride for them. The impact of awareness raising at the national level is much more difficult to judge.

In order to focus resources where they are most critically needed, conservation priorities for each PA should be identified, prioritized and presented in easily understandable cartographic form. In order to properly protect and manage a protected area, it is critical to identify and prioritize the threats and to analyze the root causes of the threats. This knowledge base on threats is essential for developing effective strategies and interventions for countering the threats to the PA.

The statement of objectives in a PA management plan should define what one hopes to achieve during the life of the management plan. Objectives should be as specific and quantifiable as possible. Objectively verifiable indicators should be defined to allow managers and oversight agencies to monitor the level of achievement of the objectives that have been set.

The management plan should define appropriate measures that seek to make the experience of visitors to PA as rewarding as possible while ensuring the objective that the conservation of the reserve and its biodiversity is not endangered and while contributing to the costs of PA management. The definition of the carrying capacity for tourism must be given especially high priority in Lebanon, given the very small size of many reserves.

Worldwide, there is growing recognition of the need to intervene in different ways within PA in order to maintain conservation values in protected areas, especially on small reserves. This may involve such things as invasive species control, habitat manipulation for critical species and different forms of fire management. The management plan should identify which invasive species of plant or animal will be targeted for control measures, how the control will be done and what types of trials or research may be needed to develop cost-effective control measures. Fire management policies will need to be developed and the capacities and equipment needed to implement these policies will need to be developed or acquired. Capacities to be developed include the capacities for fire prevention and fire suppression and possible the capacities to use controlled burning as a protected areas management tool.

The PA management plans should define the functions of the PA buffer zone and should define the types of uses that will be developed/permitted. The management plan should also analyze the adequacy of the 500 meters and should propose changes to its width and boundaries as needed. Buffer zones provide opportunities or “laboratories” for the development of sustainable natural resource management systems that benefit biodiversity conservation and that serve as pilot interventions that may find broader application for NRM in the country or region in general.

Everyone involved with managing or supporting Lebanon’s PA need to start to pay much more attention to the process of ecological change in the PA. And ultimately one will need to decide whether one will allow these ecological changes to run their course or whether one should intervene on some sites to manage the landscapes and the biological communities to better achieve specific objectives. One may decide to include measures in the management plan for restoration or species recovery. This may include habitat manipulation, captive breeding and/or reintroduction of species.

PA management plans should define and prioritize the management-oriented research needs. M&E should be seen primarily as a management tool – a tool to measure whether or not management objectives are being met and to indicate whether management strategies and interventions need to be modified. The management plan should define the infrastructure and equipment needs for PA management. The needs for, and types of, awareness raising should be defined in the management plan.

Local community/stakeholder support for PA is critical. Developing such support is often complicated. Incentive programs need to be very carefully thought out and should be included in PA management strategies.

The PA management plan should define the staffing needs for PA management and should define TOR and qualification for each position. The management plan should identify training needs and the means for filling them. The business plan for each PA should include an analysis of the costs of PA management and should develop a financing plan for meeting those costs through identified sources of revenue. The management plan should include a timeline for implementation of the various activities defined in the MP.

The Evaluation Team recommends that the WB/WWF Management Effectiveness Tracking Tool (METT) be used annually for each protected area as a tool to help key stakeholders to systematically and strategically analyze PA management effectiveness. At a minimum, the MOE staff person responsible for PA should participate along with GAC members and the managers for each PA. One day should be set aside for applying the METT to each protected area. The most useful portions of the METT are the two columns for “comments” and for “next actions”. When using the METT, the comments and Next Actions from the previous year should be reviewed together.

It is critical to develop a law that authorizes the collection of park entrance fees and that allows the local managers to reinvest these fees directly in the management of the park. This is an urgent need for Palm Islands Nature Reserve. One other financing option that should be given serious consideration would be the creation of a protected areas network trust fund.

PA managers currently suffer from an exceptionally high level of job insecurity. The Evaluation Team recommends that a major part of government contributions should be dedicated to covering core management staff salaries to improve the level of job security.

The project has experimented with two different institutional options at the local level – and neither has proven to be very satisfactory. Creation of the GACs clearly has not resolved the structural problems of the earlier NGO management. Strengths of the GACs include : a) their creation has increased the number of stakeholders involved in PA management, and; b) representation of municipalities facilitates integration of PA into local government programs and support. Weaknesses include: a) heavy involvement of municipalities introduces a significant political element into PA management; b) GAC members are volunteers, but have been given full responsibilities for hiring & supervision and management of funds; c) disagreements within the GACs or failure to meet have led to paralysis of decision making. The management teams and the management of the PA suffer as a result.

To strengthen the institutional framework for AP management, much greater attention should be paid to development of strong, detailed PA management plans. The roles and responsibilities of Management Teams should be strengthened. The role of the GACs should be primarily one of stakeholder consultations to provide input into PA management. The GACs should not have a hierarchical role as the employers of the management teams.

The Management Teams primary functions should be the following:

- They should have the lead role in PA management planning. Strong guidelines and support mechanisms need to be developed, but the local management team knows their PA best and should have the primary responsibility for developing the MP.
- Responsibility for enforcement
- Responsibility for visitor Management
- Responsibility for natural resources management
- Responsibility for infrastructure development & maintenance
- Responsibility for certain monitoring functions
- Responsibility for local awareness raising

PA management related functions that should be filled at the national level include:

- Development of strategies and plans for biodiversity conservation and the PA network
- Develop standards, criteria and guidelines for PA management
- Provision of expertise in support of PA management & planning
- Financing and fundraising
- National awareness raising
- Some forms of monitoring

A full range of institutional options for PA management are identified. One of the most promising institutional options would be to have a national NGO that is mandated by GOL to be responsible for managing the national network of PAs in Lebanon. The management teams for each PA would be employed by the national NGO.

The Evaluation Team analyzed how well the GOL lived up to the main commitments they made during project design.

- The PAW has not been created and staffed. This has been a major impediment to capacity building within government.
- Annual support to local NGOs was provided during the first five years (prior to the creation of the GACs);
- No contributions have not been made by the GOL for the construction of the visitor centers at each PA.
- Three years after the original targeted completion date for the project, the GOL continues to provide significant funding for the management of the three PAs.

The Team would encourage the GOL to seek assistance from UNDP GEF for follow-on assistance to the PAP, and the Team would encourage UNDP/GEF to respond favorably to such a request. The Evaluation Team recommends that the following orientations be considered for future UNDP/GEF support to Lebanon:

- Future support should focus on reinforcement of the national network of PA rather than on the management of individual PAs;
- The new project should elaborate a strategy for development of a representative PA network with viable areas of the full range of remaining ecosystems/habitats. This would involve a gap analysis to compare the existing PA network with the range of ecosystem/habitat/vegetation types in the country to identify gaps in the coverage. The project should then go on to identify and analyze candidate sites and corridors for filling the gaps and completing a viable, representative network of PA in Lebanon
- The project could support the development of a knowledge management system in support of PA management and biodiversity conservation in Lebanon. Such capacities could probably be built effectively within universities and/or NGOs;
- Targeted support and capacity building for effective PA management planning is needed. Two or more PA could be selected as pilots for the development of model management plans per the recommendations made in this report. Guidelines for management planning should be developed. A range of specialized support capacities should be developed in a range of

institutions – NGOs, universities, private sector businesses and government. Criteria for approval of management plans need to be developed.

- There is need for support for the development of model M&E systems that respond directly to information needs for PA management. Guidelines for M&E need to be developed.
- The new project could support the creation of a PA network trust fund (the feasibility of such a fund would need to be analyzed during project development).
- The project could support the development of capacities for the economic and financial valuation of biodiversity and PAs;
- The project could work on the development of effective economic incentives for biodiversity and PA conservation
- The project could support the modification of the METT tracking tool to Lebanese conditions
- The project could evaluate the need for new categories of PA and support legislative reform as appropriate.
- The project could integrate biodiversity and PA conservation into the Land Use Plan/ land use planning for Lebanon

Recommendations for follow-on actions to this final evaluation are developed.

Introduction

Context

The Protected Area Project (PAP) was designed at a unique period of optimism as Lebanon was emerging from an extended period of war. The PAP supported the development of management systems for Lebanon's first three protected areas (PAs). Two of the PA covered significant portions of the remnants of Lebanon's once extensive cedar forests. Given the importance of the cedars of Lebanon in the national identity, it is quite surprising that Lebanon got started so late on the development of a PA network.

The ecosystems of Lebanon must be amongst those that have been the most strongly impacted over the longest period of time – historical pressures include overgrazing, overcutting, overfishing, overhunting and man's use of fire. However, with the phenomenal construction boom since the end of fighting, they are now under pressures that are unique in the country's history.

This initiative was and still is important for Lebanon for many reasons. These include:

- Conservation of portions of the country's remaining ecosystem as part of their natural heritage. The level of environmental awareness in Lebanon has historically been quite low. The environmental movement in Lebanon is still quite young. The development of a growing public awareness of the need for creating and managing a network of PA has been an important part of this growing movement.
- The development of capacities for PA management has been critical because such capacities were non-existent before this project started. Capacity development has involved a multi-sectoral approach that has fostered the development of relationships between several institutions (public, academic and professional)
- The development of nature reserve-based eco-tourism is new to Lebanon. It involves both local tourism and international tourism. International tourism now constitutes about 13% of the general economic income of the country.

Overview of the project

The global objective of the project was to put in place an effectively managed system of protected areas to safeguard endemic and endangered species of flora and fauna, conserve their habitats and incorporate biodiversity conservation as an integral part of sustainable human development.

The global objective was supported by three immediate objectives:

- test a specific model of three demonstration parks where the MOE, local NGOs and in-country scientific institutions will cooperate and coordinate to promote the long term ecological and the short term economic objectives of wildlife conservation
- incorporate educational and sensitization components directed toward the local communities, the public at a national level and the decision makers
- promote national reconciliation by bringing people and institutions together for the conservation of the nature

The project was originally designed for 5 years. It was eventually extended for an additional three years through no-cost extensions.

The Government has contributed an amount of 1,856,100,000 Lebanese pounds between 1998 and 2003 for the PA. In 1998, there were only 3 PA and they have received, each of them, at least 40 million LP/yr. In 2003, each of the PA receives at least 82 millions/yr.

TOR & Methodology

TOR The TOR for this final evaluation are presented in Annex A. As the project is now over, the main purpose of the evaluation is to determine what the impacts of the project have been, to identify lessons learned and to make recommendations for the future based on the project experience.

The Evaluation Team encountered a confusing array of different versions of the Project Document. UNDP provide the Revised Project Document of June 1997 as the basis for the evaluation. Two other substantially different versions of the Prodoc were found, including project document that was signed by UNDP and GOL. This evaluation has been based on the signed Prodoc. The GEF Project Brief that was approved by GEF SEC was also located. It is an amazingly brief, skeletal document of only 5 pages plus short annexes. Another source of confusion were the multiple versions of the monitoring manual produced by Greenline, each of them presented to the Evaluation Team as the “final” version.

The evaluation was based on document review, interviews, field visits and the use of the WWF/WB Management Effectiveness Tracking Tool. Before each interview, the Evaluation Team sought to identify the key issues to be addressed. After each set of interviews, the two team members compared notes to reach a consensus on key points and to identify issues that required further investigations.

A critical part of the evaluation methodology was the three days spent in discussions by the two team members to reach a consensus on key finding and on recommendations before beginning the write-up of the evaluation report. Briefing were given to MOE and an expanded Power Point presentation was given to stakeholders including representatives of the management teams and GACs from the three PAs. The full draft report was submitted to UNDP and MOE. Changes and additions were made based on comments received. Key points in the final evaluation report have been italicized and high-lighted in blue.

Evaluation of the Project Design

Relevance of Project Design *The Evaluation Team finds the overall project design to have been highly relevant and pertinent for Lebanon.* The Project was designed at a very propitious and optimistic period when Lebanon was emerging from an extended period of war and a home-grown

environmental movement was rapidly developing. The project has benefited very well from this very favorable context within which it was developed.

Multiplicity Different Project Documents of The confused mix of different versions of the project document has already been sited in the introduction. The GEF Brief itself is an extremely short document of five pages plus 10 very short annexes of a total of 11 additional pages. Neither the Brief nor any of the different versions of the UNDP Prodoc contain many of the most basic components that have since become standard elements of GEF project briefs. These missing sections include:

- Identification of the threats to the biodiversity of the PA and an analysis of the root causes of these threats
- Presentation of the Baseline including identification of programmatic gaps
- The GEF Alternative
- Incremental cost analysis
- The project logical framework including impact indicators at the objective and outcome (immediate objective) levels.

Lack of Indicators *The lack of impact indicators has been an important constraint for both project implementation and for this final evaluation.* UNDP, MOE and all the project partners have never had clear indicators by which to monitor and judge the degree of success of this project. Properly defined indicators would have added to focus to the attempts to develop a monitoring system for the three demonstration reserves and for the growing network. Such indicators would have provided a clear focus for both the mid-term review and this final evaluation.

Weaknesses in design components

There is no recognition in the Prodoc of the importance of PA-based tourism. Visitor management has very quickly evolved as a principal focus of the management of the three reserves. The different project documents put all their emphasis on protection of the new reserves and make little or no mention of tourism. None of the 35 activities in the Prodoc are concerned with tourism development or visitor management.

Output 3.1 calls for the establishment of three revolving funds to be administered by three local credit committees to be established. Such a component can only be qualified as naïve – the management of successful credit programs is one of the most difficult challenges for a project to undertake and should only be entrusted to institutions with a proven track record in this area. It is to the credit of those that implemented the project that this output was dropped.

The Prodoc calls for the development of a monitoring system for biodiversity but is very vague about the justification, objectives or the functions of this system. This lack of focus has continued to be a problem throughout the life of this project.

Level of Achievement of Objectives, Outputs and Activities

Global Objective

The highest level goal or objective in the project document is the Development Objective. It is presented in the signed Prodoc as follows:

The project's overall development objective is to conserve endemic and endangered wildlife and their habitats, incorporate wildlife conservation as an integral part of sustainable human development, strengthen the institutional capacity of governmental agencies and non-government institutions, and promote national reconciliation.

Findings on biodiversity conservation *The development objective places the first and primary focus on conservation of biodiversity. All of the available information indicates the project has been very successful at this most basic level of protecting the biodiversity and habitats of the reserves from well-known human pressures.* The reserves were previously subjected to overgrazing, over-hunting, over-fishing (Palm Islands) and over-cutting. Some of the positive results of protection are readily visible to the eye – the recovery of the herbaceous cover and the sometimes abundant regeneration of cedars and other woody species that have resulted from the removal of goats and other livestock from the reserves.

It must be pointed out, however, that there are no functional monitoring systems and almost no monitoring data that show that biodiversity is successfully being conserved in these three reserves.

Findings on integration of conservation and development In spite of major social and political divisions, *there is clearly a strong base of support for conservation of the reserves amongst a wide range of stakeholders and authorities.* The rapid development of nature reserve-based tourism and the growing willingness of Lebanese to pay entrance fees that help cover the costs of managing the reserves both indicate that the protected areas are increasingly being integrated into the Lebanese socio-economic systems.

Findings on capacity development. At the time that the project was being designed, the country had almost no capacity for protected area management. *There has been very significant progress on the development of capacities to manage PA. However, capacity development has been far below what it could have been. This is especially true for the Ministry of Environment. During project preparation, the GOL committed itself to the creation and staffing of a Department of Protected Areas and Wildlife (PAW) within the MOE. A significant part of the capacity building by this project was to have been focused on the PAW. This department has not been created.* Only one full time staff member has been assigned to the protected areas and this person was appointed 3.5 years ago after most of the formal training activities of the project had already been completed. Capacity building at the site level has been much more effective.

Findings on support for national reconciliation This was a very ambitious objective, but the project has contributed positively towards this goal. The reserves are increasingly recognized as part of the national heritage of Lebanon and not simply as local treasures. The cedar forests are deeply anchored as part of the Lebanese identity. Following the war, the reserves served as foci to initiate renewed movements of people between geographic areas of the country. And the management teams of the reserves are multi-confessional.

Immediate Objective 1

The project's three Immediate Objectives (see Introduction) focus on: 1) the development of management systems for the three demonstration PA; 2) capacity building, and; 3) awareness raising and education. Several of the key findings have already been covered under the Development Objective above and only mentioned in passing herein. Additional findings are presented in this section for the three Immediate Objectives.

Findings on PA management Immediate Objective 1 (IO-1) calls for three demonstration protected areas managed by local teams according to management plans. The Evaluation Team finds *that the three reserves all have functional management systems and are managed by local management teams.* The essential management function of protection of the reserves has been especially successful. *Management plans were prepared and approved for all three reserves.* The plans cover the period 2000 to 2005.

However, the plans are very general and lacking in much of the detail that is critical for effective management. One would expect a management plan to define management objectives and then to

dedicate the main part of the document to the planning details that explain how to achieve the objectives. But the management plans for the three reserves consist primarily of statement of general objectives and of policies. Each management plan starts with general descriptive information that is specific to each reserve. But starting with the presentation of the objectives, the documents are so generic that there is almost no mention of any features that are specific to the individual reserves. In effect, the managers are left with little more than a set of generic guidelines.

As no one in Lebanon had ever prepared a PA management plan prior to this project, the project was highly dependent on IUCN for technical guidance on the development of the management plans. One must conclude that their technical support for management planning was weak.

Some of the key weaknesses of the management plans are the following:

- *Little or no identification of the spatial priorities for conservation within the PA.*
- *Little or no identification of threats to the reserves and their biodiversity nor analysis of the root causes of these threats;*
- *No zoning of the reserves -- no definition of what types of activities are to be permitted in each part of each reserve.*
- *No plan for enforcement*
- *No plan for visitor management*
- *No identification of the infrastructure and equipment needs for the reserve;*
- *No specifics on natural resources management (control of invasive species, fire management, restoration and recovery programs, buffer zone management, etc.)*
- *No identification of the specific types of research needed to better manage each reserve;*
- *No definition of the specific needs for monitoring – Why monitoring is important, what should be monitored, by whom, at what cost and when?*
- *No definition of the number and types of staff needed to manage each reserve.*
- *No plan for awareness raising*
- *No plan for revenue generating or development activities for the benefit of local communities;*
- *No business plan with analysis of recurrent costs, investment costs, financing plan and budget.*
- *No timetable for sequenced implementation of the planned activities.*

The weakness of the plans had multiple repercussions. The lack of detail in the plans places a much higher level of demands on the level of expertise required from the PA management teams. But all the teams were young and inexperienced and just beginning to develop their capacities for PA management. The lack of detail in the plans also places a much higher level of demand on the GACs and the MOE. With strong, detailed plans, these bodies could have concentrated on overseeing the implementation of the plans and their roles/-tasks would have been greatly simplified. As it was, these bodies, who had benefited the least from the training during the first five years of the project, were placed in positions of oversight and supervision of these generic plans that left the most important management decisions to be made during implementation.

Stronger plans would have lead to a clearer definition of training needs. They would have lead to a better definition of the types of baseline data collection and of the research and monitoring needed to provide the types of information needed for better PA management. The usefulness of budgets and timetables should be obvious. A better definition of threats and their causes are critical prerequisites for effective awareness raising.

Findings on studies by national institutions. IO-1 goes on to specify that national institutions would conduct studies, gather and publish data and monitor progress of the PA. The Evaluation Team finds that *national institutions have been heavily involved in a number of studies in support of the three PAs. However:*

- *The studies have been poorly organized (major delays) and poorly defined in relation to the key information needed for PA management.* For example, the recent biodiversity assessment

and monitoring study done by Lebanese University does not seem to have integrated the PA management teams in the conception and oversight of the study.

- No effective monitoring systems have yet been developed for the three reserves.
- The monitoring reports produced are especially weak in their analysis of the types of monitoring needed for effective reserve management.

Findings on conservation strategy IO-1 goes on to call for efforts for defining an overall strategy of conservation in Lebanon and for the preparation of a full document for a second phase of the project. The Evaluation Team finds *this has not been achieved*. Since the beginning of the project, the number of PA in Lebanon has grown from three to seven. The project itself has certainly been a catalyst for this growth. *However, there is no overall conservation strategy defining conservation priorities and the means for conserving them*. There has been no gap-analysis to identify which ecosystems and habitats are under-represented in the present PA network. The MOE continues to receive new requests for the creation of new PA, but the MOE is in a reactive position. They have no conservation strategy that would allow them to take a pro-active stance for the development of a coherent network of PA in Lebanon.

The National Biodiversity Strategy and Action Plan (NBSAP – 1998), should have developed a biodiversity conservation strategy for Lebanon, but it is very weak in this respect. By far the best document on this subject is a 2002 concept paper entitled “Lebanon Protected Areas Conservation Program” prepared for PAP by IUCN consultant Trevor Sandwith. The paper includes sections on the global biodiversity significance of Lebanon, threats to biodiversity, baseline, problem analysis, project rationale and objectives and project components and activities.

Sections of this concept were used to develop the new European Union-funded SISPAM project that is just starting. SISPAM will work on improving/developing a stable institutional framework for the protected area program. However, there has as yet been no dialogue between GOL and UNDP/GEF on the possibility of future UNDP/GEF support to and PA conservation in Lebanon, and there has been no development of a new project development. The Team Leader of the UNDP/GEF Regional office did indicate to the Evaluation Team that there would, indeed, be a potential for new UNDP/GEF support if the GOL were to request it.

Immediate Objective 2

Findings on capacity building IO-2 called for an enhanced capability of government agencies, scientific institutions and local NGOs to oversee, study and manage PA in an effective and sustainable manner. The problems at the government level have already been discussed. Site level capacity building has been much more successful as evidenced by the functional management systems that exist for each of the three reserves. However, nearly all of the capacity building was focused on the management teams and not on the institutions that employed these teams.

For the first five years of the project the three local NGOs that had been instrumental in the creation of the three reserves, were funded by the project to be responsible for the management of the three reserves. These NGOs appointed the management teams for the three reserves. In the end, two out of the three NGOs were judged by the mid-term review and by the MOE to be lacking in the institutional capacities needed. This led to the creation of the GACs and the transfer of management authority from the NGOs to the GACs. *None of the site-level capacity building was focused on the institutional capacities of the local NGOs – on their internal systems of management and governance. The Evaluation Team believes that this may have been a strategic error in project design and implementation.* The GACs also have not benefited from institutional capacity building. And building capacities in a committee of volunteers with three-year appointments is, by its nature, much more problematic than building capacities in established NGOs.

Findings on capacity of national institutions to conduct studies IO-2 also targets an enhanced capability of national institutions to conduct studies, gather and publish data and monitor progress of

the PA. *The Evaluation Team finds that national institutions have been heavily involved in a range of studies that have been funded by the project.* However, a number of the studies have not been well focused on the actual information needs for protected areas management. The studies have been conducted by national institutions, *but it is not clear that significant capacity has been built in these national institutions.* The quality of the studies done has been highly variable. A plethora of species lists has been generated, but species lists by themselves are of limited utility for PA management. Effective monitoring systems geared towards management needs have yet to be developed. Fundraising recommendations for the three reserves remain very generic.

Immediate Objective 3

Findings on Awareness raising and education IO-3 called for a “multi-dimensional [awareness raising and education] campaign... targeting local and national groups... in order to ensure... sustainability of biodiversity conservation efforts. The Team finds that *the awareness raising at the local level has been quite successful. The reserves are generally respected by the local populations and are increasingly a source of pride for them.*

A remarkable change in local attitudes has taken place at Palm Islands. When the creation of Palm Islands Reserve was proposed, one of the local fishermen organized a petition against its creation that was signed by 5000 people. This same fisherman has since been hired as a reserve ranger. He estimates that about 80% of the local fishermen are now supporters of the reserve. What more, there is a general recognition by these fishermen that the closing of the 500-meter marine buffer zone to fishing has actually resulted in an overall increase in their catch. (The possibility of creating similar “no-take zones” should be studied for their potential use as a fisheries management tool all along the Mediterranean coast in Lebanon).

The impact of awareness raising at the national level is much more difficult to judge. The number of visitors to all three reserves continues to increase significantly each year (an average of 30%/yr for Arz Al Shouf between 1999 and 2004. We have seen no statistics on the relative numbers of visitors that come from the local area versus those coming from farther away. Such a breakdown would give a much better idea of how well the reserves are known and appreciated at the national level.

The growth in the number of reserves from 3 to 7 is another indicator of success of the awareness raising at the national level. All are most of these new reserves have been the result of local demands. Other requests for the creation of PA have been received by MOE and are under study.

A more detailed analysis of the level of achievement at the Output and Activity levels is presented in Annex

Thematic Findings and Recommendations

Protected Area Management Plans

In the analysis of IO-1, the existing management plans were identified as a key weakness of the project and the missing elements were listed. In the section, the Evaluation Team develops its recommendations for how to improve the management plans.

Spatial identification of conservation priorities Protected areas often include both highly degraded areas of low conservation value and other areas with unique ecosystems/habitats or species of high conservation priority. *In order to focus resources where they are most critically needed, conservation priorities should be identified, prioritized and presented in easily understandable cartographic form.* This may include the localization of rare, endangered and threatened plant species and of critical habitats for wildlife species of high conservation priority.

Spatial analysis of threats The biodiversity and ecosystems within protected areas require protection because they are under threat. *In order to properly protect and manage a protected area, it is critical to identify and prioritize the threats and to analyze the root causes of the threats.* The main types of threats encountered in Lebanon are listed in the analysis of IO-1 in the preceding chapter. *This knowledge base on threats is essential for developing effective strategies and interventions for countering the threats to the PA.* The analysis of threats and root causes can be presented in a table of the following format:

| Threat | Bio-Physical Impacts | Root Causes | Mitigating Measures/Solutions |
|--------|----------------------|-------------|-------------------------------|
| | | | |

Threats are rarely homogeneous over the entire PA. Therefore, one should conduct a spatial analysis as to which parts of the reserve is affected by each type of threat and where the authors of the threats come from. These are critical for planning enforcement/control measures and for awareness raising campaigns.

Vision and principles The vision statement describes the situation or conditions that one hopes to achieve at some point in time in the future – generally a future date that is considerable farther away than the planned length of the management plan. Agreed principles underlying the management plan should be defined and presented.

Objectives and indicators *The statement of objectives defines what one hopes to achieve during the life of the management plan.* Objectives may be in part a function of the legislation that created the reserve. Objectives should define the relative importance of biodiversity conservation versus tourism development, use of the reserve for research and education, etc. *Objectives should be as specific and quantifiable as possible. Objectively verifiable indicators should be defined to allow managers and oversight agencies to monitor the level of achievement of the objectives that have been set.* The questions of who will monitor, how the monitoring will be done and how it will be financed should be addressed in the section on monitoring and evaluation.

Zonation of the reserve Based on conservation priorities, threats and other factors, PA are usually zoned for the development of different types of uses for each zone.

Enforcement This section of the MP should define which of the threats will be addressed through enforcement. As enforcement usually entails significant cost outlays, cost efficiency should be a significant consideration in the definition of the most effective enforcement strategies. The MP should address the legal basis for enforcement as well as the types of partnerships to be developed with the police, the military, or others.

Visitor management *The MP should define appropriate measures that seek to make the visitor experience as rewarding as possible while ensuring the objective of conservation of the reserve and its biodiversity is not endangered and while contributing to the costs of PA management.* Given the very small size of most of the PAs in Lebanon, visitor management and *the definition of the carrying capacity for tourism must be given especially high priority.* Visitor management needs to address topics of access points and control of entrance to the reserve, collection of entrance fees, visitor information, interpretation and guide services, trails, camping, toilets, rentals, sales, services, etc.

Natural resources management *Worldwide, there is growing recognition of the need to intervene in different ways within PA in order to maintain conservation values in protected areas, especially on small reserves. This may involve such things as invasive species control, habitat manipulation for critical species and different forms of fire management.*

Invasive species control *The management plan should identify which invasive species of plant or animal will be targeted for control measures, how the control will be done and what types of*

trials or research may be needed to develop cost-effective control measures and how to avoid re-introduction of invasives once they have been eliminated.

Fire management The elimination of grazing by goats and other livestock lead to an immediate increase in the risk and intensity of fire because of the marked increase of fine fuels in the dry season. As some of the previously degraded ecosystems now benefiting from protection evolve towards closed canopy forests, the risk of catastrophic forest fires may increase dramatically. A fire covering a few square kilometers at Arz Al Shouf may help maintain a diversity of landscapes and habitats. A fire of the same size at Horsh Ehden could devastate the entire reserve. The questions of when and how to intervene will need to be debated at length. *Fire management policies will need to be developed and the capacities and equipment needed to implement these policies will need to be developed or acquired. Capacities to be developed include the capacities for fire prevention and fire suppression and possible the capacities to use controlled burning as a protected areas management tool.*

The Arz Al Shouf management team has already developed two highly innovative natural resource management measures to diminish fire risk in, both of them involving controlled grazing. To protect individual stands of cedar of high conservation value, the MT has reintroduced goat grazing under highly controlled conditions to create grazed firebreaks around the cedar stands. The grazing is done by local goat owners under negotiated agreements. The second measure was to introduce a system of sustainable range management into the 500-meter buffer zone of the park. A system of grazing rotation between different parcels was introduced based on calculated carrying capacities. Local goat owners were given exclusive grazing rights under the condition that they respect the new management system. The range management in the buffer zone represents a sustainable natural resource management system that diminishes the fine fuel cover and has the side benefit of reducing fire risk to the reserve. The Evaluation Team strongly encourages the further testing of this type of interventionist measures under the caveat that they be combined with appropriate monitoring to ascertain their impacts on the biodiversity.

PA buffer zones Lebanon has opted for buffer zones of an arbitrarily chosen width of 500 meters. Some of the buffer zones, e.g Palm Islands, are given strict protection and are, in effect, managed as an integral part of the PA. *The PA management plans should define the functions of the buffer zone and should define the types of uses that will be developed/permitted. The MP should also analyze the adequacy of the 500 meters and should propose changes to its width and boundaries as needed – changes that may require legislative reform.*

Ecological succession and landscape management The importance of ecological succession seems to be little understood or appreciated by most people concerned with PA management in Lebanon. The plant and animal communities in the nature reserves have been heavily influenced by man's use of fire, hunting, grazing by livestock and harvest of different products for centuries if not millennia. Fire has a tremendous power to alter biological communities and man has probably been using fire in Lebanon for hundreds of thousands of years. The plant (especially) and animal species that compose the communities in the reserves today are those that have been able to adapt to these human pressures. The species composition and the structure of these communities have been severely altered from what they would have been in the absence of these pressures.

Now that most pressures have been removed, the fascinating process of ecological succession is beginning to drastically alter these communities. Many open, herbaceous-dominated communities may evolve towards closed canopy forests. In the absence of fire, the early sun-loving pioneer forest species would eventually be replaced by more shade-tolerant species that regenerate best under the shade of an established forest. The process of ecological succession will be very rapid on some sites, slower at other. As plant succession takes place in a plant community, its suitability as habitat for different animal species will evolve, sometimes drastically. Wildlife that is best adapted to open, park-like communities may not find their ecological niche in closed canopy forests. The aesthetic values of the communities will change – sometimes in a positive way and sometimes in a negative way. The

risk and nature of wildfires will change. Open herb-dominated communities subject to low intensity grass fires may become closed canopy forests subject to high intensity forest fires. On top of all of this are new ecological changes that will take place as a result of climate change and other man-made disturbances to the environment. Climate change can be expected to increase the altitudes where plants and animals find their most suitable niche.

Everyone involved with managing or supporting Lebanon's PA need to start to pay much more attention to the process of ecological change in the PA. One should try to predict the directions that ecological succession will take. One needs to monitor the change. One needs to analyze how these changes affect the habitats for rare, endangered and threatened species. *And ultimately one will need to decide whether one will allow these ecological changes to run their course or whether one should intervene on some sites to manage the landscapes and the biological communities to better achieve specific objectives.* Lebanon should develop increased expertise in ecological systems with particular emphasis on the topic of ecological succession.

Ecological restoration and species recovery programs For degraded ecosystems and rare, threatened and endangered species, *one may decide to include measures in the management plan for restoration or species recovery. This may include* the following types of interventions:

- *Habitat manipulation* – this involves managing manipulating plant communities to provide more suitable habitat for priority species. This may be done through controlled burns, selective cutting, etc.
- *Captive breeding* – This may be done for species at immediate risk of local or general extinction to build up populations for reintroduction in into natural areas.
- *Reintroduction of species* that have gone locally extinct – This is already being considered at Arz Al Shouf.

An example of the ecological complexities PA managers are faced with is illustrated in the following example. It has been suggested that the elimination of goats from Arz Al Shouf has had negative impacts on the suitability of this reserve for wolves – who used to prey on the goats. One way of improving Arz Al Shouf as habitat for wolves may be to reintroduce gazelles or ibex into this reserve, to increase the availability of some of the natural prey of this predator.

Sustainable NRM in the buffer zone *Buffer zones provide opportunities or “laboratories” for the development of sustainable natural resource management systems that benefit biodiversity conservation and that serve as pilot interventions that may find broader application for NRM in the country or region in general.* The development of range management in the buffer zone for Arz Al Shouf is a case in point. The closure of the Palm Islands marine buffer zone to fishing has had the serendipitous side effect of increasing the fish catch in the area – demonstrating the use of no-take zones as a fisheries management tool. Buffer zones may also be used for testing/developing new forms of natural forest management or wildlife management.

Management-oriented research program PA are very commonly the focus of basic research on species or ecosystems. It is much less common for research done in PA to be applied directly to the information needs of the PA managers. Such information needs are numerous. *PA management plans should define and prioritize the management-oriented research needs* and identify strategies for mobilizing the resources for getting such research done.

Management-oriented monitoring and evaluation Much greater thought and analysis should be given to the subject of monitoring and evaluation (M&E). *M&E should be seen primarily as a management tool – a tool to measure whether or not management objectives are being met and to indicate whether management strategies and interventions need to be modified.* Those who are providing funding for PA management should insist that appropriate indicators are identified and monitored to determine the effectiveness of their monetary support.

Monitoring must be strategic. The “shotgun” approach to monitoring must be avoided. One almost never has the resources to monitor everything one would like to monitor. Indicators must be chosen very carefully. The costs and responsibilities for monitoring must be carefully considered in developing monitoring systems.

Infrastructure, equipment and maintenance *The management plan should define the infrastructure and equipment needs for PA management.* Infrastructure needs may commonly include the following:

- Offices
- Visitor interpretation center
- Roads, trails and shelters
- Signs
- Toilets and sewage treatment
- Parking

Awareness Raising *The needs for, and types of, awareness raising should be defined in the management plan.* Responsibilities for awareness raising should be defined and costs should be budgeted.

Incentive programs for communities The support of local communities usually critical to the success of PA management. Many different strategies have been tried around the world for developing such support. Many of them go well beyond simple awareness raising to include different forms of incentives. Incentives may include sharing of visitor entrance fees, creation of PA-based employment, opportunities for sale of handicrafts and local produce, direct funding of rural development activities, etc. *Incentive programs need to be very carefully thought out and should be included in PA management strategies.*

Staffing and personnel management *The PA management plan should define the staffing needs for PA management and should define TOR and qualification for each position.* Where PA funding varies significantly from year to year (a very common situation) staffing priorities should differentiate between essential positions/functions and those that are desirable to fill when resources permit.

Training program Human resource development is critical to effective PA management. *The management plan should identify training needs and the means for filling them.*

The Business plan is a critical part of the PA management plan. *The business plan should include an analysis of the costs of PA management and should develop a financing plan for meeting those costs through identified sources of revenue.* This should include a definition of the investments needed to increase revenue generation. Management costs should be budgeted. The business plan for each reserve must be based on the specificities of each reserve. Tourist entrance fees will normally make up a major portion of the revenues needed to cover PA management costs. Revenue generating potential must be carefully balanced against the tourism carrying capacity for each reserve.

Workplan *The management plan should include a timeline for implementation of the various activities defined in the MP.*

Tourism carrying capacity

The Evaluation Team recommends that PA managers and other stakeholders in the PA network begin pay much closer attention to defining the PA carrying capacity for tourism development. This is especially important in Lebanon because tourism is growing rapidly and many of the reserves are very small. Tourism development may lead to negative impacts on the biodiversity of the nature reserves. One must seek to define the carrying capacity of each reserve. Doing this will involve a definition of the types of impacts in each reserve. One should pay special attention to the impacts of tourism on rare, threatened, endangered & flagship spp. For example, the presence of tourists may cause certain

predators or other animals to quit using those habitats frequented by the tourists. One needs to define the information needs for the definition of thresholds and for minimizing impacts. Developing the needed information may involve targeted research and the development and implementation of monitoring systems to measure impacts of tourism.

PA management effectiveness

Management teams, GACs and the MOE are all faced with the challenge of increasing PA management effectiveness. WWF and the World Bank (WB) have developed a Management Effectiveness Tracking Tool (METT – see Annex E) as a tool for monitoring and improving management effectiveness. The METT consists of a series of 30 multiple choice questions that systematically analyzes all aspects of PA management. The Evaluation Team applied it to all three protected areas, working with the management teams and/or GAC members for each site. The results are presented in Annex E.

All participants felt it is a useful tool. The discussions with PA managers and GAC representatives held while completing the METT were very useful to the Evaluation Team in synthesizing their finding and developing their recommendations for the final evaluation. *The Evaluation Team recommends that the METT be used annually for each protected area as a tool to help key stakeholders to systematically and strategically analyze PA management effectiveness.* Preferably, its use should be applied by a neutral, independent party, but the MOE PA staff could play this role. *At a minimum, the MOE staff person responsible for PA should participate along with GAC members and the managers for each PA. One day should be set aside for applying the METT to each protected area. The most useful portions of the METT are the two columns for “comments” and for “next actions”. When using the METT, the comments and Next Actions from the previous year should be reviewed together.*

Ideally, the METT should be modified to better fit the specific conditions of the Lebanese context. Further recommendations on use of the METT are developed in the last section of this report on an Action Plan for Follow-Up to the Final Evaluation.

Legal framework

The two laws creating the three reserves do not authorize the collection of entrance fees. Although the management teams for Arz Al Shouf and Horsh Ehden have successfully instituted a system of voluntary entrance fees, this has not worked at Palm Islands. This is a major and urgent problem for Palm Islands because it leaves them with the MOE contribution as virtually their only source of funding for reserve management. They attempted to institute the voluntary system a year or so ago, but were challenged by the local police to define the legal basis for collecting entrance fees. The GAC quickly decided to discontinue their attempt to collect entrance fees.

It is critical to have a law that authorizes the collection of park entrance fees and that allows the local managers to reinvest these fees directly in the management of the park. The Evaluation Team was told by MOE that the draft PA framework law does just this. The Team strongly recommends this portion of the framework law be passed in this form.

Financing of PA management costs

Sources of funding for PA management in Lebanon can be grouped in three principal categories:

- Government contribution. Everyone that the Evaluation Team met with considers the government contribution to PA management costs to be absolutely critical. The Team strongly encourages the GOM to continue to contribute substantially to PA management.

- Tourism-based revenues. This includes tourist entrance fees and the sales of articles (guide books, T-shirts, souvenirs) and services (guide services, rentals, etc.)
- Various forms of fundraising – special events, dinners, etc.

Much of the PAP's capacity building has been directed towards the PA management teams. Some of this capacity has already been lost. *PA managers currently suffer from an exceptionally high level of job insecurity. The Evaluation Team recommends that a major part of government contributions should be dedicated to covering core management staff salaries to improve the level of job security.* The management team should have the primary responsibility for overseeing all tourism-based income generating activities. But one should not expect the PA managers to have the skills needs to organizing and managing specialized fundraising activities – unless they are specifically recruited to have the requisite skills and experience for this.

One financing option that should be given serious consideration would be the creation of a protected areas network trust fund. This would probably require passage of enabling legislation to provide a legal basis for such a trust fund. The critical question would be the probability of adequately capitalizing the trust fund. Trust funds have overhead costs that are relatively independent of the level of capitalization of the fund. Small funds are generally not economically viable.

The institutional framework for PA management

Local institutional framework

The most difficult task demanded of the Evaluation Team has been that of recommending an appropriate institutional framework for PA management in Lebanon. The socio-political context of reserve management is characterized by complex diversity of political and religious groupings and clearly presents a special challenge. *The project has experimented with two different institutional options at the local level – and neither has proven to be very satisfactory.* As foreseen by the Prodoc, for the first five years the three PAs were managed by three local NGOs. For the last three years, the PA have been managed by Government Appointed Committees (GACs). The mid-term review found a number of weaknesses with the NGOs and recommended that the NGOs be replaced by the GACs that were foreseen in the two laws that created the three PAs. This was done, *but creation of the GACs clearly has not resolved the structural problems of the earlier NGO management.*

Local NGOs It is very difficult for the Evaluation Team to judge at this point the merits of the prior management by the NGOs. The Team does believe that an opportunity for strengthening this option may have been missed. Each NGO appointed the Management Team for its PA. The project focussed its capacity building on these MTs. Little or none of the capacity building was directed towards the NGOs themselves – towards strengthening their internal systems of planning, governance, accounting systems, etc. The NGOs were mostly young and with little experience to prepare them for the scope of the challenge that was demanded of them. Perhaps directing some of the projects resources towards capacity building of the NGOs would have lead to much more positive results from this innovative option.

Government appointed committees The Evaluation Team has attempted to identify the strengths and weaknesses of the GACs:

Strengths: a) creation of the GACs has increased the number of stakeholders involved in PA management, and; b) representation of municipalities facilitates integration of PA into local government programs and support

Weaknesses of the GACs: a) heavy involvement of municipalities introduces a significant political element into PA management; b) GAC members are volunteers, but have been given full responsibilities for hiring & supervision and management of funds; c) disagreements within the GACs

or failure to meet have lead to paralysis of decision making. The management teams and the management of the PA suffer as a result.

Principles for Strengthening Local Institutional Framework *The Evaluation team has sought here to identify a set of principles for strengthening the institutional framework for AP management.*

- a) *Much greater attention should be paid to development of strong, detailed PA management plans.* The present management plans are so general that the MT, the GACs and the MOE are left to figure out for themselves how to actually manage the PAs. This places a very high level of demands on these three bodies. It necessitates MT managers of a high caliber and it means that the GAC members and the MOE staff have to have a high level of competence to judge the merits of what is proposed by the MT. The development of much more detailed management plans along the lines of the recommendations above would make the tasks of the MT, the GACs and of MOE much simpler – the MT would be responsible for implementation and the GACs and MOE for monitoring and overseeing implementation.
- b) *The roles and responsibilities of Management Teams should be strengthened.* The Evaluation Team finds that the capacities developed in the Management Teams are a significant strength of the project. The MT should be given increased responsibilities and autonomy. The MT should have a moderate level of performance-based job security. The high level of job insecurity at present could easily lead to further losses of trained personnel.
- c) *The role of the GACs should be primarily one of stakeholder consultations to provide input into PA management. The GACs should not have a hierarchical role as the employers of the management teams.* (The institutional options as to who should employ the MT are discussed below.)

Proposed definition of roles for PA management teams. The Evaluation Team proposes that *the Management Teams primary functions should be the following:*

- *They should have the lead role in PA management planning. Strong guidelines and support mechanisms need to be developed, but the local management team knows their PA best and should have the primary responsibility for developing the MP.*
- *Responsibility for enforcement*
- *Responsibility for visitor Management*
- *Responsibility for natural resources management*
- *Responsibility fir infrastructure development & maintenance*
- *Responsibility for certain monitoring functions*
- *Responsibility for local awareness raising*

Proposed institutional Roles for PA at national level The Evaluation Team proposes *that the following PA management related functions should be filled at the national level:*

- *Development of strategies and plans for biodiversity conservation and the PA network*
- *Develop standards, criteria and guidelines for PA management*
- *Provision of expertise in support of PA management & planning*
- *Financing and fundraising*
- *National awareness raising*
- *Some forms of monitoring*

Institutional options The key institutional question is, “Who should employ the Management teams?” What types of institutional options could provide proper security, support and oversight to management teams. What are the strengths and weaknesses of each option? The Evaluation Team has identified the following options:

- **MT employed by local NGO or GACs.** These are the two options that have already been tried. They have not given general satisfaction, although the management of Arz Al Shouf by a local NGO has worked quite well. One should not expect these two options to give general satisfaction unless one is willing to invest in the institutional capacity development of these structures. For the GACs, investments in capacity development of committees of changing membership is inherently problematic.
- **MT employed by MOE** One of the institutional options would be for the government to manage PA directly with management teams composed of civil servants. This would certainly resolve the problem of job security of the current management teams under this existing situation. But no one that the Evaluation Team met with advocated direct management by government and the Evaluation Team does not recommend this option. PA management does not fit comfortably into a traditional eight hour work day and employment of PA managers as civil servants generally leads to a diminished sense of the initiative and dedication that is so important to effective PA management.
- **MT contracted by MOE** This is not recommended as a long term solution, but it could be an effective interim measure while more permanent institutional framework is being investigated and developed.
- **MT employed by a national parastatal** Parastatals are not bound by government hiring regulations that apply to civil servants and theoretically have greater flexibility and more private sector-style initiative. Lebanon could potentially create a parastatal institution that would be mandated to manage the country's network of PAs. Such parastatals, however, often end up performing much more like government institutions than the high performance private sector entities that are intended to emulate.
- **MT employed by a national NGO** *One of the most promising institutional options would be to have a national NGO that is mandated by GOL to be responsible for managing the national network of PAs in Lebanon. The management teams for each PA would be employed by the national NGO.* The NGO would enjoy the private sector flexibility to award employees for good performance and to dismiss employees who perform poorly. The national NGO would employ staff specialized in fundraising for the PA network. If expertise could be accessed as needed from universities, other NGOs and the private sector, the size of the headquarters staff of the national NGO could be kept quite small. This NGO could benefit from any PA trust fund to be created in the future. If a new NGO were to be created for this purpose, existing environmental NGOs concerned with PA and biodiversity management could be members of the new NGOs. Considerable investments in capacity building of the new NGO would be necessary.
- **MT employed by a private business** Management of PA by for-profit businesses has some precedents – African Parks is a private sector business that is now managing parks in several African countries. Because of the inherent conflict between short-term profit and long-term conservation, PA management by the private sector would require an exceptionally strong oversight role on the part of MOE. It is not clear that MOE at this point in time would have the oversight capacities needed for this. Nor is it evident that this option would be welcomed in the socio-political context of the country.

GOL Respect for Commitments Made

The Evaluation Team analyzed how well the GOL lived up to the main commitments they made during project design. The signed Prodoc specifies that:

- The GOL would create and staff a department of Protected Areas and Wildlife (PAW) within the MOE;

- The GOL would provide annual support to the three local NGOs during the 5 year project life
- The GOL would contribute 50 million LP/yr/PA for the construction of visitor centers
- The Prodoc also states that the GOL should contribute 50% of operating costs to the local NGOs beyond end of project

The Evaluation Team reports the following findings:

- *The PAW has not been created and staffed. This has been a major impediment to capacity building within government.*
- *Annual support to local NGOs was provided during the first five years (prior to the creation of the GACs);*
- *No contributions have not been made by the GOL for the construction of the visitor centers*
- *GOL continues to provide significant funding for the management of the three PAs.*

Recommendations for Follow-on Support from UNDP/GEF

The Evaluation Team finds that the overall impacts of the PAP have been quite positive. There are many positive results from the PAP and there are many gaps and weaknesses yet to be filled. The Team feels that there is a good opportunity for GEF to build upon the successes of this first project by attacking new barriers to effective PA management and biodiversity conservation in Lebanon. *The Team would encourage the GOL to seek assistance from UNDP GEF and the Team would encourage UNDP/GEF to respond favorably to such a request.*

The Evaluation Team recommends that the following orientations be considered for future UNDP/GEF support to Lebanon:

- *Future support should focus on reinforcement of the national network of PA rather than on the management of individual PAs;*
- *The new project should elaborate a strategy for development of a representative PA network with viable areas of the full range of remaining ecosystems/habitats. This would involve a gap analysis to compare the existing PA network with the range of ecosystem/habita/vegetation types in the country to identify gaps in the coverage. The project should then go on to identify and analyze candidate sites and corridors for filling the gaps and completing a viable, representative network of PA in Lebanon*
- *The project could support the development of a knowledge management system in support of PA management and biodiversity conservation in Lebanon. Such capacities could probably be built effectively within universities and/or NGOs;*
- *Targeted support and capacity building for effective PA management planning is needed. Two or more PA could be selected as pilots for the development of model management plans per the recommendations made in this report. Guidelines for management planning should be developed. A range of specialized support capacities should be developed in a range of institutions – NGOs, universities, private sector businesses and government. Criteria for approval of management plans need to be developed.*
- *There is need for support for the development of model M&E systems that respond directly to information needs for PA management. Guidelines for M&E need to be developed.*
- *The new project could support the creation of a PA network trust fund (the feasibility of such a fund would need to be analyzed during project development.*
- *The project could support the development of capacities for the economic and financial valuation of biodiversity and PAs;*
- *The project could work on the development of effective economic incentives for biodiversity and PA conservation*
- *The project could support the modification of the METT tracking tool to Lebanese conditions*

- *The project could evaluate the need for new categories of PA and support legislative reform as appropriate.*
- *The project could integrate biodiversity and PA conservation into the Land Use Plan/ land use planning for Lebanon*

Action Plan for Follow-Up to the Final Evaluation

The following are suggested as follow-up actions to the final evaluation:

- The MOE should circulate the final evaluation report widely to all stakeholders who were involved in the PAP and to stakeholders involved in the other PA of Lebanon;
- A workshop should be organized with all the managers of the three PAP PA, with representatives of the three GACs and with representatives of the other PA/PA projects in Lebanon. The purpose of the workshop should be to review and debate the key findings and recommendations of the final evaluation report and to improve/modify this action plan. Key issues should include institutional options, PA management plan content, the possibility of applying for new UNDP/GEF funding and the objectives of new funding. The GOB/MOE should approach UNDP/GEF to express their interest in new support for Lebanon's PA network and to develop a dialogue on this subject.
- The MOE should form a working group to analyze and advise on the use of the METT as a management effectiveness monitoring tool for Lebanon. The working group could include representatives of MOE, of PA managers, of GACs, of environmental NGOs and of universities. Topics to cover could include:
 - How can the METT be used in the most effective manner in the Lebanese context? Is it a worthwhile tool for operational use in Lebanon? (If Lebanon receives GEF funding for the PA network in the future, use of the METT will be a requirement for GEF funding.)
 - How should the wording of METT questions and multiple choice answers be modified to make them less ambiguous and more pertinent to the Lebanese context? E.g. Questions 2 and 3 are poorly worded – they can be misinterpreted to mean the same thing? Also, question 22 is not relevant to Lebanon and should be dropped.
 - Should the METT be scored to give a numerical ranking for each PA. This can be useful for comparing progress for a given PA over time. Those who produced the METT say that METT scores should not be used to compare one PA with another – but people inevitably will do so. Would numerically scoring METT analyses of PA in Lebanon run the risk of causing unhealthy conflicts between different PA or would it set up a healthy competition?
 - Should completely new questions be added to adapt the METT to Lebanese conditions? For example, if some of the recommendations in this evaluation report on the content of management plans are adopted for general use, one may want to add questions to the METT to cover specific aspects of PA management plan content.
- Institutional reform for PA management should be pursued with donor assistance. The institutional options laid out in this report should be used to catalyze the analyses and the debate on the choice of institutional framework that would prove the most effective for Lebanon.

Annex A: Terms of Reference for the Final Project Evaluation

Strengthening of National Capacity and Grassroots in situ Conservation for Sustainable Biodiversity in Lebanon

Introduction

In accordance with UNDP/GEF M&E policies and procedures, all regular and medium-sized projects supported by the GEF should undergo a final evaluation upon completion of implementation. A final evaluation of a GEF-funded project is also required before a concept proposal for additional funding (or subsequent phases of the same project) can be considered for inclusion in a GEF work program. However, a final evaluation is not an appraisal of the follow-up phase

The M&E policy at the project level in UNDP/GEF has four objectives: i) to monitor and evaluate results and impacts; ii) to provide a basis for decision making on necessary amendments and improvements; iii) to promote accountability for resource use; and iii) to document, provide feedback on, and disseminate lessons learned..

Final evaluations are intended to assess the relevance, performance and success of the project. It looks at early signs of potential impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental goals. It will also identify/document lessons learned and make recommendations that might improve design and implementation of other UNDP/GEF projects.

Project Context

The goal of the “Strengthening of National Capacity and Grassroots in situ Conservation for Sustainable Biodiversity in Lebanon” project is to put into place an effectively managed system of protected areas to safeguard endemic and endangered species of fauna and flora, conserve their habitats and incorporate Biodiversity conservation as an integral part of sustainable human development. The project aims at testing a specific model of three demonstration parks where the Ministry of Environment, local non-governmental organizations and in-country scientific institutions will cooperate and coordinate their activities to promote both the long term ecological and the short term economic objectives of wildlife conservation. It is also expected to incorporate educational and sensitization components directed towards the local communities, and to reach out to the public and decision makers with documentary films and TV spots, thus aiming to promote national reconciliation by bringing people and institutions together for the conservation of nature.

The project aimed specifically at achieving the three following immediate objectives:

- Three functional protected areas managed by local park management teams according to management plans prepared with the assistance of international conservation organizations and in-country scientific institutions and organizations that will conduct field studies, gather basic ecological data, analyze and publish results, and monitor the progress of the protected area. Based on scientific assessments an overall strategy of conservation will be defined, and plans prepared for the future sustainability of the project beyond the present intervention;
- An enhanced capability of government agencies, scientific institutions and non-governmental organizations to oversee, study and manage protected areas in an effective and sustainable manner by means of institutional support for the Ministry of Environment and training workshops for all project participants to upgrade their skills;

- A sensitization and education campaign targeting a number of population groups within the vicinity of the protected areas as well as at the national level, in order to assure large-scale sustainability of Biodiversity conservation efforts. This will include outreach to the local communities living in the vicinity of protected areas, preparation of educational materials for use in local schools as well as recommendations for national level environmental education components, and an effective series of documentaries and TV spots to sensitize the public and to supply the visual materials for an awareness campaign to alert government officials to the need for Biodiversity conservation and establishment of protected areas network

Project indicative facts:

- ❑ The Project started its operation in November 1996 for an initial period of 5 years. Due to necessity to extend its support for reasons highlighted in the tripartite meetings, the project was extended for 3 additional years (until November 2004)
- ❑ The MoE is the government counterpart institution responsible for providing oversight and guidance to the project.
- ❑ The project drew upon the technical and scientific experience of IUCN for 6 years in order to ensure sound implementation of the project objectives
- ❑ The day-to-day management of the project was initially (1st 3 years) undertaken by a full-time Project Manager contracted by the project then the management was fully transferred to the Ministry of Environment.

Objectives of scope the Evaluation

Based on the final project Tripartite Review meeting that was held in January 2004 and attended by the Government Executing Agency, UNDP, CDR and representatives of the national project beneficiary groups, it was commonly agreed and recommended that an external final evaluation mission be undertaken for the Protected Areas project in Lebanon prior to its closure in November 2004. The objectives of this evaluation will be to:

1. Assess the relevance of the project to the national development priorities, UNDP practice areas and the needs of the direct project stakeholders.
2. Assess project activity undertaking, especially with regard to gearing up activities towards achieving project outputs and objectives
3. Review all the progress made by the project toward achieving its sustainability in terms of provision of all planned inputs, biodiversity conservation, performance of the different implementers, adequacy of the policy undertakings and the management tools produced and its practicality for use by the different parties,
4. Identify the difficulties faced during the implementation of the project and how the project and the government response to them.
5. Assess project impact on target groups (local communities, NGOs, local institutions), the policy making at the national level, barrier removal and problem solving. The project successes in conserving biodiversity in the three reserves and in keeping sustainable ecological balance should particularly be identified.
6. Meet with all involved project stakeholders and assess the ownership of the project at the national and local levels. This includes the assessment of the government taking over the sustainable management of the project and the government support to integrating the project objectives and goals into the national development agenda and programs.

7. Assess the efficiency of the technical backstopping of IUCN and other contractors is providing technical support for the Ministry of Environment and the different partners of the project
8. Assess the replicability of the project using the same management approach and mechanisms in other areas in the country especially that the national Executing Agency is expanding the network of protected areas and is seeking the support for the establishment of new protected areas in the country
9. Assess the quality of inputs and performance of the project subcontractors at the national and site levels, including the three NGOs entrusted with reserve management.
10. Identify gaps and recommend remedial actions that could be adopted at the short, medium and long term as well as future orientations aiming at ensuring a successful sustainability of the project.

Products Expected from the Evaluation

The final evaluation report resulting from this evaluation, shall include:

- Findings on the project implementation achievements, challenges, and difficulties to date;
- Assessments of the progress made towards the attainment of outcomes;
- Recommendations for future follow-up and future orientations;
- Recommendations for the overall project management structure at the Ministry of Environment.
- Lessons learned from the project structure, coordination between different; agencies, experience of the implementation, and output/outcome; and,

Methodology or Evaluation Approach

In general, monitoring and evaluation practices at GEF explore five criteria that are applicable to projects, programs, and thematic or country-level monitoring and evaluation but that do not all need to be systematically reviewed in all cases. These five specific monitoring and evaluation criteria used in combination provide the decision-maker with essential information in connection with present and future decisions on projects and programs.

Impact: measures both the positive and negative, foreseen and unforeseen, changes to and effects on the counterparts/communities targeted by the project. This includes addressing aspects such as the capacity development, awareness raising and leverage of funds and national policies.

Effectiveness: measures the extent to which the objective has been achieved or the likelihood that it will be achieved.

Efficiency: assesses the outputs in relation to inputs, looking at costs, implementing time, and economic and financial results.

Relevance: gauges the degree to which the project or program at a given time is justified within the global and national/local environment and development priorities.

Sustainability: measures the extent to which benefits continue from a particular project or program after GEF assistance/external assistance has come to an end.

The World Bank/ WWF Alliance for forest conservation and sustainable use has developed a **management effectiveness-tracking tool** (guidelines attached) that has been used by the Global Environment facility. This tool shall be applied to assess the management effectiveness trends of this project.

In order to address these criteria, this evaluation will entail:

- Reviewing all available documentation among which:
 - Yearly workplans,
 - Progress reports including TPR reports and PIR reports,
 - The mid term evaluation report
 - The management and business plans for each reserve,
 - The resource mobilization strategy,
 - The training manual,
 - The different laws for each declared protected area,
 - The draft framework law and the different institutional measures undertaken for the management of the protected areas in the country.
 - Documents of projects that have been leveraged based on this project.
 - Documents of national undertaking directly or indirectly related to the project (such as CDR undertakings)

- Meeting and conducting interviews with all the involved partners in the project as well as representatives of the communities living in the vicinities of the protected areas. The final evaluation consultant should at least interview the following people:
 - Director General of the Ministry of Environment
 - National Coordinator
 - MoE staff working on issues related to protected areas management
 - GACs of each reserve
 - Medwet Project Manager
 - UN/CDR Coordinator
 - CDR Environment Focal Point
 - UNDP Environment Unit team
 - UNDP/GEF Regional Coordination Unit
 - Representatives of subcontracted entities by the project (local NGOs involved in the management of the reserves, GreenLine, Conseil et Developpement, National Council for Scientific Research)
 - Ecotour operators visiting the reserves
 - Community members living in the vicinities of the protected Areas
 - Local representatives of potential donors and partners

During these meetings, the evaluator will be able to use the assessment technique such as questionnaires, focus group discussions, checklists, etc...

Evaluation Mission requirement:

The evaluation mission will consist of a team of two consultants:

1. An external international consultant who will also act as the team leader. He /she shall possess a high University Degree (Ph.D/M.Sc.) in the field of environment and natural resources conservation in addition to an extensive experience (> or =10 years) in protected areas management with considerable experience at the regional or international level. Previous involvement and understanding of UNDP and GEF procedures is an advantage and extensive international experience in the fields of project writing skills coupled with experience in result-based monitoring and evaluation techniques.

2. A national socio-economic or policy support consultant who must have 5-7 years of experience working on the issue of biodiversity management from a socio-economic or policy support perspective. S/He must have special strengths in assessing livelihood benefits and people participation in protected areas management processes. Or, if possible, S/He should have a professional capacity to assess policy impact on stakeholders and institutionalization of the protected areas project at national and local levels.

The consultants will be recruited through the project and will work under the supervision of the UNDP and the Ministry of Environment. They will be hosted at the Protected Areas Project offices in the Ministry of Environment. His/her field visits will be facilitated by the project vehicles and personnel.

Duration of the evaluation:

The consultants mission will be of 15 days duration each:

- For the international consultant: 10 days in Lebanon and 5 days from his/her home country to complete and submit the final report including the inclusion of remarks / reviews of all concerned partners.
- For the national consultant: his/her assignment shall start few days before the team leader to acquaint himself with the evaluation context (assemble/collect required information/report) and set the mission agenda and contacts.

Budget

All the costs incurred for the conduct of the evaluation shall be charged against project funds allocated to conduct this evaluation.

Annexe B: List of Documents Reviewed

The following is a list of the documents reviewed and used by the evaluation team for the final report

Abu-Izzedin Faisal (1997): Protected Areas Project, inception report, 20 march 1997, Ministry of Environment.

Abu-Izzedin Faisal (1997): Protected Areas Project, revised project document, 15 june 1997, Ministry of Environment.

Abu-Izzedin F., Hitchcock P., Yamout L., Jaradi G. (2000): Al-Shouf Cedar Ehden Nature Reserve. Management Plan 2000- 2005.

Abu-Izzedin F., Hitchcock P., Yamout L. (2000): Horsch Ehden Nature Reserve. Management Plan 2000- 2005.

Abu-Izzedin F., Hitchcock P., Yamout L., Serhal A. (2000): Palm Islands Nature Reserve. Management Plan 2000- 2005.

APR/PIR (2002): UNDP annual Project Report, UNDP/GEF project Implementation Report, PAP.

Conseil et Développement S.A.L., Arab Resources development S.A;R.L. (2003): Report on the capacity building session for the management team of the nature reserves- fund raising activities in the protected areas of Lebanon.

Conseil et Développement S.A.L., Arab Resources development S.A;R.L. (2004): revise business plan of Horsh Ehden Nature Reserve- Ehden. Fund raising activities in the protected areas of Lebanon.

Conseil et Développement S.A.L., Arab Resources development S.A;R.L. (2004): revise business plan of palm Islands Nature Reserve- Tripoli. Fund raising activities in the protected areas of Lebanon.

Conseil et Développement S.A.L., Arab Resources development S.A;R.L. (2004) : Fund raising activities in the protected areas of Lebanon. Final report.

Contract for professional consulting service between UNDP and the Lebanese University.

Green Line Association (2001): Monitoring Programme and GIS/GPS training. Quaterly Progress Report. September-november.

Green Line Association (2001): Monitoring Programme and GIS/GPS training. Quaterly Progress Report. Final report (2).

Lliya Stevenson consultants (1998): plans and design guidelines maase al-shouf entrance

Marravers Messana G.H. (2001): Strengthening of National Capacity and Grassroots In-situ Conservation for sustainable Biodiversity protection. Report of the External Evaluation Mission.

Marsh J., Abu-Izzedin F., Hitchcock P. (2001): Training manual for protected areas in Lebanon. A compendium of information on protected area management. Prepared for the PAP, Ministry of Environment, Lebanon.

Ministry of Environment/UNDP/GEF/Biodiversity (1998): National biodiversity strategy and action plan. November 1998.

Ministry of Environment/Lebanese University (2004) : Biodiversity assessment and monitoring in the protected areas/ Lebanon . Final reports (august 2004).

Official Gazette (Nb 11), dated 12/3/1992 , law nb 121 aims at founding a natural reserve (in arabic)

Official Gazette (Nb 33), dated 29/7/1996 , law nb 532 establishing a natural protected area –AL-Shouf Cedar- (in Arabic)

PPER (1997): Project Performance Evaluation, 1996-1997.

Report on protected areas (2000): The planning and management of visitors activity and tourism in protected areas. Ehden, 18-22 april 2000.

Sandwith T. (2002) : Lebanon protected area conservation program, concept proposal.

Sattout E., Talhouk S.N., Knio K. (1999): Monitoring biological diversity , flora of the natural reserve of Al-Shouf. Green line, a scientific association for conservation. PAP, part II.

Sattout E., Talhouk S.N., Knio K. (1999): Monitoring biological diversity , flora of the natural reserve of Ehden. Green line, a scientific association for conservation. PAP, part II.

Sattout E., Talhouk S.N., Knio K. (1999): Monitoring biological diversity , flora of the natural reserve of palm Islands. Green line a scientific association for conservation. PAP, part II.

Sattout E., Talhouk S.N. (2001); a proposed monitoring program for the flora of the natural reserves of Al-Shouf, Ehden, and the Palm Islands. Green line a scientific association for conservation

UNDP/GEF (1995): Project brief for the project review committee of 26 july 1995.

UNDP/GEF (1996): Strengthening of National Capacity and Grassroots In-situ Conservation for sustainable Biodiversity protection . Project document.

UDP/GEF (1997): Strengthening of National Capacity and Grassroots In-situ Conservation for sustainable Biodiversity protection. Published project document (march 1997).

Annexe C: List of persons interviewed

Beirut

Awad Nancy: responsible of the protected areas, MOE

Darwish Ali : President Green Line

Béchara André: Managing Partner, Lebanese adventure

Chehab Edgard; UNDP environmental unit

Clairs Tim: Team leader, Global Environment Facility

Hamadé Chadi: Consultant for range management in Al – Shouf

Mansour Lamia: UND/GEF regional office

Rizk Charbel: Project manager-Medwet Coast

Sattout Elsa: Green Line

Serhal Assad: ex- park manager/ SPNL

Charaffedine Wafa: Funding division Director, Council for Development and Reconstruction.

Nasr Waleed: UNDP environmental Unit

Yamout Lina: Chief of the Urban Environmental Protection service, MOE.

Al-Shouf Nature Reserve

Abou Daher Wissam: awareness coordinator Pa management team

Abu-Izzeddin Faisal : ex-IUCN project coordinator, member of the GAC of Horsch Ehden Nature reserve

Hani Nizar: research and monitoring PA management team

Njeim Charles: President of the GAC and mayor Maaser al shouf Municipality

Horsh Ehden Nature Reserve

Antoun Said: Municipality representative in the GAC

Frangieh Robert: FOHE representative in the GAC

Général MARAWI Joseph: new president of the Municipality and the new president of the GAC

Khawaja sarkis: Reserve manager PA management team

Moawad Nabil : member of the GAC, Moawad foundation

Morcos ??? : FOHE representative in the GAC

Saba sandra: Assistant manager PA management team

Tayoun Ghasan: Ex member of the GAC, Advisor Environmental Affairs.

Yamine Georges: ex mayor Zgharta – Ehden Minicipality, ex-president of the GAC

Palm Island Nature reserve

Chahine Ramzi : Ranger

Siddawi Issam ; Ranger

Jaradi Ghassan : Member of the GAC

Nader Manale: Member of the GAC

Annex D Achievements at the Output and Activity Levels

| Objectives, Outputs and Activities | General remarks |
|---|---|
| <p>Objective 1: Three demonstration protected areas managed by local teams of park rangers according to management plans prepared with the assistance of international conservation organizations and scientific institutions. They will conduct:</p> <ul style="list-style-type: none"> - Field studies - Gather and analyze basic ecological data - Publish results - monitor the progress of the protected areas - efforts will be made towards defining an overall strategy of conservation and plans prepared for the future sustainability of the project. | <p>-The three reserves all have functional management systems and are managed by local teams</p> <p>- The most basic management function of protection of habitats and biodiversity seems enjoy a high level of effectiveness at all three sites, although there is almost no data to prove this.</p> <ul style="list-style-type: none"> • Prior to creation and management, there were exceptionally heavy pressures from overgrazing, uncontrolled hunting, woodcutting, and overfishing (at Palm Islands). • By all accounts, these are effectively controlled • The increase in regeneration is sometimes striking and remarkable. <p>- National institutions have been heavily involved in these studies</p> <ul style="list-style-type: none"> • The studies have been poorly organized (major delays) and poorly defined in relation to the key information needed for PA management. For example, the recent biodiversity assessment and monitoring study done by Lebanese University does not seem to have integrated the PA management teams in the conception and oversight of the study. • No effective monitoring systems have yet been developed for the three reserves. • The monitoring reports produced are especially weak in their analysis of the types of monitoring needed for effective reserve management. <p>- All the reserves have management plans, but the plans are very general and lacking in much of the detail that is critical for effective management.</p> <p>- Efforts has to be made in an overall strategy of conservation in biodiversity.</p> |
| <p>1.1- Detailed delineation of the final status and size of the demonstration areas.</p> | <p>Not achieved</p> |
| <p>1.1.1- Review all laws, decrees and enabling legislation to clarify details and procedures concerning the three demonstration parks.</p> | <p>There is until now, no framework law concerning the protected areas. It seems that a draft framework law for the protected area is going to be submitted to the parliament.</p> |
| <p>1.1.2- Survey boundaries (exact measures, detailed map duly signed and approved)</p> | <p>The boundaries of the reserve and the buffer zone are still not surveyed because;</p> <ul style="list-style-type: none"> - they are not precisely defined. This is a major problem through out Lebanon and this makes this entire output unrealistic. |

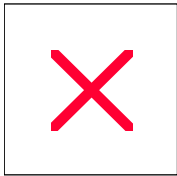
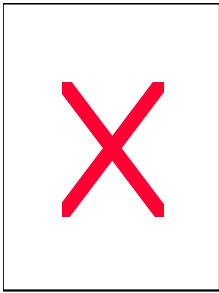
| Objectives, Outputs and Activities | General remarks |
|--|--|
| | <ul style="list-style-type: none"> - There is no inventory of the private lands within the reserve boundaries 'specially for Arz Al Shouf) - The legal problems have to be resolved concerning the private properties inside the boundaries (specially Arz Al Shouf). - The project grossly underestimated the cost of a boundaries survey |
| 1.2- Fourteen park rangers divided into three teams (1 manager, 1 guide and security rangers employed by the NGO's and trained by the project) | Management teams were recruited for each PA. The number and profiles of team members vary from site to site. |
| 1.2.1- Selection of park rangers from list of applicants submitted by local NGOs (resident near the area, academic background, able to generate local support, familiar with the park) | Achieved |
| 1.2.2- 5 year sub-contracting agreement with the concerned NGOs for the employment of fourteen park rangers; - Arz Al Shouf Society (6 rangers) - Friends of Horsh Ehdén (4 rangers) - Environmental Protection Committee (4 rangers) | <ul style="list-style-type: none"> • The law stipulates the creation of a committee to manage each reserve. It says nothing about permanent salaried management team. • The management teams were hired by NGOs. Actually, in Horch Ehdén and in Palm Island they are employed by the GACs. In Arz Al Shouf they still employed by the NGO. • The number of staff in December 2004 (at the end of the project) is the following: <ul style="list-style-type: none"> - 11 persons in Arz Al Shouf, - 4 persons in Horch Ehdén - 2 rangers in Palm Island without managers. |
| 1.2.3- Provide basic equipment that will allow the park rangers to begin work on the parks. | Equipment has been provided. Some of it is now in urgent need of replacement. |
| 1.3- Detailed management plan plans for the three demonstration parks | The plans exist for the three protected areas and they were completed in 2000. The plans are extremely general consisting primarily of statement of general objectives and of policies but no real plans for achieving the objectives. All the plans are reaching the end of their 5-year life. |
| 1.3.1- Prepare a detailed 5 years management plan for each of the 3 demonstration areas using IUCN guidelines and expertise The plans will have to provide: - statement of goals and measurable objectives that form the framework for determining what actions to take, when they will be taken, the budget and personnel needed to implement them. - The management plan will have to cover the national and regional background, description and inventory of the area, management considerations and objectives, management programmes and | <p>Statement of goals and objectives has been presented. But no indicators have been identified to measure the achievement of objectives. There is no calendar, work plan, there is no budget, there is no analysis of staff needs. Management plans have been prepared for each of the three reserves</p> <p>The principles of the management plan have been used where team managers had a protected area experience. Their backgrounds helped them to elaborate sub-plans for the Protected area they had in charge. That was the case in Arz Al Shouf and Palm Islands.</p> |

| Objectives, Outputs and Activities | General remarks |
|---|---|
| development programmes - plans must be published in Arabic, and in English - brief summary will be produced for the general public, decision makers, and potential funding sources. | Plans have not been published in Arabic. Summary produced |
| 1.3.2- Prepare interim management plans for other potential protected areas. Interim management plans prepare the way for an area to be officially recognized and incorporated into a national system of protected areas. | Not done Efforts have yet to be made to develop an overall biodiversity conservation strategy. The network of PA has expanded to a total of seven. |
| 1.3.3- assist the park managers to prepare annual operations plans at the beginning of each year that are based on the management plans | Achieved |
| 1.4- field studies and activities to gather data and analyze results | The baseline studies and development of the monitoring system have been poorly focused on the real information needs for PA management. This reflects the lack of detail in the management plans themselves. |
| 1.4.1- Commission appropriate field studies and activities that will give the park manager scientific information | Two literature reviews/inventories have been conducted but are insufficient for the information needs for PA management. |
| 1.4.2- Identify scientific community willing and capable of conducting field studies | Achieved |
| 1.4.3- Publication of the results | The NCSR report and the draft LU report (August 2004) are the major reports. |
| 1.4.4- Undertake scientific assessments of conservation needs and recommend future area for conservation activities | Inachieved and weak There is no viable strategy for the development of a representative network of PA in Lebanon. The management team of Arz Al Shouf prepared an agenda of research needed to better manage the PA. |
| 1.4.5- Development of future management plans and assessment of resources need beyond the present project period. For a phase II; a full project proposal will be developed by IUCN in collaboration with national partners | Management plans were supposed to be completed in year one and future plans in year five. In reality, the management plans were not produced until the third and fourth years and have been not renewed. No full project proposal has been prepared and no discussions between GOL and UNDP for a follow-on project have been initiated. A well prepared concept paper for a PA program was prepared by IUCN consultant T. SANDWITH. |
| 1.5- Monitoring program using GIS and GPS | There is no functional program of management-oriented monitoring for the three PAs. |
| 1.5.1- Establish and conduct a monitoring programs for each of the three protected areas based on tge GIS/GPS systems to detect problems as they arise, gauge progress in meeting the management objectives and produce reliable basemaps to determine status of all species within the | The monitoring program remains very weak for several reasons: - The functions and needs for monitoring have never been properly defined. The management plans fix monitoring as an objective without defining why it is needed, how it will be used or what needs to be monitored. |

| Objectives, Outputs and Activities | General remarks |
|---|--|
| <p>protected areas. The operators GIS/GPS system will work in close cooperation with researchers conducting field studies All data collected will be centralized in the AUB</p> | <ul style="list-style-type: none"> - The basemaps showing the status of key species have still not been completed – they are in draft. (It would be unrealistic to do all species) - There were technical problems at the site level that were not resolved, such as an incompatibility between the GIS software and the GPS units. - 2 of the three management teams did not develop their own GIS/GPS capabilities. - The databases are scattered and not easily accessible for research. - The rangers were not trained for the monitoring using those techniques. |
| Immediate Objective n°2 | |
| <p>2. Enhanced capability of government agencies, scientific institutions and NGOs to manage protected area in a sustainable manner</p> | <p>Significant capacities have been built at the site level (management team, NGOs and GACS). Capacity building of the scientific institutions is less evident.</p> |
| <p>2.1- Creation of a department of protected area and wildlife in the MOE to oversee implementation of management plans and a PCC bringing Government agencies, NGO and scientific institutions together</p> | <p>The PAW was not created. A single staff member was assigned to cover PA in the 5th year of the project after most of the project-funded training had been completed. This level of staffing is clearly inadequate for what is needed for the MOE to properly coordinate and oversee the growing protected area network in Lebanon.</p> |
| <p>2.1.1- the project's chief technical advisor will advise the MOE on the most effective organization of a PAW</p> | <p>The PAW was not created within the MOE as agreed in the Prodoc</p> |
| <p>2.1.2- establishment of a Project Coordinating Committee (PCC) chaired by the MOE's Director of PAW</p> | <p>The PCC was created and functioned regularly until about 2001, but has since been abandoned.</p> |
| <p>2.2.- Training workshops for park rangers, researchers and government officials</p> | <p>Many training workshops were held. Capacity building within government was severely constrained because PAW was not created and because of the shortage of personnel assigned to cover PA within the MOE.</p> |
| <p>2.2.1- Protected area management workshop for the 14 park rangers</p> | <p>Achieved</p> |
| <p>2.2.2- Biological diversity monitoring course for researchers and park managers... on permanent plot methodology... (methodology, field working, data gathering, data base management...)</p> | <p>Those who developed the monitoring techniques had no prior experience in working on monitoring systems for PA. The PA management plans did not adequately define the needs for monitoring not the functions of the monitoring systems to be developed. Training was given to site management teams on techniques for monitoring both flora and fauna. (But this training is no longer used) Permanent plots can be used for plants, but not for monitoring wildlife.</p> |
| <p>2.2.3- GIS/GPS training courses for researchers and the 3 park managers</p> | <p>Training was given to management teams at all four sites, but only Al Shouf is still using their GIS system.</p> |
| <p>2.2.4- Rural awareness campaign course for NGOs</p> | <p>There were no courses for NGOs but the local NGOs collaborated with the team responsible for the awareness campaign.</p> |

| Objectives, Outputs and Activities | General remarks |
|--|--|
| Immediate Objective n 3 | |
| 3. Sensitization (awareness raising) and education campaign targeting: local population within the vicinity of the protected area, national population to insure large-scale sustainability of biodiversity conservation efforts | The awareness raising at the local level has been generally successful. PA are generally respected by the local communities and are increasingly a source of pride. At the national level, the impact is less much apparent. |
| 3.1- Establishment and management of 3 revolving funds for the benefit of communities in the vicinity f the 3 protected areas 3 separate funds will be established with a size in proportion to the number of beneficiaries | The EvaluationTeam believes this output to have unrealistic and inappropriate. Decision made (appropriately) by Tripartite Review in Yr 1 to drop this output. |
| 3.1.1- set up of three small credit facilities | Not attempted |
| 3.1.2- Credit committees will be established and guidelines for granting of micro-credit, repayment schedule, criteria and purpose of loans | Not attempted |
| 3.1.3- The members of the credit committee will be drawn from the immediate community . Loan will not exceed 100\$ / borrower | Not attempted |
| 3.1.4- Gender sensitivity will be excised when setting up the credit scheme. Half loans will be granted to women applicants | Not attempted |
| 3.1.5- Funds are managed by local NGOs and/or other local institutions and authorities | Not attempted |
| 3.2- Sensitization and awareness campaign in the environs of the 3 protected areas. Integration of the local communities within the conservation activities | |
| 3.2.1- Sensitization and awareness campaigns shall be undertaken in order to share information with local communities. | Achieved |
| 3.3- Educational components | |
| 3.3.1- Sub-contract with an NGO to study and prepare recommendations for the MOE on the incorporation of environmental education components | Achieved |
| 3.3.2- Develop basic materials for use in local schools in order to educate students on environmental issues | Achieved |
| 3.3.3- Training local teachers | |
| 3.4- Three half-hour documentaries and 15 30-second TV spots for each Protected area | Achieved |
| 3.4.1- Film of half hour documentaries on each PA to: | Achieved -- videos are essentially scientific documentaries and weak on coverage of PA |

| Objectives, Outputs and Activities | General remarks |
|---|---|
| <ul style="list-style-type: none"> - provide a visual baseline for future comparison - highlight special features that are unique and/or inaccessible to regular visitor - use or fund raising, education and awareness campaign | management and on PA-based tourism |
| 3.4.2- Preparation of fifteen 30-second TV Spots | Achieved |
| 3.4.3- Selection of the most effective segments of the TV spots and the films to prepare 200 copies of sample video presentation | Achieved |
| 3.5- Awareness campaign at national level | |
| 3.5.1- maximum exposure of produced material through voluntary transmission | The videos and TV spots were aired, but rarely at prime time periods. |
| 3.5.2- provide members of local NGOs with copies of the sample videos for distribution to the government authorities | Achieved |
| 3.6- Fund raising activities to sustain the 3 demonstration areas beyond the 5 years duration of the project | |
| 3.6.1- Initiate fund raising activities | A number of fund raising strategies and plans have been produced. Activities include entrances fees, sale of souvenirs, identification of sponsors, fund-raising dinners. In the absence of a law authorizing the collection of entrance fees, two of the three PA collect entrance “donations”. Sale of souvenir items is being developed at all three sites. Development of sponsors, dinners and similar fund raising activities have only been done for one site. |



Annex E: The Management Effectiveness Tracking Tool (METT)

The following is background material on the METT:

The
World
Bank

Contents

Background

The WCPA Framework

Purpose of the World Bank/WWF Management Effectiveness Tracking Tool

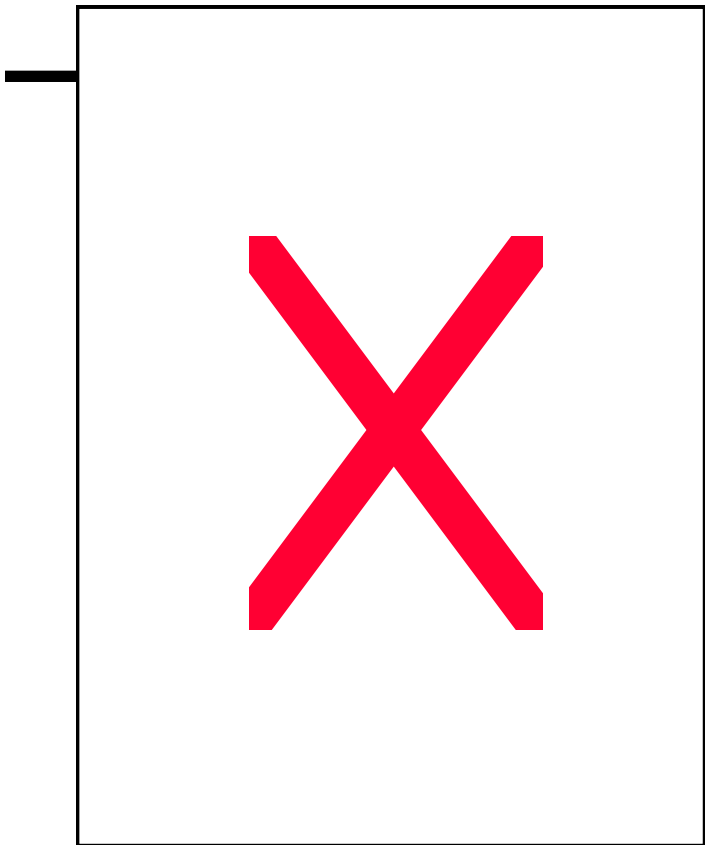
Guidance notes for using the World Bank/WWF Management Effectiveness Tracking Tool

Data Sheet and Questionnaire

Reporting Progress at Protected Area Sites

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A simple site-level tracking tool developed for the World Bank and WWF
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Background

There is a growing concern amongst protected area professionals that many protected areas around the world are not achieving the objectives for which they were established. One response to this concern has been an emphasis on the need to increase the effectiveness of protected area management, and to help this process a number of assessment tools have been developed to assess management practices. It is clear that the existence of a wide range of situations and needs require different methods of assessment. The World Commission on Protected Areas (WCPA) has therefore developed a 'framework' for assessment¹. The WCPA framework aims both to provide some overall guidance in the development of assessment systems and to encourage standards for assessment and reporting.

The WCPA Framework is based on the idea that good protected area management follows a process that has six distinct stages, or elements:

- it begins with understanding the **context** of existing values and threats,
- progresses through **planning**, and
- allocation of resources (**inputs**), and
- as a result of management actions (**processes**),
- eventually produces products and services (**outputs**),
- that result in impacts or **outcomes**.

The World Bank/WWF Alliance for Forest Conservation and Sustainable Use ('the Alliance') was formed in April 1998, in response to the continued depletion of the world's forest biodiversity and of forest-based goods and services essential for sustainable development. As part of its programme of work the Alliance has set a target relating to management effectiveness of protected areas: *50 million hectares of existing but highly threatened forest protected areas to be secured under effective management by the year 2005*². To evaluate progress towards this target the Alliance has developed a simple site-level tracking tool to facilitate reporting on management effectiveness of protected areas within WWF and World Bank projects. The tracking tool has been built around the application of the WCPA Framework and Appendix II of the Framework document has provided its basic structure.

The World Bank/WWF Management Effectiveness Tracking Tool forms part of a series of management effectiveness assessment tools, which range from the *WWF Rapid Assessment and Prioritisation Methodology* used to identify key protected areas at threat within a protected area system to detailed monitoring systems such as those being developed by the *Enhancing Our Heritage* project for UNESCO natural World Heritage sites. The Alliance has also supported the development of both the WCPA framework and the development of the WWF Rapid Assessment and Prioritisation Methodology.

The WCPA Framework

To maximise the potential of protected areas, and to improve management processes, we need to understand the strengths and weaknesses of their management and the threats that they face. In the last few years, various methodologies for assessing management effectiveness of protected areas have been developed and tested around the world. The World Commission on Protected Areas provides an overarching framework for assessing management effectiveness of both protected areas and protected area systems, to give guidance to managers and others and to help harmonise assessment around the world.

Table 1 contains a very brief summary of the elements of the WCPA Framework and the criteria that can be assessed³. The World Bank/WWF Management Effectiveness Tracking Tool has been designed to fulfil the elements of evaluation included in the Framework.

¹ Hockings, Marc with Sue Stolton and Nigel Dudley (2000); *Assessing Effectiveness – A Framework for Assessing Management Effectiveness of Protected Areas*; University of Cardiff and IUCN, Switzerland

² Dudley, Nigel and Sue Stolton (1999); *Threats to Forest Protected Areas: Summary of a survey of 10 countries*; project carried out for the WWF/World Bank Alliance in association with the IUCN World Commission on Protected Areas, IUCN, Switzerland

³ For a copy of the WCPA Framework or a more detailed summary please visit the WCPA web-site at: www.iucn.org/themes/wcpa or contact WCPA at wcpa@hq.iucn.org

Table 1: Summary of the WCPA Framework

| Elements of evaluation | Explanation | Criteria that are assessed | Focus of evaluation |
|-------------------------------|---|--|-----------------------------------|
| Context | <i>Where are we now?</i> Assessment of importance, threats and policy environment | - Significance - Threats - Vulnerability - National context - Partners | Status |
| Planning | <i>Where do we want to be?</i> Assessment of protected area design and planning | - Protected area legislation and policy - Protected area system design - Reserve design - Management planning | Appropriateness |
| Inputs | <i>What do we need?</i> Assessment of resources needed to carry out management | - Resourcing of agency - Resourcing of site | Resources |
| Processes | <i>How do we go about it?</i> Assessment of the way in which management is conducted | - Suitability of management processes | Efficiency and appropriateness |
| Outputs | <i>What were the results?</i> Assessment of the implementation of management programmes and actions; delivery of products and services | - Results of management actions - Services and products | Effectiveness |
| Outcomes | <i>What did we achieve?</i> Assessment of the outcomes and the extent to which they achieved objectives | - Impacts: effects of management in relation to objectives | Effectiveness and appropriateness |

Questions in the following tracking tool have been ordered to make completion as easy as possible; the element(s) that each refers to are indicated in the left hand column.

Purpose of the World Bank/WWF Management Effectiveness Tracking Tool

The World Bank/WWF Management Effectiveness Tracking Tool has been developed to help track and monitor progress in the achievement of the World Bank/WWF Alliance worldwide protected area management effectiveness target. It is also hoped that the tracking tool will be used more generally where it can help monitor progress towards improving management effectiveness; for example it is being used by the Global Environment Facility.

The Alliance has identified that the tracking tool needs to be:

- Capable of providing a harmonised reporting system for protected area assessment within both the World Bank and WWF;
- Suitable for replication;
- Able to supply consistent data to allow tracking of progress over time;
- Relatively quick and easy to complete by protected area staff, so as not to be reliant on high levels of funding or other resources;
- Capable of providing a “score” if required;
- Based around a system that provides four alternative text answers to each question, strengthening the scoring system;

- Easily understood by non-specialists; and
- Nested within existing reporting systems to avoid duplication of effort.

Limitations

The World Bank/WWF Management Effectiveness Tracking Tool is aimed to help *reporting progress* on management effectiveness and should not replace more thorough methods of assessment for the purposes of adaptive management. The tracking tool has been developed to provide a quick overview of progress in improving the effectiveness of management in individual protected areas, to be filled in by the protected area manager or other relevant site staff. As such it is clear that there are strict limitations on what it can achieve: it should not for example be regarded as an independent assessment, or as the sole basis for adaptive management.

Because of the great differences between expectations, resources and needs around the world, the tracking tool also has strict limitations in terms of allowing comparison between sites: the scoring system, if applied at all, will be most useful for tracking progress over time in one site or a closely related group of sites.

Lastly, the tracking tool is too limited to allow a detailed evaluation of *outcomes* and is really aimed at providing a quick overview of the management steps identified in the WCPA Framework up to and including *outputs*. Although we include some questions relating to outcomes, the limitations of these should be noted. Clearly, however good management is, if biodiversity continues to decline, the protected area objectives are not being met. Therefore the question on condition assessment has disproportionate importance in the overall tracking tool.

Guidance notes for using the Tracking Tool

The World Bank/WWF Management Effectiveness Tracking Tool can be completed by protected area staff or project staff, with input from other protected area staff. The tracking tool has been designed to be easily answered by those managing the protected area without any additional research.

All sections of the tracking tool should be completed. There are two sections:

1. **Datasheet:** which details key information on the site, its characteristics and management objective and includes an overview of WWF/World Bank involvement.
2. **Assessment Form:** the assessment form includes three distinct sections, all of which should be completed.
 - **Questions and scores:** the main part of the assessment form is a series of 30 questions that can be answered by *assigning a simple score ranging between 0 (poor) to 3 (excellent)*. A series of four alternative answers are provided against each question to help assessors to make judgements as to the level of score given. *Questions that are not relevant to a particular protected area should be omitted*, with a reason given in the comments section (for example questions about use and visitors will not be relevant to a protected area managed according to the IUCN protected area management Category Ia). In addition, there are six supplementary questions which elaborate on key themes in the previous questions and provide additional information and points. This is, inevitably, an approximate process and there will be situations in which none of the four alternative answers appear to fit conditions in the protected area very precisely. We suggest that you choose the answer that is nearest and use the comments section to elaborate.
 - **Comments:** a box next to each question allows for *qualitative judgements to be justified* by explaining why they were made (this could range from personal opinion, a reference document, monitoring results or external studies and assessments – the point being to give anyone reading the report an idea of why the assessment was made). In this section we also suggest that respondents comment on the role/influence of WWF or World Bank projects if appropriate. On some occasions suggestions are made about what might be covered in the comments column.
 - **Next Steps:** for each question respondents are asked to identify a long-term management need to further adaptive management at the site, if this is relevant.
3. **Final Score:** a final total of the score from completing the assessment form can be *calculated as a percentage of scores from those questions that were relevant to a particular protected area*. (So for example if 5 questions are believed to be irrelevant (and this is justified in the comments column) then the final score would be multiplied by 29/24 to offset the fact that some questions were not applied.) If the

additional questions are relevant to the protected area, add the additional score to the total if they are relevant and omit them if they are not.

Disclaimer: The whole concept of “scoring” progress is fraught with difficulties and possibilities for distortion. The current system assumes, for example, that all the questions cover issues of equal weight, whereas this is not necessarily the case. Accuracy might be improved by weighting the various scores although this would provide additional challenges in deciding differing weightings. In the current version a simple scoring system is maintained, but the limitations of this approach should be recognised.

Annex E Addendum 1 Application of the METT to Horsh Ehden Nature Reserve

Reporting Progress at Protected Area Sites: Data Sheet

| | | |
|--|---|----------------------------------|
| Name of protected area | Horsh Ehden Nature Reserve | |
| Location of protected area (country and if possible map reference) | Northern Lebanon 35 NE of Tripoli on Mount Lebanon between 1200 and 2000 meters | |
| Date of establishment (distinguish between agreed and gazetted*) | Agreed | Gazetted March 1992 |
| Ownership details (i.e. owner, tenure rights etc) | Municipality of Zgherta/Ehden | |
| Management Authority | Ministry of Environment plus the Government Appointed Committee plus the Management Team | |
| Size of protected area (ha) | 1000 ha including the buffer zone (buffer zone is managed the same as the PA) | |
| Number of staff | Permanent No one as of November 15 when UNDP/'GEF project funding ended | Temporary Four until November 15 |
| Budget | 18 million Lebanese pounds from the Ministry of Environment that was budgeted for 2002 and received in 2004. GAC expects to receive 2003 budget in 2005, but there is no guarantee. | |
| Designations (IUCN category, World Heritage, Ramsar etc) | IUCN Category I and IBA | |
| Reasons for designation | Strict protection with tourism, ranked by Birdlife International as an IBA | |
| Brief details of World Bank funded project or projects in PA | | |
| Brief details of WWF funded project or projects in PA | | |
| Brief details of other relevant projects in PA | | |
| List the two primary protected area objectives | | |
| Objective 1 | Conservation of natural and cultural heritage | |
| Objective 2 | Conservation as the basis for sustainable development | |
| List the top two most important threats to the PA (and indicate reasons why these were chosen) | | |
| Threat 1 | Hunting | |
| Threat 2 | Uncontrolled settlements and developments around the reserve | |
| List top two critical management activities | | |
| Activity 1 | Enforcement | |
| Activity 2 | Visitor management | |

Date assessment carried out: December 10, 2004

Name/s of assessor: Roy Hagen and Jocelyne Gerard

| Issue | Criteria | Score | Comments | Next steps |
|---|--|-------|---|---|
| 1. Legal status Does the protected area have legal status? <i>Context</i> | The protected area is not gazetted | 0 | <i>Note:</i> see fourth option for private reserves | |
| | The government has agreed that the protected area should be gazetted but the process has not yet begun | 1 | | |
| | The protected area is in the process of being gazetted but the process is still incomplete | 2 | | |
| | The protected area has been legally gazetted (or in the case of private reserves is owned by a trust or similar) | 3 | | |
| 2. Protected area regulations Are inappropriate land uses and activities (e.g. poaching) controlled? <i>Context</i> | There are no mechanisms for controlling inappropriate land use and activities in the protected area | 0 | The wording of “implementation” is confusing. We interpret this as the existence of proper regulations and land use controls. | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist but there are major problems in implementing them effectively | 1 | | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist but there are some problems in effectively implementing them | 2 | | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist and are being effectively implemented | 3 | | |
| 3. Law enforcement Can staff enforce protected area rules well enough? <i>Context</i> | The staff have no effective capacity/resources to enforce protected area legislation and regulations | 0 | <i>Possible issue for comment:</i> What happens if people are arrested? The law empowers the reserve rangers who have been sworn in, to stop people and to give them tickets. The one reserve ranger has not yet been sworn. When needed the ranger calls on the police for help. The local community gives very good support. Funding as of Nov 15 is highly uncertain. | The ranger will be sworn in 2005 |
| | There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget) | 1 | | |
| | The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain | 2 | | |
| | The staff have excellent capacity/resources to enforce protected area legislation and regulations | 3 | | |
| 4. Protected area objectives Have objectives been agreed? | No firm objectives have been agreed for the protected area | 0 | The five-year duration of the management plan is coming to term and the plan will need to be updated. The objectives need to be reviewed. The municipality and the direct neighbors including hunters, herders and | Management plan must be reviewed in 2005. Use MedWetCoast management plans as a reference because they are more practically oriented. |
| | The protected area has agreed objectives, but is not managed according to these objectives | 1 | | |
| | The protected area has agreed objectives, but these are only partially implemented | 2 | | |

| Issue | Criteria | Score | Comments | Next steps |
|---|--|-------|---|--|
| <i>Planning</i> | The protected area has agreed objectives and is managed to meet these objectives | 3 | woodcutters were not consulted. Broader stakeholder participation needs to be achieved. | |
| 5. Protected area design | Inadequacies in design mean achieving the protected areas major management objectives of the protected area is impossible | 0 | <i>Possible issue for comment:</i> does the protected area contain different management zones and are these well maintained? The reserve should be better integrated into the larger landscape. The reserve should be extended farther down the valley and farther up the mountain. The buffer zone on the north side extends into the adjoining municipality. This area may become urbanized. To the west, there is still an opportunity for creating a corridor. To the south, most of the buffer zone falls within the urbanized area. This has been dealt with, but measures should be formalized. | The GAC should work directly with the Director General of Urban Planning, the two municipalities to develop land use management controls for the larger landscape around the reserve. The DG of MOE sits on the higher council for urban planning and should support this. |
| Does the protected area need enlarging, corridors etc to meet its objectives? | Inadequacies in design mean that achievement of major objectives are constrained to some extent | 1 | | |
| | Design is not significantly constraining achievement of major objectives, but could be improved | 2 | | |
| <i>Planning</i> | Reserve design features are particularly aiding achievement of major objectives of the protected area | 3 | | |
| 6. Protected area boundary demarcation | The boundary of the protected area is not known by the management authority or local residents/neighbouring land users | 0 | <i>Possible issue for comment:</i> are there tenure disagreements affecting the protected area? On the uphill side (east and north) the road has been accepted by everyone as the boundary line and corresponds quite well with the theoretical limits. Other natural features have been used as limits (the cliff and the valley bottom). On the eastern side, there is a private property inside the reserve that are not used because it is a zone of accumulation of rock fall. Other boundaries are recognized approximately by both staff and local residents. | |
| Is the boundary known and demarcated? | The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users | 1 | | |
| | The boundary of the protected area is known by both the management authority and local residents but is not appropriately demarcated | 2 | | |
| <i>Context</i> | The boundary of the protected area is known by the management authority and local residents and is appropriately demarcated | 3 | | |
| 7. Management plan | There is no management plan for the protected area | 0 | It is lack of resources that limits the implementation of the plan. The existing management plan is very general and | Management plan must be reviewed in 2005. Use MedWetCoast management |
| | A management plan is being prepared or has been prepared but is not being implemented | 1 | | |

| Issue | Criteria | Score | Comments | Next steps |
|---|--|-------|---|---|
| Is there a management plan and is it being implemented? <i>Planning</i> | An approved management plan exists but it is only being partially implemented because of funding constraints or other problems | 2 | lacking in detail. It does not well reflect the specificities of the area. The next plan must be translated into Arabic. | plans as a reference because they are more practically oriented. |
| | An approved management plan exists and is being implemented | 3 | | |
| Additional points <i>Planning</i> | The planning process allows adequate opportunity for key stakeholders to influence the management plan | +1 | The process allows for stakeholder participation (but this has not been used effectively) | The GAC, MT and MOE should jointly define the process for revising the management plan |
| | There is an established schedule and process for periodic review and updating of the management plan | +1 | No defined planning process for revising the plan has been elaborated. | |
| | The results of monitoring, research and evaluation are routinely incorporated into planning | +1 | | |
| 8. Regular work plan Is there an annual work plan? <i>Planning/Outputs</i> | No regular work plan exists | 0 | Since November 2002, there has been no workplan until 2004 when one was prepared. GAC does not systematically monitoring achievements of activities against targets, but the MOE does this monitoring. GAC has not held regular meetings, there was no budget and there was no MT. In 2004, the GAC has received regular reports. MOE has not received them. GAC has refused to send any reports to MOE. The GAC had a big misunderstanding with MOE on funding. The lack of reporting continued on, unfortunately, even after the disagreement had been resolved. | The reporting system (for all PA) between MT, GAC and MOE needs to be reviewed. These reports should include reporting on achievement of activities against the workplan and the management plan itself. There is a major need to improve communications between the GAC and MOE. The change in GAC membership presents a good opportunity for starting afresh. |
| A regular work plan exists but activities are not monitored against the plan's targets | 1 | | | |
| A regular work plan exists and actions are monitored against the plan's targets, but many activities are not completed | 2 | | | |
| A regular work plan exists, actions are monitored against the plan's targets and most or all prescribed activities are completed | 3 | | | |
| 9. Resource inventory Do you have enough information to manage the area? | There is little or no information available on the critical habitats, species and cultural values of the protected area | 0 | There is one list (done by NRSC with very little site visits) that says the PA has 500 species and another by Hubberd that found over 1000 spp. Dr. Riccardo Hubberd (and his wife) of Friends of Nature have an inventory of the plants of Horsh Ehdn. He found over | The validity of the Riccardo data needs to be confirmed. The GAC would like the MOE to take a decision on this. |
| Information on the critical habitats, species and cultural values of the protected area is not sufficient to support planning and decision making | 1 | | | |
| Information on the critical habitats, species and cultural values of the protected area is sufficient for key areas of planning/decision making but the necessary survey work is not being maintained | 2 | | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|--|-------|--|--|
| <i>Context</i> | Information concerning on the critical habitats, species and cultural values of the protected area is sufficient to support planning and decision making and is being maintained | 3 | 1000 species. These are qualified people. NRSC should have found this in their literature review. The Universite Libanaise did a study to choose indicator species. They ran filters on the 500 species. They selected a small number of key indicator species. Contracted August 2003 and being finished now. An inventory/study on butterflies has been done by a Dutch amateur. He gave them the results in 2004 – he found 160 spp of butterfly. The British Embassy funded research and an inventory of a family of insects. They did a lot of fieldwork. The Embassy refused to endorse the final report. It is still being repaired. HE has no copy yet. | |
| 10. Research Is there a programme of management-orientated survey and research work? <i>Inputs</i> | There is no survey or research work taking place in the protected area | 0 | MT has prepared a Preferred Research Agenda but it is not specifically geared toward management needs. They market it with university and individual researchers. This has worked fairly well. | Prepare a new PRA that specifically targets management needs. Open a dialogue between the reserve and the universities. |
| | There is some <i>ad hoc</i> survey and research work | 1 | | |
| | There is considerable survey and research work but it is not directed towards the needs of protected area management | 2 | | |
| | There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs | 3 | | |
| 11. Resource management Is the protected area adequately managed (e.g. for fire, invasive species, poaching)? <i>Process</i> | Requirements for active management of critical ecosystems, species and cultural values have not been assessed | 0 | Risk of forest fires will increase substantially over time with the increased regeneration. The needs for ecosystem are just now beginning to be recognized. | |
| | Requirements for active management of critical ecosystems, species and cultural values are known but are not being addressed | 1 | | |
| | Requirements for active management of critical ecosystems, species and cultural values are only being partially addressed | 2 | | |
| | Requirements for active management of critical ecosystems, species and cultural values are being substantially or fully addressed | 3 | | |
| 12. Staff numbers Are there enough people employed to | There are no staff | 0 | This assumes that contracts for the present staff will be maintained. There is a significant need for temporary summer | Restructure the staff and integrate one position for marketing and public relations |
| | Staff numbers are inadequate for critical management activities | 1 | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|---|-------|---|--|
| manage the protected area? <i>Inputs</i> | Staff numbers are below optimum level for critical management activities | 2 | staff. | campaigns. |
| | Staff numbers are adequate for the management needs of the site | 3 | | |
| 13. Personnel management Are the staff managed well enough? <i>Process</i> | Problems with personnel management constrain the achievement of major management objectives | 0 | The GAC took significant measures to improve guidelines for personnel management, but members of the GAC have not always respected them. | Develop clearer job descriptions and clarify the hierarchy of the personnel. |
| | Problems with personnel management partially constrain the achievement of major management objectives | 1 | | |
| | Personnel management is adequate to the achievement of major management objectives but could be improved | 2 | | |
| | Personnel management is excellent and aids the achievement major management objectives | 3 | | |
| 14. Staff training Is there enough training for staff? <i>Inputs/Process</i> | Staff are untrained | 0 | Staff has benefited from a great deal of training. They need networking with other PA and need to be kept up to date. Exchange with other PA in other countries should be promoted. There is a moderate level of exchange visits with other PA in Lebanon | Define further specific needs such as on fire management. |
| | Staff training and skills are low relative to the needs of the protected area | 1 | | |
| | Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management | 2 | | |
| | Staff training and skills are in tune with the management needs of the protected area, and with anticipated future needs | 3 | | |
| 15. Current budget Is the current budget sufficient? <i>Inputs</i> | There is no budget for the protected area | 0 | The GAC receives their budget from the MOE one or two years late. The 2002 budget arrived in 2003. No monies have been received in 2004. MOE feels the GAC is too dependent on MOE for their budget. A revolving fund is needed for the sale/marketing of souvenirs. The management team may never be large enough to manage the reserve and to do proper fundraising/marketing. Need to involve the private sector in joint ventures with shares for the reserve. Development of a Horsh Ehden label needs to be investigated. | The GAC needs to diversify their sources of financing. |
| | The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage | 1 | | |
| | The available budget is acceptable, but could be further improved to fully achieve effective management | 2 | | |
| | The available budget is sufficient and meets the full management needs of the protected area | 3 | | |
| 16. Security of budget Is the budget secure? | There is no secure budget for the protected area and management is wholly reliant on outside or year by year funding | 0 | The end of the PAP funding in November 2004 presents a special challenge. | |
| | There is very little secure budget and the protected area could not function adequately without outside funding | 1 | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|---|-------|--|---|
| <i>Inputs</i> | There is a reasonably secure core budget for the protected area but many innovations and initiatives are reliant on outside funding | 2 | | |
| | There is a secure budget for the protected area and its management needs on a multi-year cycle | 3 | | |
| 17. Management of budget Is the budget managed to meet critical management needs? <i>Process</i> | Budget management is poor and significantly undermines effectiveness | 0 | MOE has not yet received a budget from the GAC for 2003 monies. | GAC should immediately prepare a proper budget in conformity with the annual work plan and the management plan. |
| | Budget management is poor and constrains effectiveness | 1 | | |
| | Budget management is adequate but could be improved | 2 | | |
| | Budget management is excellent and aids effectiveness | 3 | | |
| 18. Equipment Is equipment adequately maintained? <i>Process</i> | There is little or no equipment and facilities | 0 | Need to upgrade computers and software, GPS and radio system, binoculars, showshoes, digital camera, projector and need a medium 4X4 double cabin vehicle. | Procure computers with remaining GEF monies. Actively seek additional funding from sponsors and donors. |
| | There is some equipment and facilities but these are wholly inadequate | 1 | | |
| | There is equipment and facilities, but still some major gaps that constrain management | 2 | | |
| | There is adequate equipment and facilities | 3 | | |
| 19. Maintenance of equipment Is equipment adequately maintained? <i>Process</i> | There is little or no maintenance of equipment and facilities | 0 | There is relatively little equipment and it is relatively well maintained. | |
| | There is some <i>ad hoc</i> maintenance of equipment and facilities | 1 | | |
| | There is maintenance of equipment and facilities, but there are some important gaps in maintenance | 2 | | |
| | Equipment and facilities are well maintained | 3 | | |
| 20. Education and awareness programme Is there a planned education programme? <i>Process</i> | There is no education and awareness programme | 0 | The chain of relationships between the recipients of the awareness campaign and the field exposure is weak. Staff gives talks in schools but there is little follow up. Proper equipment is lacking. | Integrate national event calendar in the local awareness raising planning. |
| | There is a limited and <i>ad hoc</i> education and awareness programme, but no overall planning for this | 1 | | |
| | There is a planned education and awareness programme but there are still serious gaps | 2 | | |
| | There is a planned and effective education and awareness programme fully linked to the objectives and needs of the protected area | 3 | | |
| 21. State and commercial neighbours Is there co-operation | There is no contact between managers and neighbouring official or corporate land users | 0 | Most neighbours are private land owners. The restaurant operators do not feel they have direct benefit from the reserve, except for one who is trying to see the | Be more aggressive in approaching them and try to work out deal integrating the restaurants and the activities in |
| | There is limited contact between managers and neighbouring official or corporate land users | 1 | | |

| Issue | Criteria | Score | Comments | Next steps |
|---|---|-------|--|--|
| with adjacent land users? <i>Process</i> | There is regular contact between managers and neighbouring official or corporate land users, but only limited co-operation | 2 | positive returns. | the reserve. |
| | There is regular contact between managers and neighbouring official or corporate land users, and substantial co-operation on management | 3 | | |
| 22. Indigenous people Do indigenous and traditional peoples resident or regularly using the PA have input to management decisions? <i>Process</i> | Indigenous and traditional peoples have no input into decisions relating to the management of the protected area | 0 | There are no “traditional” people, | |
| | Indigenous and traditional peoples have some input into discussions relating to management but no direct involvement in the resulting decisions | 1 | | |
| | Indigenous and traditional peoples directly contribute to some decisions relating to management | 2 | | |
| | Indigenous and traditional peoples directly participate in making decisions relating to management | 3 | | |
| 23. Local communities Do local communities resident or near the protected area have input to management decisions? <i>Process</i> | Local communities have no input into decisions relating to the management of the protected area | 0 | The local community is involved through the different volunteers programs But the only decision making process is through the representation of the municipality in the GAC. | Nothing could really be done without changing the structure of the GAC or to make public hearings for major decisions. |
| | Local communities have some input into discussions relating to management but no direct involvement in the resulting decisions | 1 | | |
| | Local communities directly contribute to some decisions relating to management | 2 | | |
| | Local communities directly participate in making decisions relating to management | 3 | | |
| Additional points <i>Outputs</i> | There is open communication and trust between local stakeholders and protected area managers | +1 | They are in favour of the reserve and always offer help, which comes to be limited. The full support is there. | Elaborate on the creation of a stable volunteer programme |
| | Programmes to enhance local community welfare, while conserving protected area resources, are being implemented | +1 | | |
| 24. Visitor facilities Are visitor facilities (for tourists, pilgrims etc) good enough? <i>Outputs</i> | There are no visitor facilities and services | 0 | There is not a very big number of visitors, however there is fear that increasing the number is inappropriate due to the limited number of guides which can cause more damage than good. | Need to resolve the lower entrance issue (Nabaa Jouit) |
| | Visitor facilities and services are inappropriate for current levels of visitation or are under construction | 1 | | |
| | Visitor facilities and services are adequate for current levels of visitation but could be improved | 2 | | |
| | Visitor facilities and services are excellent for current levels of visitation | 3 | | |
| 25. Commercial tourism | There is little or no contact between managers and tourism operators using the protected area | 0 | They are not invited due to the fact that in summer the staff is overloaded. | Make contact and invite the major tour operators as a start in |

| Issue | Criteria | Score | Comments | Next steps |
|---|---|-------|---|--|
| Do commercial tour operators contribute to protected area management? <i>Process</i> | There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters | 1 | | an organized manner. |
| | There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values | 2 | | |
| | There is excellent co-operation between managers and tourism operators to enhance visitor experiences, protect values and resolve conflicts | 3 | | |
| 26. Fees If fees (tourism, fines) are applied, do they help protected area management? <i>Outputs</i> | Although fees are theoretically applied, they are not collected | 0 | ??? The fee is collected and re-injected in the management of the reserve. But not all visitors are paying. | Find a way to control all incoming visitors. |
| | The fee is collected, but it goes straight to central government and is not returned to the protected area or its environs | 1 | | |
| | The fee is collected, but is disbursed to the local authority rather than the protected area | 2 | | |
| | There is a fee for visiting the protected area that helps to support this and/or other protected areas | 3 | | |
| 27. Condition assessment Is the protected area being managed consistent to its objectives? <i>Outcomes</i> | Important biodiversity, ecological and cultural values are being severely degraded | 0 | There is a dynamic re-generation at all levels | |
| | Some biodiversity, ecological and cultural values are being severely degraded | 1 | | |
| | Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted | 2 | | |
| | Biodiversity, ecological and cultural values are predominantly intact | 3 | | |
| Additional points <i>Outputs</i> | There are active programmes for restoration of degraded areas within the protected area and/or the protected area buffer zone | +1 | | |
| 28. Access assessment Are the available management mechanisms working to control access or use? <i>Outcomes</i> | Protection systems (patrols, permits etc) are ineffective in controlling access or use of the reserve in accordance with designated objectives | 0 | Staff is not sufficient | Convince the municipality to give provide funds for extra rangers if possible. |
| | Protection systems are only partially effective in controlling access or use of the reserve in accordance with designated objectives | 1 | | |
| | Protection systems are moderately effective in controlling access or use of the reserve in accordance with designated objectives | 2 | | |
| | Protection systems are largely or wholly effective in controlling access or use of the reserve in accordance with designated objectives | 3 | | |
| 29. Economic benefit assessment | The existence of the protected area has reduced the options for economic development of the local communities | 0 | The local community is convinced the reserve can be beneficial to them. But no | Work more on longer stay packages. |

| Issue | Criteria | Score | Comments | Next steps |
|--|--|-------|---|--|
| Is the protected area providing economic benefits to local communities? <i>Outcomes</i> | The existence of the protected area has neither damaged nor benefited the local economy | 1 | major benefit is has been proved yet. | |
| | There is some flow of economic benefits to local communities from the existence of the protected area but this is of minor significance to the regional economy | 2 | | |
| | There is a significant or major flow of economic benefits to local communities from activities in and around the protected area (e.g. employment of locals, locally operated commercial tours etc) | 3 | | |
| 30. Monitoring and evaluation <i>Planning/Process</i> | There is no monitoring and evaluation in the protected area | 0 | The monitoring carried out is taken from a monitoring programme prepared for the reserve. The management staff does not have available time to take the full program in hand. | Subcontract to a scientific body to complement under the supervision of the management team. |
| | There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results | 1 | | |
| | There is an agreed and implemented monitoring and evaluation system but results are not systematically used for management | 2 | | |
| | A good monitoring and evaluation system exists, is well implemented and used in adaptive management | 3 | | |
| TOTAL SCORE | | | | |

**Annex E Addendum 1 Application of the METT to Palm Islands Nature Reserve
Reporting Progress at Protected Area Sites: Data Sheet**

| | | |
|--|---|--|
| Name of protected area | Palm Islands Nature Reserve | |
| Location of protected area (country and if possible map reference) | 5.5 kms from the shore directly west of Tripoli to the mid-point of the three islands. | |
| Date of establishment (distinguish between agreed and gazetted*) | Agreed | Gazetted March 9, 1992 |
| Ownership details (i.e. owner, tenure rights etc) | Government of Lebanon | |
| Management Authority | MOE, GAC and MT | |
| Size of protected area (ha) | 4.2 km ² including the 500 meter buffer zone | |
| Number of staff | Permanent 2 | Temporary 2 in the summer during the opening of the reserve in July, August and September |
| Budget | \$50,000 per year from MOE | |
| Designations (IUCN category, World Heritage, Ramsar etc) | IUCN Category I, RAMSAR, Specially Protected Area of Mediterranean Importance under the Barcelona Convention (SPAMI) and IBA | |
| Reasons for designation | No extractive use allowed except for spear fishing done without scuba gear. High significance of the biodiversity. SPAMI requires one site from each country. | |
| Brief details of World Bank funded project or projects in PA | | |
| Brief details of WWF funded project or projects in PA | | |
| Brief details of other relevant projects in PA | | |
| List the two primary protected area objectives | | |
| Objective 1 | Conserving endemic and endangered species and their habitats | |
| Objective 2 | Incorporation of in situ conservation as an integral part of human development (this is why the site is opened for visitors and for use for education) | |
| List the top two most important threats to the PA (and indicate reasons why these were chosen) | | |
| Threat 1 | Illegal taking of fish, eggs, birds, etc. | |
| Threat 2 | Exotic species (rabbits, rats...) | |
| List top two critical management activities | | |
| Activity 1 | Awareness raising and education | |
| Activity 2 | Effective mechanisms for law enforcement | |

Date assessment carried out: Dec 11, 2004

Name/s of assessor: Roy Hagen and Jocelyne Gerard

| Issue | Criteria | Score | Comments | Next steps |
|---|--|-------|--|--|
| 1. Legal status Does the protected area have legal status? <i>Context</i> | The protected area is not gazetted | 0 | <p><i>Note:</i> see fourth option for private reserves</p> <p>The law stipulates there will be no camping and no fire on the islands. This makes it impossible to develop camping as a revenue generating tourism activity. Each year, a wireless club gets special permission to camp on the island. Camping would have to be very closely regulated to minimize impacts. It is rumoured that there is a movement to declassify this reserve.</p> | Analyse in depth the pros and cons of amending the law to allow for well regulated camping on the island. |
| | The government has agreed that the protected area should be gazetted but the process has not yet begun | 1 | | |
| | The protected area is in the process of being gazetted but the process is still incomplete | 2 | | |
| | The protected area has been legally gazetted (or in the case of private reserves is owned by a trust or similar) | 3 | | |
| 2. Protected area regulations Are inappropriate land uses and activities (e.g. poaching) controlled? <i>Context</i> | There are no mechanisms for controlling inappropriate land use and activities in the protected area | 0 | <p>There is a Finance law that specifies that any fees for use of public lands must go to the government.</p> <p>The GAC tried to have the rangers collect entrance fees in 2003, but they were stopped by the police.</p> <p>When the army arrests people, fines go to the Ministry of Finance, even though the law says they should go to the GAC.</p> | <p>Regulations need to be changed to allow for enforcement officers to have a control post on the island.</p> <p>Amend the law to allow the GAC to collect entrance fees and to use the full amount for the management of the reserve.</p> |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist but there are major problems in implementing them effectively | 1 | | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist but there are some problems in effectively implementing them | 2 | | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist and are being effectively implemented | 3 | | |
| 3. Law enforcement Can staff enforce protected area rules well enough? <i>Context</i> | The staff have no effective capacity/resources to enforce protected area legislation and regulations | 0 | <p><i>Possible issue for comment:</i> What happens if people are arrested?</p> <p>There is an agreement with the army and police that when people are caught in the reserve, the first time the, guilty party must write a letter stating that they won't commit the same infraction again. The second time they are fined.</p> <p>Agents are not authorised to issue tickets. They would have to go to Ka – M- Makam to be sworn in by a judge. They need a book of citations (tickets). The MT has a very fast boat.</p> | The two rangers should be sworn in 2004. |
| | There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget) | 1 | | |
| | The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain | 2 | | |
| | The staff have excellent capacity/resources to enforce protected area legislation and regulations | 3 | | |
| 4. Protected area objectives | No firm objectives have been agreed for the protected area | 0 | Financial and human resources are limited and prevent full implementation of the | Use the limited resources for the highest priority objectives and |

| Issue | Criteria | Score | Comments | Next steps |
|--|--|-------|---|--|
| Have objectives been agreed? <i>Planning</i> | The protected area has agreed objectives, but is not managed according to these objectives | 1 | management plan. | activities. |
| | The protected area has agreed objectives, but these are only partially implemented | 2 | | |
| | The protected area has agreed objectives and is managed to meet these objectives | 3 | | |
| 5. Protected area design Does the protected area need enlarging, corridors etc to meet its objectives? <i>Planning</i> | Inadequacies in design mean achieving the protected areas major management objectives of the protected area is impossible | 0 | <i>Possible issue for comment:</i> does the protected area contain different management zones and are these well maintained? Scientific studies are needed to show whether the 500 meter marine buffer zone is adequate. Need bathymetrical studies and ecological studies. What was the basis for the 500 meter width of the buffer zone? | Provide more infrastructure in recreational zones in order to reduce pressures on other zones. Bathymetrical and ecological studies should be added to the research agenda and should be submitted to research institutes. |
| | Inadequacies in design mean that achievement of major objectives are constrained to some extent | 1 | | |
| | Design is not significantly constraining achievement of major objectives, but could be improved | 2 | | |
| | Reserve design features are particularly aiding achievement of major objectives of the protected area | 3 | | |
| 6. Protected area boundary demarcation Is the boundary known and demarcated? <i>Context</i> | The boundary of the protected area is not known by the management authority or local residents/neighbouring land users | 0 | <i>Possible issue for comment:</i> are there tenure disagreements affecting the protected area? The buffer zone was once marked with bouys, but fishermen or others cut the ropes. | Buoys should not be used until there is adequate presence on the island to minimize risks they will be stolen or sabotaged. |
| | The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users | 1 | | |
| | The boundary of the protected area is known by both the management authority and local residents but is not appropriately demarcated | 2 | | |
| | The boundary of the protected area is known by the management authority and local residents and is appropriately demarcated | 3 | | |
| 7. Management plan Is there a management plan and is it being implemented? <i>Planning</i> | There is no management plan for the protected area | 0 | Bureaucracy and overlapping or unclear mandates is a major problem. Eight ministries are involved with coast zone management issues. | |
| | A management plan is being prepared or has been prepared but is not being implemented | 1 | | |
| | An approved management plan exists but it is only being partially implemented because of funding constraints or other problems | 2 | | |
| | An approved management plan exists and is being implemented | 3 | | |
| Additional points | The planning process allows adequate opportunity for key stakeholders to influence the management plan | +1 | The present management plan was distributed to all stakeholders for | |

| Issue | Criteria | Score | Comments | Next steps |
|---|---|-------|--|---|
| <i>Planning</i> | There is an established schedule and process for periodic review and updating of the management plan | +1 | comment before validation | The MOE, GAC and MT should define and agree upon a process for revising the management plan. |
| | The results of monitoring, research and evaluation are routinely incorporated into planning | +1 | This information is used in budgeting | |
| 8. Regular work plan | No regular work plan exists | 0 | The GAC monitors achievement of activities against the work plan. There is insufficient staff. | A major effort should be made in 2005 to secure funds for the appointment of an assistant manager. |
| Is there an annual work plan? | A regular work plan exists but activities are not monitored against the plan's targets | 1 | | |
| | A regular work plan exists and actions are monitored against the plan's targets, but many activities are not completed | 2 | | |
| | A regular work plan exists, actions are monitored against the plan's targets and most or all prescribed activities are completed | 3 | | |
| <i>Planning/Outputs</i> | | | | |
| 9. Resource inventory | There is little or no information available on the critical habitats, species and cultural values of the protected area | 0 | Surveys on land are made and maintained. For the marine side, almost nothing has been done. | The GAC will develop a project proposal and secure funds for conducting marine habitat/biodiversity surveys/inventories. |
| Do you have enough information to manage the area? | Information on the critical habitats, species and cultural values of the protected area is not sufficient to support planning and decision making | 1 | | |
| | Information on the critical habitats, species and cultural values of the protected area is sufficient for key areas of planning/decision making but the necessary survey work is not being maintained | 2 | | |
| | Information concerning on the critical habitats, species and cultural values of the protected area is sufficient to support planning and decision making and is being maintained | 3 | | |
| <i>Context</i> | | | | |
| 10. Research | There is no survey or research work taking place in the protected area | 0 | A management-oriented research agenda has been prepared and it was distributed to universities. Some research was done on the terrestrial side only, but most results have not been transmitted to the GAC. Biodiversity inventories were done by Lebanese University for five PA for MOE. This did not cover the marine ecosystems. | Develop a mechanism to ensure that research institutions remit copies to the GAC/management authorities of all research done at Palm Islands. |
| Is there a programme of management-orientated survey and research work? | There is some <i>ad hoc</i> survey and research work | 1 | | |
| | There is considerable survey and research work but it is not directed towards the needs of protected area management | 2 | | |
| | There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs | 3 | | |
| <i>Inputs</i> | | | | |
| 11. Resource management | Requirements for active management of critical ecosystems, species and cultural values have not been assessed | 0 | Invasive species – Rabbits, rats and <i>Washingtonia filifera</i> are exotic species on the island. Partial control measures have been undertaken for rabbits, but this | Washingtonia will be removed once sunbrellas have been provided for shade. Seek documentation on best |
| | Requirements for active management of critical ecosystems, species and cultural values are known but are not being addressed | 1 | | |

| Issue | Criteria | Score | Comments | Next steps |
|---|---|-------|--|---|
| Is the protected area adequately managed (e.g. for fire, invasive species, poaching)? | Requirements for active management of critical ecosystems, species and cultural values are only being partially addressed | 2 | has not succeeded. Rats are said to come in on floating vegetation/garbage. Introduce castrated fox? | practices for eradication of rabbits and rats. Seek documentation on the World Bank/GEF-funded rat eradication in Mauritius and/or Seychelles. |
| | Requirements for active management of critical ecosystems, species and cultural values are being substantially or fully addressed | 3 | | |
| <i>Process</i> | | | | |
| 12. Staff numbers Are there enough people employed to manage the protected area? | There are no staff | 0 | There is neither a manager nor an assistant manager and no fund-raising officer. | A major effort should be made from 2005 on to secure funds for the appointment of an assistant manager. |
| | Staff numbers are inadequate for critical management activities | 1 | | |
| | Staff numbers are below optimum level for critical management activities | 2 | | |
| | Staff numbers are adequate for the management needs of the site | 3 | | |
| <i>Inputs</i> | | | | |
| 13. Personnel management Are the staff managed well enough? | Problems with personnel management constrain the achievement of major management objectives | 0 | Ensuring continuity is the biggest challenge. Staff have been hired on a project basis – there was a lack of transparency on TORs for the managers are very well done. | |
| | Problems with personnel management partially constrain the achievement of major management objectives | 1 | | |
| | Personnel management is adequate to the achievement of major management objectives but could be improved | 2 | | |
| | Personnel management is excellent and aids the achievement major management objectives | 3 | | |
| <i>Process</i> | | | | |
| 14. Staff training Is there enough training for staff? | Staff are untrained | 0 | This only pertains to the existing staff – the two rangers/guides. Investing in better guide services is a way of increasing fundraising. | Rangers/guides need training in eco-guiding and monitoring of ecotourism. |
| | Staff training and skills are low relative to the needs of the protected area | 1 | | |
| | Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management | 2 | | |
| | Staff training and skills are in tune with the management needs of the protected area, and with anticipated future needs | 3 | | |
| <i>Inputs/Process</i> | | | | |
| 15. Current budget Is the current budget sufficient? | There is no budget for the protected area | 0 | One should create a national system of PA in Lebanon so that all PA can share resources for specialities like fundraising. Even though the present budget does not allow for the hiring of a manager or an assistant manager, it does cover essential management activities. The GAC has obtained souvenirs, but has not yet begun to sell them. | Begin sales of souvenirs. If and when GAC receives 2003 budget from MOE, they will be able to appoint an assistant manager. |
| | The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage | 1 | | |
| | The available budget is acceptable, but could be further improved to fully achieve effective management | 2 | | |
| | The available budget is sufficient and meets the full management needs of the protected area | 3 | | |
| <i>Inputs</i> | | | | |
| 16. Security of budget | There is no secure budget for the protected area and management is wholly reliant on outside or year by year funding | 0 | The only budget monies come from the MOE. | By February, the GAC will have prepared a written request to |

| Issue | Criteria | Score | Comments | Next steps |
|--|---|-------|--|--|
| Is the budget secure? <i>Inputs</i> | There is very little secure budget and the protected area could not function adequately without outside funding | 1 | The GAC never knows when they will get monies from MOE. | MOE to take the necessary legal actions to allow Palm Islands to collect entrance fees and to use all of these fees for managing the reserve. |
| | There is a reasonably secure core budget for the protected area but many innovations and initiatives are reliant on outside funding | 2 | With the economic situation in Lebanon, public civil servants never know when they will receive their salaries (some teachers haven't been paid for a year and a half.) | |
| | There is a secure budget for the protected area and its management needs on a multi-year cycle | 3 | | |
| 17. Management of budget Is the budget managed to meet critical management needs? <i>Process</i> | Budget management is poor and significantly undermines effectiveness | 0 | | |
| | Budget management is poor and constrains effectiveness | 1 | | |
| | Budget management is adequate but could be improved | 2 | | |
| | Budget management is excellent and aids effectiveness | 3 | | |
| 18. Equipment Is equipment adequately maintained? - <i>Process</i> | There is little or no equipment and facilities | 0 | Scuba equipment and underwater cameras are needed. Water analysis testing kits are needed. | Equipment will be sought through projects for marine and terrestrial research. |
| | There is some equipment and facilities but these are wholly inadequate | 1 | | |
| | There is equipment and facilities, but still some major gaps that constrain management | 2 | | |
| | There is adequate equipment and facilities | 3 | | |
| 19. Maintenance of equipment Is equipment adequately maintained? <i>Process</i> | There is little or no maintenance of equipment and facilities | 0 | Marine equipment requires much higher maintenance than terrestrial equipment. | Ask MOE to budget for maintenance of the two boats. |
| | There is some <i>ad hoc</i> maintenance of equipment and facilities | 1 | | |
| | There is maintenance of equipment and facilities, but there are some important gaps in maintenance | 2 | | |
| | Equipment and facilities are well maintained | 3 | | |
| 20. Education and awareness programme Is there a planned education programme? <i>Process</i> | There is no education and awareness programme | 0 | Situation is due to the absence of human resources at the management level. | Education and awareness will be part of the duties of the assistant manager to be recruited. |
| | There is a limited and <i>ad hoc</i> education and awareness programme, but no overall planning for this | 1 | | |
| | There is a planned education and awareness programme but there are still serious gaps | 2 | | |
| | There is a planned and effective education and awareness programme fully linked to the objectives and needs of the protected area | 3 | | |
| 21. State and commercial neighbours Is there co-operation with adjacent land users? | There is no contact between managers and neighbouring official or corporate land users | 0 | There are no adjacent lands but adjacent marine area with users such as fishermen, shell collectors and divers with various activities. On several occasions local fishermen asked the rangers to help them keeping away shell and urchin collectors | Establish and implement a protocol of cooperation between the protected area, army and department of fishery in the Ministry of Agriculture to regulate the use of the sea |
| | There is limited contact between managers and neighbouring official or corporate land users | 1 | | |
| | There is regular contact between managers and neighbouring official or corporate land users, but only limited co-operation | 2 | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|---|-------|---|---|
| <i>Process</i> | There is regular contact between managers and neighbouring official or corporate land users, and substantial co-operation on management | 3 | which are foreigners coming from Batroun and its vicinity to collect such organisms and introduce them in their own areas. The fishermen of Al Mina who are aware of the importance of shells and sea-urchins within the food chain were assisted. | urchins and molluscs not only around the reserve but also in the Lebanese water |
| 22. Indigenous people | Indigenous and traditional peoples have no input into decisions relating to the management of the protected area | 0 | Traditional people informed the management team about their traditional use of the sandy beach as a cure for rheumatism. Also they provided information about some medicinal and culinary plants on the islands. So they indirectly contributed to some decisions relating to management. Others directly participated in making decisions of relation to management such as the ideal location of the doc and the best place for evacuating people during unexpected storms. | Strengthen the relation with traditional people in order to increase their input. |
| Do indigenous and traditional peoples resident or regularly using the PA have input to management decisions? <i>Process</i> | Indigenous and traditional peoples have some input into discussions relating to management but no direct involvement in the resulting decisions | 1 | | |
| | Indigenous and traditional peoples directly contribute to some decisions relating to management | 2 | | |
| | Indigenous and traditional peoples directly participate in making decisions relating to management | 3 | | |
| 23. Local communities | Local communities have no input into decisions relating to the management of the protected area | 0 | The local community directly contributed to several decisions relating to management since they pushed hard to open the reserve for visitation in 1997 and expressed their needs for more infrastructure on the island. | Strengthen the relation with local communities in order to increase their input. |
| Do local communities resident or near the protected area have input to management decisions? <i>Process</i> | Local communities have some input into discussions relating to management but no direct involvement in the resulting decisions | 1 | | |
| | Local communities directly contribute to some decisions relating to management | 2 | | |
| | Local communities directly participate in making decisions relating to management | 3 | | |
| Additional points | There is open communication and trust between local stakeholders and protected area managers | +1 | People from local community appointed as management team, priority for transportation of visitors is given to local community, Labours paid for cleaning and construction works are selected from Local community. | Develop more programmes to enhance local community welfare such as training them on guiding visitors for bird watching and on interpretation. |
| <i>Outputs</i> | Programmes to enhance local community welfare, while conserving protected area resources, are being implemented | +1 | | |
| 24. Visitor facilities | There are no visitor facilities and services | 0 | <i>Possible issue for comment:</i> Do visitors | Inaugurate additional activities |

| Issue | Criteria | Score | Comments | Next steps |
|---|---|-------|--|--|
| Are visitor facilities (for tourists, pilgrims etc) good enough? <i>Outputs</i> | Visitor facilities and services are inappropriate for current levels of visitation or are under construction | 1 | damage the protected area? There are trails, dry latrine, open-sided rooms with palm leaves tops, guiding signs, wooden bridges, and balconies. | such as scuba diving, snorkeling, small boat sailing, etc... |
| | Visitor facilities and services are adequate for current levels of visitation but could be improved | 2 | Other facilities such as benches, bird watching tower, sunbrellas, interpretive signs, kiosk for selling souvenirs are under implementation | |
| | Visitor facilities and services are excellent for current levels of visitation | 3 | | |
| 25. Commercial tourism Do commercial tour operators contribute to protected area management? <i>Process</i> | There is little or no contact between managers and tourism operators using the protected area | 0 | <i>Possible issue for comment:</i> examples of contributions | Improve facilities for visitors in accordance with the recommendations of the tour operators provided they are consistent with conservation and sustainable development. |
| | There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters | 1 | Several tour operators were contacted and others investigated the islands as a potential site for eco-tourism. The contributed in generating ideas on what should be done to attract visitors. Also they proposed mechanisms for sharing incomes (giving percentage to the PA) and suggested a package of visits within Al Mina and Tripoli. | |
| | There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values | 2 | | |
| | There is excellent co-operation between managers and tourism operators to enhance visitor experiences, protect values and resolve conflicts | 3 | | |
| 26. Fees If fees (tourism, fines) are applied, do they help protected area management? <i>Outputs</i> | Although fees are theoretically applied, they are not collected | 0 | No entrance fees but there are fines which are collected by the army from people committing infractions and sent to Ministry of Finance despite the fact that the law of the reserve says that fines are to be used by the managing authority of the reserve. | Write a letter to the Ministry of Environment to find with the Ministry of Finance a mechanism or procedure to apply the law. |
| | The fee is collected, but it goes straight to central government and is not returned to the protected area or its environs | 1 | | |
| | The fee is collected, but is disbursed to the local authority rather than the protected area | 2 | | |
| | There is a fee for visiting the protected area that helps to support this and/or other protected areas | 3 | | |
| 27. Condition assessment Is the protected area being managed consistent to its objectives? <i>Outcomes</i> | Important biodiversity, ecological and cultural values are being severely degraded | 0 | <i>Possible issue for comment:</i> It is important to provide details of the biodiversity, ecological or cultural values being affected | Eliminate the introduced species and closely cooperate with the army to put an end to the illegal fishing practices. |
| | Some biodiversity, ecological and cultural values are being severely degraded | 1 | | |
| | Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted | 2 | Only some plant species are affected by the teeth of the introduced species (rabbits). Some eggs in nests of birds are probably damaged by the introduced rats. Fish within the sea belt are damaged by dynamites from time to time | |
| | Biodiversity, ecological and cultural values are predominantly intact | 3 | | |

| Issue | Criteria | Score | Comments | Next steps |
|---|--|-------|--|--|
| Additional points <i>Outputs</i> | There are active programmes for restoration of degraded areas within the protected area and/or the protected area buffer zone | +1 | | |
| 28. Access assessment Are the available management mechanisms working to control access or use? <i>Outcomes</i> | Protection systems (patrols, permits etc) are ineffective in controlling access or use of the reserve in accordance with designated objectives | 0 | There is total lack of control during nights and stormy days. Otherwise, the protection system (patrols and permits) is more than moderately effective in controlling access or use of the reserve in accordance with designated objectives. | Make necessary arrangement to provide a night control room for the police/army on Ramkine Island and strengthen cooperation with the police/army to increase their support to the management team's patrols. |
| | Protection systems are only partially effective in controlling access or use of the reserve in accordance with designated objectives | 1 | | |
| | Protection systems are moderately effective in controlling access or use of the reserve in accordance with designated objectives | 2 | | |
| | Protection systems are largely or wholly effective in controlling access or use of the reserve in accordance with designated objectives | 3 | | |
| 29. Economic benefit assessment Is the protected area providing economic benefits to local communities? <i>Outcomes</i> | The existence of the protected area has reduced the options for economic development of the local communities | 0 | <i>Possible issue for comment:</i> how does national or regional development impact on the protected area? Economical benefits derive from increased number of visitors to the PA. Around the reserve (at Al Mina), restaurants, petrol stations, shops of handcrafts, boat owners, fishermen hiring their boats, fresh fish markets are getting obvious benefits from visitors. In the protected area, the benefits are nearly limited to employed locals. | Propose, design and implement a Sunday market on one the islands (preferably Ramkine) to sell local goods which characterize the region. |
| | The existence of the protected area has neither damaged nor benefited the local economy | 1 | | |
| | There is some flow of economic benefits to local communities from the existence of the protected area but this is of minor significance to the regional economy | 2 | | |
| | There is a significant or major flow of economic benefits to local communities from activities in and around the protected area (e.g. employment of locals, locally operated commercial tours etc) | 3 | | |
| 30. Monitoring and evaluation | There is no monitoring and evaluation in the protected area | 0 | There is a site-specific strategy for monitoring and a partially implemented species-specific methodology for monitoring of species. These are intermittently evaluated and the results are used for management. E.g. flowering | Develop detailed species-specific strategy for monitoring and evaluation. |
| | There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results | 1 | | |
| | There is an agreed and implemented monitoring and evaluation system but results are not systematically used for management | 2 | | |

| Issue | Criteria | Score | Comments | Next steps |
|-------------------------|---|-------|---|------------|
| <i>Planning/Process</i> | A good monitoring and evaluation system exists, is well implemented and used in adaptive management | 3 | <p>period of annual plants is monitored for some noteworthy species and visitors become deprived from access to their area; selected bird species are monitored and their preferred areas for roosting, nesting or resting are protected. Yellow-legged Gull is monitored in relation to garbage size and its numbers are controlled through cleaning activities to increase number of other gulls which feed on natural food (non garbage matters). Introduced rabbits are monitored and their population is decreased when it reaches threatening size (more than 50 rabbits), etc.</p> | |
| TOTAL SCORE | | | | |

Annex E Addendum 1 Application of the METT to Arz Al Shouf Nature Reserve
Reporting Progress at Protected Area Sites: Data Sheet

| | | |
|--|--|--|
| Name of protected area | El Shouf Cedar Nature Reserve | |
| Location of protected area (country and if possible map reference) | El Shouf Mountain Range of Mount Lebanon between 1100 to 2000 meters | |
| Date of establishment (distinguish between agreed and gazetted*) | Agreed 1992 Law of Parliament 5325 | Gazetted 1996 |
| Ownership details (i.e. owner, tenure rights etc) | Government of Lebanon (most of cedar forests) and nine municipalities | |
| Management Authority | Ministry of Environment, Government Appointed Committee for El Shouf Cedar NR and El Shouf Cedar Society | |
| Size of protected area (ha) | Approximately 16,500 has (not precise) | |
| Number of staff | Permanent 11 | Temporary 6-8 during spring and summer |
| Budget | From business plan -- \$150,000 for recurrent costs | |
| Designations (IUCN category, World Heritage, Ramsar etc) | IUCN Category I and an IBA | |
| Reasons for designation | Based on how it is presently managed, ranked by Birdlife International | |
| Brief details of World Bank funded project or projects in PA | | |
| Brief details of WWF funded project or projects in PA | | |
| Brief details of other relevant projects in PA | UNDP GEF Protected Areas Project ended in November 2004, | |
| List the two primary protected area objectives | | |
| Objective 1 | Protection of the cultural and natural | |
| Objective 2 | Sustainable rural development | |
| List the top two most important threats to the PA (and indicate reasons why these were chosen) | | |
| Threat 1 | Deforestation/uncontrolled cutting – heritage (would develop again if funding is not adequate) | |
| Threat 2 | Uncontrolled grazing -- | |
| List top two critical management activities | | |
| Activity 1 | Enforcement | |
| Activity 2 | Ecotourism | |

Date assessment carried out: December 8, 2004

Name/s of assessor: Roy Hagen and Jocelyn

The information for the first ten issues was lost from a corrupted computer file.

| Issue | Criteria | Score | Comments | Next steps |
|---|--|-------|---|------------|
| 1. Legal status Does the protected area have legal status? <i>Context</i> | The protected area is not gazetted | 0 | <i>Note:</i> see fourth option for private reserves | |
| | The government has agreed that the protected area should be gazetted but the process has not yet begun | 1 | | |
| | The protected area is in the process of being gazetted but the process is still incomplete | 2 | | |
| | The protected area has been legally gazetted (or in the case of private reserves is owned by a trust or similar) | 3 | | |
| 2. Protected area regulations Are inappropriate land uses and activities (e.g. poaching) controlled? <i>Context</i> | There are no mechanisms for controlling inappropriate land use and activities in the protected area | 0 | Enforcement of the southern part of the reserve | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist but there are major problems in implementing them effectively | 1 | | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist but there are some problems in effectively implementing them | 2 | | |
| | Mechanisms for controlling inappropriate land use and activities in the protected area exist and are being effectively implemented | 3 | | |
| 3. Law enforcement Can staff enforce protected area rules well enough? <i>Context</i> | The staff have no effective capacity/resources to enforce protected area legislation and regulations | 0 | <i>Possible issue for comment:</i> What happens if people are arrested? | |
| | There are major deficiencies in staff capacity/resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget) | 1 | | |
| | The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain | 2 | | |
| | The staff have excellent capacity/resources to enforce protected area legislation and regulations | 3 | | |
| 4. Protected area objectives Have objectives been agreed? <i>Planning</i> | No firm objectives have been agreed for the protected area | 0 | | |
| | The protected area has agreed objectives, but is not managed according to these objectives | 1 | | |
| | The protected area has agreed objectives, but these are only partially implemented | 2 | | |
| | The protected area has agreed objectives and is managed to meet these objectives | 3 | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|--|-------|--|------------|
| 5. Protected area design Does the protected area need enlarging, corridors etc to meet its objectives? <i>Planning</i> | Inadequacies in design mean achieving the protected areas major management objectives of the protected area is impossible | 0 | <i>Possible issue for comment:</i> does the protected area contain different management zones and are these well maintained? | |
| | Inadequacies in design mean that achievement of major objectives are constrained to some extent | 1 | | |
| | Design is not significantly constraining achievement of major objectives, but could be improved | 2 | | |
| | Reserve design features are particularly aiding achievement of major objectives of the protected area | 3 | | |
| 6. Protected area boundary demarcation Is the boundary known and demarcated? <i>Context</i> | The boundary of the protected area is not known by the management authority or local residents/neighbouring land users | 0 | <i>Possible issue for comment:</i> are there tenure disagreements affecting the protected area? | |
| | The boundary of the protected area is known by the management authority but is not known by local residents/neighbouring land users | 1 | | |
| | The boundary of the protected area is known by both the management authority and local residents but is not appropriately demarcated | 2 | | |
| | The boundary of the protected area is known by the management authority and local residents and is appropriately demarcated | 3 | | |
| 7. Management plan Is there a management plan and is it being implemented? <i>Planning</i> | There is no management plan for the protected area | 0 | | |
| | A management plan is being prepared or has been prepared but is not being implemented | 1 | | |
| | An approved management plan exists but it is only being partially implemented because of funding constraints or other problems | 2 | | |
| | An approved management plan exists and is being implemented | 3 | | |
| Additional points <i>Planning</i> | The planning process allows adequate opportunity for key stakeholders to influence the management plan | +1 | | |
| | There is an established schedule and process for periodic review and updating of the management plan | +1 | | |
| | The results of monitoring, research and evaluation are routinely incorporated into planning | +1 | | |
| 8. Regular work plan Is there an annual work | No regular work plan exists | 0 | | |
| | A regular work plan exists but activities are not monitored against the plan's targets | 1 | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|---|-------|---|--|
| plan? <i>Planning/Outputs</i> | A regular work plan exists and actions are monitored against the plan's targets, but many activities are not completed | 2 | | |
| | A regular work plan exists, actions are monitored against the plan's targets and most or all prescribed activities are completed | 3 | | |
| 9. Resource inventory Do you have enough information to manage the area? <i>Context</i> | There is little or no information available on the critical habitats, species and cultural values of the protected area | 0 | | |
| | Information on the critical habitats, species and cultural values of the protected area is not sufficient to support planning and decision making | 1 | | |
| | Information on the critical habitats, species and cultural values of the protected area is sufficient for key areas of planning/decision making but the necessary survey work is not being maintained | 2 | | |
| | Information concerning on the critical habitats, species and cultural values of the protected area is sufficient to support planning and decision making and is being maintained | 3 | | |
| 10. Research Is there a programme of management-orientated survey and research work? <i>Inputs</i> | There is no survey or research work taking place in the protected area | 0 | | |
| | There is some <i>ad hoc</i> survey and research work | 1 | | |
| | There is considerable survey and research work but it is not directed towards the needs of protected area management | 2 | | |
| | There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs | 3 | | |
| 11. Resource management Is the protected area adequately managed (e.g. for fire, invasive | Requirements for active management of critical ecosystems, species and cultural values have not been assessed | 0 | The landscape of the Al Chouf reserve is a manmade landscape that has been formed over the last 10,000 years. Controlled grazing is being done to create firebreaks around the major cedar forests. There is a truck with a water tank for fire | One may have to intervene to maintain some open areas. This is something to be monitored and debated over the medium to long term. Pinus nigra. |
| | Requirements for active management of critical ecosystems, species and cultural values are known but are not being addressed | 1 | | |
| | Requirements for active management of critical ecosystems, species and cultural values are only being partially addressed | 2 | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|---|-------|---|--|
| species, poaching)? <i>Process</i> | Requirements for active management of critical ecosystems, species and cultural values are being substantially or fully addressed | 3 | fighting. Management team has had four workshops on forest fire suppression. There is good cooperation with civil defense for fire fighting. There is a problem of invasive (Pinus nigra and Robinia pseudoacacia). P. Nigra and Robina have been removed from Barouk forest and P. nigra still needs to be removed from Aain-Zahalta. There is beautiful indigenous partridge that is being lost because of an introduced exotic partridge that interbreeds with the indigenous species. | Continue lobbying against the continued introduced species of partridge. They could cross-breed with the native partridge. |
| 12. Staff numbers Are there enough people employed to manage the protected area? <i>Inputs</i> | There are no staff | 0 | There is a critical need for increased patrolling by agents, especially in the south. There are not enough guides to provide adequate services to visitors. There is high turnover in seasonal staff that are trained as guides. The reserve had a very highly qualified manager who moved on. The assistant manager is not biologically qualified. The reserve manager at present is a volunteer. | Train and employ more people as the budget allows. |
| | Staff numbers are inadequate for critical management activities | 1 | | |
| | Staff numbers are below optimum level for critical management activities | 2 | | |
| | Staff numbers are adequate for the management needs of the site | 3 | | |
| 13. Personnel management Are the staff managed well enough? <i>Process</i> | Problems with personnel management constrain the achievement of major management objectives | 0 | There are problems of communications between the MT and the newly formed GAC. Job stability/security is a major problem. There have been major cuts in salaries since the PAP project ended. | Regular coordination meetings need to be held between staff and the GAC. GAC needs to provide more direct supervision. |
| | Problems with personnel management partially constrain the achievement of major management objectives | 1 | | |
| | Personnel management is adequate to the achievement of major management objectives but could be improved | 2 | | |
| | Personnel management is excellent and aids the achievement major management objectives | 3 | | |
| 14. Staff training Is there enough training for staff? <i>Inputs/Process</i> | Staff are untrained | 0 | A lot of training took place during the first few years of the PAP. Unfortunately, training has come largely to an end. Exchange needs to be developed with more established PA outside of Lebanon (Lebanon already serves as a good example to other countries in the region) | More exchange of permanent staff. Jordan is the only other Arab country in the region where staff could benefit. Develop exchanges with Greece, Italy, Spain and France. |
| | Staff training and skills are low relative to the needs of the protected area | 1 | | |
| | Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management | 2 | | |
| | Staff training and skills are in tune with the management needs of the protected area, and with anticipated future needs | 3 | | |

| Issue | Criteria | Score | Comments | Next steps |
|--|---|-------|--|--|
| 15. Current budget Is the current budget sufficient? <i>Inputs</i> | There is no budget for the protected area | 0 | Need more rangers. Need a paid, full-time manager. Vehicles will need replacement. | Continue to pressure government to increase their support. Continue and expand fund-raising activities. Seek partners and funding for the creation of a PA trust fund. |
| | The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage | 1 | | |
| | The available budget is acceptable, but could be further improved to fully achieve effective management | 2 | | |
| | The available budget is sufficient and meets the full management needs of the protected area | 3 | | |
| 16. Security of budget Is the budget secure? <i>Inputs</i> | There is no secure budget for the protected area and management is wholly reliant on outside or year by year funding | 0 | Government must supply core funding for all PA in Lebanon. The critical core funding is for salary and social security. Funding from government arrives about two years late and the delays vary from one year to another. | We beseech the government to do it. |
| | There is very little secure budget and the protected area could not function adequately without outside funding | 1 | | |
| | There is a reasonably secure core budget for the protected area but many innovations and initiatives are reliant on outside funding | 2 | | |
| | There is a secure budget for the protected area and its management needs on a multi-year cycle | 3 | | |
| 17. Management of budget Is the budget managed to meet critical management needs? <i>Process</i> | Budget management is poor and significantly undermines effectiveness | 0 | Much of the problems of budget management are linked to the delays Budget management is often a day-to-day affair. It is impossible to make investments. | |
| | Budget management is poor and constrains effectiveness | 1 | | |
| | Budget management is adequate but could be improved | 2 | | |
| | Budget management is excellent and aids effectiveness | 3 | | |
| 18. Equipment Is equipment adequately maintained? <i>Process</i> | There is little or no equipment and facilities | 0 | PAP provided much fo the basic equipment. Equipment needs: New vehicles are critical. Binoculars, GPS, cameras are needed. | |
| | There is some equipment and facilities but these are wholly inadequate | 1 | | |
| | There is equipment and facilities, but still some major gaps that constrain management | 2 | | |
| | There is adequate equipment and facilities | 3 | | |
| 19. Maintenance of equipment Is equipment adequately maintained? <i>Process</i> | There is little or no maintenance of equipment and facilities | 0 | Gaps in maintenance are primarily due to lack of funds. The vehicles are all he equipment were supposed to be handed over by UNDP to the government at the end of the project. An unwritten understanding is that all equipment found at the PA would remain in the same PA. | Seek a commitment from government that all equipment supplied for Al Chouf by the UNDP/GEF project will remain with Al Chouf. |
| | There is some <i>ad hoc</i> maintenance of equipment and facilities | 1 | | |
| | There is maintenance of equipment and facilities, but there are some important gaps in maintenance | 2 | | |
| | Equipment and facilities are well maintained | 3 | | |
| 20. Education and awareness programme | There is no education and awareness programme | 0 | There is an education program, There is an education and awareness raising | Employ more staff as possibilities arise. |

| Issue | Criteria | Score | Comments | Next steps |
|---|---|-------|---|--|
| Is there a planned education programme? <i>Process</i> | There is a limited and <i>ad hoc</i> education and awareness programme, but no overall planning for this | 1 | committee composed of teachers from schools around the reserve and project staff. The program works with about 30 schools. Environmental clubs have been created in each school. There is not enough staff to properly implement the program. | |
| | There is a planned education and awareness programme but there are still serious gaps | 2 | | |
| | There is a planned and effective education and awareness programme fully linked to the objectives and needs of the protected area | 3 | | |
| 21. State and commercial neighbours Is there co-operation with adjacent land users? <i>Process</i> | There is no contact between managers and neighbouring official or corporate land users | 0 | PA has not invested in hotel and restaurants to avoid competitions. | |
| | There is limited contact between managers and neighbouring official or corporate land users | 1 | | |
| | There is regular contact between managers and neighbouring official or corporate land users, but only limited co-operation | 2 | | |
| | There is regular contact between managers and neighbouring official or corporate land users, and substantial co-operation on management | 3 | | |
| 22. Indigenous people Do indigenous and traditional peoples resident or regularly using the PA have input to management decisions? <i>Process</i> | Indigenous and traditional peoples have no input into decisions relating to the management of the protected area | 0 | | |
| | Indigenous and traditional peoples have some input into discussions relating to management but no direct involvement in the resulting decisions | 1 | | |
| | Indigenous and traditional peoples directly contribute to some decisions relating to management | 2 | | |
| | Indigenous and traditional peoples directly participate in making decisions relating to management | 3 | | |
| 23. Local communities Do local communities resident or near the protected area have input to management decisions? <i>Process</i> | Local communities have no input into decisions relating to the management of the protected area | 0 | President of the GAC is the mayor is one of the key municipalities. Four of the GAC members are heads of municipalities. All of the staff have been recruited from the local communities. | More community participation is needed from members other than the heads of municipalities. They should be the focus of awareness, communication, education program. |
| | Local communities have some input into discussions relating to management but no direct involvement in the resulting decisions | 1 | | |
| | Local communities directly contribute to some decisions relating to management | 2 | | |
| | Local communities directly participate in making decisions relating to management | 3 | | |
| Additional points <i>Outputs</i> | There is open communication and trust between local stakeholders and protected area managers | +1 | This applies even to hunters and goat herders. | |
| | Programmes to enhance local community welfare, while conserving protected area resources, are being implemented | +1 | | |
| 24. Visitor facilities | There are no visitor facilities and services | 0 | <i>Possible issue for comment:</i> Do visitors | |

| Issue | Criteria | Score | Comments | Next steps |
|---|---|-------|---|---|
| Are visitor facilities (for tourists, pilgrims etc) good enough? <i>Outputs</i> | Visitor facilities and services are inappropriate for current levels of visitation or are under construction | 1 | damage the protected area? Bathroom facilities are a critical need. | |
| | Visitor facilities and services are adequate for current levels of visitation but could be improved | 2 | The information centre is Barouk was closed for lack of personnel. Information is supplied at the entrance booths. | |
| | Visitor facilities and services are excellent for current levels of visitation | 3 | | |
| 25. Commercial tourism Do commercial tour operators contribute to protected area management? <i>Process</i> | There is little or no contact between managers and tourism operators using the protected area | 0 | <i>Possible issue for comment:</i> examples of contributions | Increase contacts with conventional tour operators. |
| | There is contact between managers and tourism operators but this is largely confined to administrative or regulatory matters | 1 | Regular contacts are maintained, especially with Ecotours. Tour operators contribute to the marketing and promotion of the reserve. | |
| | There is limited co-operation between managers and tourism operators to enhance visitor experiences and maintain protected area values | 2 | | |
| | There is excellent co-operation between managers and tourism operators to enhance visitor experiences, protect values and resolve conflicts | 3 | A meeting for 25 tour operators was organized by Al Chouf in 2001. Some of the ecotourism operators served as trainers for PA managers. Ecoguide training will be organized by Ministry of Environment/Medwet Coast – 50 people are registered. | |
| 26. Fees If fees (tourism, fines) are applied, do they help protected area management? <i>Outputs</i> | Although fees are theoretically applied, they are not collected | 0 | There is no law authorizing the collection of tourist entrance fees. | Support the initiative of Palm Islands to pass a law authorizing the collection of tourist entrance fees and their reinvestment in PA management. |
| | The fee is collected, but it goes straight to central government and is not returned to the protected area or its environs | 1 | | |
| | The fee is collected, but is disbursed to the local authority rather than the protected area | 2 | | |
| | There is a fee for visiting the protected area that helps to support this and/or other protected areas | 3 | | |
| 27. Condition assessment Is the protected area being managed consistent to its objectives? <i>Outcomes</i> | Important biodiversity, ecological and cultural values are being severely degraded | 0 | <i>Possible issue for comment:</i> It is important to provide details of the biodiversity, ecological or cultural values being affected There has been major degradation over the last 10k000 years, but there is very good protection since the reserve was created | |
| | Some biodiversity, ecological and cultural values are being severely degraded | 1 | | |
| | Some biodiversity, ecological and cultural values are being partially degraded but the most important values have not been significantly impacted | 2 | | |
| | Biodiversity, ecological and cultural values are predominantly intact | 3 | | |

| Issue | Criteria | Score | Comments | Next steps |
|---|--|-------|---|---|
| Additional points <i>Outputs</i> | There are active programmes for restoration of degraded areas within the protected area and/or the protected area buffer zone | +1 | 30 has of cedar and other indigenous species were planted in 2004. This will continue each year but at a smaller scale. An “adopt a cedar” program has also been initiated. Range management has been implemented in the buffer zone. | |
| 28. Access assessment Are the available management mechanisms working to control access or use? <i>Outcomes</i> | Protection systems (patrols, permits etc) are ineffective in controlling access or use of the reserve in accordance with designated objectives | 0 | Biggest problem is in the southern part of the reserve. The specific problems are with hunting, grazing and collecting of plants for medicinal uses and for food. | |
| | Protection systems are only partially effective in controlling access or use of the reserve in accordance with designated objectives | 1 | | |
| | Protection systems are moderately effective in controlling access or use of the reserve in accordance with designated objectives | 2 | | |
| | Protection systems are largely or wholly effective in controlling access or use of the reserve in accordance with designated objectives | 3 | | |
| 29. Economic benefit assessment Is the protected area providing economic benefits to local communities? <i>Outcomes</i> | The existence of the protected area has reduced the options for economic development of the local communities | 0 | <i>Possible issue for comment:</i> how does national or regional development impact on the protected area? All staff have been recruited from local communities. Artisinal products are now being marketed, but the benefits are minor. Prior to the creation of the reserve, only the poorest people depended on the resources of the reserve. | Seek to develop strategies to get tourists to stay longer and spend more. |
| | The existence of the protected area has neither damaged nor benefited the local economy | 1 | | |
| | There is some flow of economic benefits to local communities from the existence of the protected area but this is of minor significance to the regional economy | 2 | | |
| | There is a significant or major flow of economic benefits to local communities from activities in and around the protected area (e.g. employment of locals, locally operated commercial tours etc) | 3 | | |
| 30. Monitoring and evaluation <i>Planning/Process</i> | There is no monitoring and evaluation in the protected area | 0 | There is a good monitoring system for plants and mammals. A hill pond was built to provide water so that animals would not have to leave the park where they would be shot. Monitoring showed this site being used by the jungle cat. Use by visitors was then reduced so as not to frighten these rare animals away. | A review of the M&E system should be done as part of the review of the management plan in 2005. |
| | There is some <i>ad hoc</i> monitoring and evaluation, but no overall strategy and/or no regular collection of results | 1 | | |
| | There is an agreed and implemented monitoring and evaluation system but results are not systematically used for management | 2 | | |
| | A good monitoring and evaluation system exists, is well implemented and used in adaptive management | 3 | | |
| TOTAL SCORE | | | | |

