MANAGEMENT EFFECTIVENESS EVALUATION OF EGYPT'S PROTECTED AREA SYSTEM

June 2006

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With special thanks to Esraa Saber for translation of RAPPAM questionnaire and report.

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Report Synopsis

This report presents the results of a rapid assessment of the management effectiveness of Egypt's system of Protected Areas. This is the first evaluation of Egypt's Protected Areas, and is also the first such evaluation for Arab countries. The main findings were:

- Egypt has declared a relatively good proportion of its land as PAs, and the ecological and social benefits offered by Egypt's PA system are high.
- In general the system contains a good representation of Egyptian habitats (but this needs quantitative verification) with high biological significance.
- The system appears to be equally important for most aspects of biodiversity conservation, i.e. representativeness, important species, full range of diversity, significant populations etc.
- The PAs generally are meeting their conservation objectives and the PAMU staff technical skills are generally good.
- The PA system is a vitally important socio-economic asset to Egypt but many benefits are unrealised.
- Egypt's Protected Areas are all chronically under-resourced, far below the norm for Developing Countries or even for Africa. In Egypt the total expenditure on PAs (including staff costs) averages 108 LE ($19) per km^2 per year, approximately 11% of the average for developing countries. In order to match the regional or developing countries norms Egypt would need to invest between $7.4 million and $15.7 million annually in its national protected area system – a 4 to 9 fold increase on current expenditure.
- In administering the system, there is a marked disparity in the allocation of staff and budgets to areas as opposed to their needs and the national priorities in regard to biodiversity value.
- The conversion of land use, recreational use (especially tourism) and hunting are considered as the greatest pressures operating on the PA system. Since they will continue to threaten the system, coordinated national strategies will be required to address these issues.
- While there appear to be good local relations, local people don't necessarily support the PAs and they are not involved in management decisions.
- The system is vulnerable as a result of poor law enforcement, overexploitation of resources, and lack of resources.
- Site planning is generally poor; only one third of the protected areas have formal management plans or definitive work plans – this is a serious concern because it makes it difficult to implement proper management, track effectiveness or develop business plans.
- Inputs to the system are inadequate from all aspects. The main limitations to effective management are considered to be the very low levels of Government funding, the low staff levels, and the lack of training opportunities. Inadequate management resources (especially transport) and poor infrastructure facilities are also important constraints.
- PA staff have major concerns with staffing levels, salaries and funding for their many duties, especially transport. They also cite an unresponsive central office with administrative delays (in releasing funds, in approvals, etc) and uncoordinated requests for data and information.

A realistic and prioritised action agenda was drawn up in Part 3 that is designed to address many of these findings and that incorporates subsequent recommendations for enhancing NCS's work in terms of new or improved strategies, policies and activities.

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Acronyms

AWP	Annual Work Plan
BP	Business Plan
BioMAP	Monitoring and Assessing Biodiversity Project
CBD	Convention on Biodiversity
EEAA	Egyptian Environmental Affairs Agency
EIA	Environmental Impact Assessment
GoE	Government of Egypt
IUCN	World Conservation Union
MEE	Management Effectiveness Evaluation
MSEA	Minister of State for Environmental Affairs
NCSCB	Nature Conservation Sector Capacity Building Project
NCS	Nature Conservation Sector
PA	Protected Areas
PAMU	Protected Area Management Unit
RAPPAM	Rapid Assessment and Prioritisation of Protected Area Management
UNDP	United Nations Development Programme
WESCANA	Western/Central Asia and North Africa Region (IUCN)
WWF	Worldwide Fund for Nature

Foreword

Since ancient times, we Egyptians have relied on the wealth of natural resources to sustain our civilization. Indeed ancient Egyptians were among the first to adopt resource conservation measures and also to record the diversity of nature. The tradition continues into the 21st century as the conservation and wise use of Egypt's biodiversity continues to underpin our health, prosperity and development.

The establishment of a modern, representative system of protected areas in Egypt has been a relatively recent activity with the declaration of Ras Mohamed National Park in 1983. Since that time Egypt has made significant progress and today Egypt has almost 10% of its territory designated by a system of 24 conservation areas, and plans to almost double the area under conservation management by 2017. The establishment of protected areas in Egypt has been in response to the importance of managing the use of natural resources to sustain development and reverse their degradation. The Egyptian Government regards protected areas as one of the most effective measures to conserve the nation's natural heritage, particularly in view of emerging threats to biodiversity. The National Biodiversity Strategy and Action Plan developed in 1998 gives the highest priority to the "development of a national network of protected areas representing the principal ecosystem types with scientific importance or biodiversity importance that may be threatened".

However the establishment of protected areas is one thing: ensuring that they are effective tools for nature conservation is another. In 2005 the Convention on Biological Diversity (CBD) and the 2003 World Parks Congress both affirmed the need for nations to continue efforts toward **effectively managing** their systems of protected areas. Goal 4.2 of the CBD's Programme of Work on Protected Areas is to evaluate and improve the effectiveness of protected areas management with a target that by 2010 "frameworks for monitoring, evaluating and reporting protected areas management effectiveness at sites, national and regional systems, and trans-boundary protected area levels will be adopted and implemented by Parties".

As a signatory to the CBD Egypt is obliged to fulfill its commitments and the report presented here is in response to this commitment and the CBD programme of work for protected areas. This was the first occasion that Egypt's 24 PAs have been evaluated for management effectiveness in a systematic and consistent manner, and this evaluation is probably the one of the first to be conducted in the Arab World or the Middle East. The purpose of the exercise was to assess the conservation status of the nation's system of Protected Areas (PAs) by determining the extent to which PAs are achieving their objectives, identifying relative management strengths and weaknesses and focusing attention for action and policy intervention.

I consider that the results that emerge from this evaluation will be very useful for the NCS administration's efforts to improve the management effectiveness of Egypt's system of protected areas through consolidating its systemic strengths and improving on its weaknesses. There are strengths in the way Egypt has implemented its system of protected areas, but there are also some clear weaknesses which we must address. The advantage of evaluating in this way is that we get a detailed and prioritized list of the aspects that need attention. How the NCS will address these issues is presented in Section 3 of the report.

Now this management effectiveness exercise will be extended to the individual protected areas. A further value that has emerged from the exercise was the initiation of a culture of critical transparency within the NCS and this can only bode well for the future.

Dr Moustafa Fouda (Director, NCS)

Executive Summary

1. Introduction

A two-day workshop was held in January 2006 to enable NCS staff to undertake a rapid assessment of the overall management effectiveness of Egypt's system of Protected Areas (PAs). During the workshop, NCS staff were introduced to and applied one of the specific assessment tools developed for this purpose - the Rapid Assessment and Prioritisation of Protected Area Management (RAPPAM) Methodology. The Workshop Agenda and list of participants are attached as Appendix 1 to this report. Following the MEE workshop held in January and the drafting of the initial report a follow-up workshop was held in May 2006 at which participants from the original workshop were asked to review the MEE findings and provide recommendations as how the NCS should proceed, particularly to address the weaknesses that had been identified in terms of policies, strategies and administrative actions. The outcomes of this second meeting are incorporated into this report.

The reasons for undertaking a system-wide MEE in Egypt are various, but essentially it provides a yardstick for Egypt's Nature Conservation Sector (NCS) to assess the status (or "health") of the nation's system of Protected Areas (PAs) by determining the extent to which PAs are achieving their objectives, identifying relative management strengths and weaknesses and focusing attention for action and policy intervention. For the MEE a specific assessment tool developed for this purpose - the Rapid Assessment and Prioritisation of Protected Area Management (RAPPAM) Methodology - was employed. For the NCS it was anticipated that the MEE exercise could lead to:

1. An extension of the knowledge base for the PA system and for individual PAs
2. Improvements in the conservation effectiveness of the system and individual PAs through the identification of systemic issues
3. Improved decision and management support processes for the system and for individual PAs
4. Providing critical information to secure political understanding and justify support
5. Fostering an institutional culture for evaluation within the NCS
6. Trust and confidence between the NCS centre and the PA staff.
7. A prioritised plan of action for the NCS that addresses the issues that have emerged and responds to the subsequent recommendations.

The RAPPAM methodology is designed to allow broad-level comparisons among Protected Areas (PAs). The assessment had been revised to adapt it to the situation in Egypt. Using this framework, participants were engaged in evaluating the management effectiveness of Egypt's PAs, assessing the results and implications, and identifying priorities and next steps.

This was the first occasion that Egypt's 24 PAs have been evaluated in a systematic and consistent manner, and the results should allow the NCS to understand better and address important management issues at a system level. Worldwide there have been very few Management Effectiveness Evaluations (MEEs) conducted for PAs at a national level, in either developed or developing countries, and this evaluation is probably the first in the Middle East - WESCANA region.

As such it may serve as a regional (WESCANA) example for future evaluations to be carried out in accordance with the targets of the Programme of Work on Protected Areas developed by the Convention on Biological Diversity (CBD). The RAPPAM methodology and lessons learnt from its application in Egypt during the workshop and subsequent analysis are presented in Appendix 2 to this report.

2. Key Findings and Recommendations

During two evaluation workshops, NCS staff examined the strengths and weaknesses of Egypt's protected areas system under five main topics: context, planning, inputs, processes and outputs. The results, as summarized in figure 1 and table 1, indicate that Egypt's PAs have various levels of management effectiveness. Good progress has been made in some areas such as establishing PAs, however, there are significant challenges in ongoing management of the estate. A number of salient points emerged from the evaluation, as follows:

From the RAPPAM graphical representation of results it is evident that Egypt's PAs have various levels of management effectiveness and the salient points that emerge from this national pattern of strengths and weaknesses are reviewed in detail in Part 2 below. When the data are considered holistically some important general issues emerge.

1. There is a significant data management problem in the NCS. It proved to be impossible to extract current and consistently accurate data on PAs and their management status (e.g., PA size, staffing and budgets). There is no single authoritative source for this type of data.

2. There is a marked disparity between the allocation of staff and budgets to PAs, and their needs and national priorities in regard to size or biodiversity value.

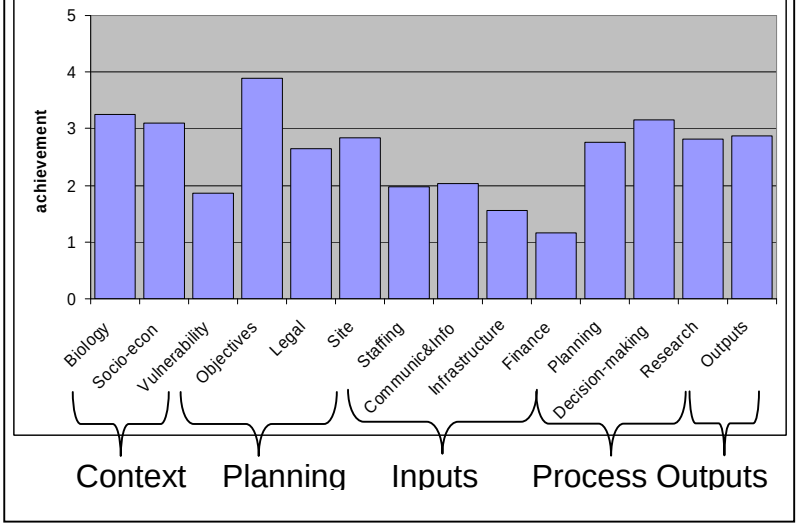
3. Larger PAs tend to have more infrastructure (staff, budget, etc), to have been established for longer, and to have greater degrees of pressures and threats; in addition, more generally, they are in a better condition in all aspects investigated by RAPPAM.

4. Large PAs are harder to manage effectively because even though they have greater inputs, this does not compensate for their greater size, and therefore they have lower outputs.

5. The impact of management input on the longer-established PAs is detectable in reduced levels of pressures and threats.

6. Greater planning by managers occurs in the more vulnerable PAs, but these coexist with weaknesses in the decision-making processes. The more specific findings and recommendations of the assessment are described below.[1]

Figure 1: Summary of RAPPAM findings, showing mean values for the different sections



[1] There are many ways the data could be analysed and presented for the system as a whole (refer to Part 2), for combinations of issues and for individual PAs. Also, there is significant variability in management strengths and weaknesses between sites (refer to Appendix 3)

Table 1. ***Snapshot of Relative Strengths and Weaknesses reported by NCS staff for Egypt's Protected Area System***

Context and Policies	PA Design and Planning	Inputs	Management Processes	Management Outputs*
Strengths	**Strengths**	**Strengths**	**Strengths**	**Strengths**
The PA System has high biological importance and representation. It is socio-economically important but many benefits are unrealised.	The PAs generally are meeting their conservation objectives. The PAs are well configured and zoned to meet their objectives. The PAs have binding legal security	Staff technical skills and performance are generally good Communication and educational programmes are satisfactory	Management planning capacity is generally good Decision-making is collaborative and transparent with partners	Threat detection to the system is good Visitor and tourist activities are managed Staff monitoring, supervision and evaluation occurs
Weaknesses	**Weaknesses**	**Weaknesses**	**Weaknesses**	**Weaknesses**
Serious pressures and threats from land use changes and recreation The system is vulnerable to illegal activities and low law enforcement The system suffers from an inadequate policy framework	Many PAs have land ownership disputes Legal enforcement is poor. Local communities are not very supportive EIAs are poorly enforced and buffer zones are not adequately regulated.	Unacceptably low level of funding is the most serious weakness Staff levels are too low Training opportunities are inadequate PA equipment resources and infrastructure are inadequate Arrangements for visitor safety are poor	Management plans are not being implemented Management actions are not informed by research and monitoring programmes.	Threats are detected, fines or other punish-ments are levied, but the law is then not applied Infrastructure development is inadequate Staff training and career development is poor

* Specific products and services accomplished by PAMU staff, and evaluated relative to threats and pressures, PA objectives and work plans.

(a) Context and Policies

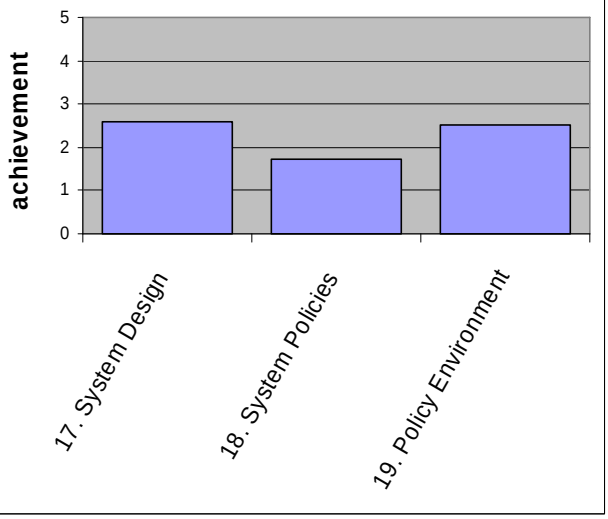
The ecological and social benefits offered by Egypt's PA system are high. The system seems to have almost equal importance for the conservation of most aspects of Egypt's biodiversity (i.e., representativeness, important species, biodiversity, full range of diversity, significant populations etc.), and the system is considered to offer a full range of social and economic benefits.[2] The two protectorates that contain the highest levels of terrestrial biodiversity in Egypt (Gebal Elba and St. Katherine) appear to face the most serious combined pressures and threats.

[2] The White Desert has rather an anomalous position when scored for the cumulative value of its biological importance, socio-economic value and vulnerability; the site scores below Hasana Dome on these values, and yet it has been identified as a potential future World Heritage Site.

The conversion of land use, recreational use and hunting or over-collecting are considered to be the greatest pressures operating on the PA system, and they will continue to threaten the system until coordinated national strategies address these issues. In this regard the PA system suffers from the lack of an appropriate policy framework that would go some way to addressing these issues.

Figure 2 shows the average scores for the three sections answered by policy makers. The scores are relatively low, indicating some problems in the system design and policy structure. The lowest scores among the individual questions of each section indicate a belief that the PA system does not adequately maintain natural processes at the landscape level (section 17), there is no assessment of the historical range of variation of ecosystem types (section 18) and the level of funding is too low (section 19).

Figure 2: Mean values for the three system-level sections



Recommendations

Policy Issues. The NCS as a matter of urgency should institute formal policies for nature conservation and for protected areas, with options for community-based conservation initiatives, to place the NCS in a proactive rather than a reactive stance. Policy guidelines should be comprehensive and address the following: human and financial resource management, systems planning, research, inventory, monitoring and assessment, planning, EIA, communications, marketing, interpretation, community relations and poverty alleviation, and collaborative management.

Relations with the military and security authorities. It cannot be right for a PA to be inaccessible to visitors or even scientific research or NCS employees. The NCS should enter into negotiations with the military so as to enable permits to be issued for visits to Wadi Allaqi and Gebel Elba PAs quickly and without problems, preferably by the NCS itself. The NCS could explore the idea of using military personnel in the cause of conservation. Furthermore, a 'tourism-friendly' policy is needed for the Tourism Police to enable and encourage freer movements by tourists.

(b) PA Design & Planning

The system as a whole is considered to have good long-term legal protection, but the PAs are individually vulnerable as a result of poor law enforcement, overexploitation of resources, lack of resources and excessive pressure on managers to accommodate unsustainable demands. Furthermore environmental impact assessment (EIA) compliance procedures are considered inadequate: this validates the initiation of the Legal and Institutional Framework Project (LIFP) which, among other things, will address this issue.

Recommendation

Buffer Zone management. In line with the CBD plan of work for PAs and in view of Egypt's arid nature, a more integrated landscape approach for conservation should be

instituted to sustain ecosystem processes that operate on larger scales than the individual PAs, and also to lessen the direct impact of activities adjacent to PAs.

This will involve more effective buffer-zone management, mainly through better cooperation with other Government agencies, and the establishment of corridors and transition zones. NCS should work with the Ministry of Planning, local district councils and others to develop long-term land-use plans for areas outside the PAs. These plans should identify low-impact buffer/transition zones adjacent to PAs, and low-impact corridors that connect PAs. Associated policies should be established to determine the nature of compatible development and uses within buffer and corridor zones, and public participation mechanisms to establish and amend the land-use plans. There is an opportunity to establish category V (protected landscape) and category VI (resource use) PAs where buffer and corridor protection is needed. All parties need to be reminded of their obligations under the National Biodiversity Strategy & Action Plan of 1998.

(c) Inputs

Though staff technical capacity is scored relatively highly, management inputs to the system are generally inadequate from all aspects. The main limitations to effective management are the very low levels of Government funding, the low staff levels[3], lack of training opportunities, inadequate management resources (especially transport) and poor infrastructure facilities.

The fact that the PAs are chronically under-resourced has critical implications for management effectiveness, since internationally it has been shown that a PA's budget correlates closely with management effectiveness: typically, the higher the budget, the better the performance. In Egypt the total expenditure on PAs (including staff costs) averages 108 LE ($19) per km^2 per year, which is only 11% of the average for developing countries and 9% of the minimum for other African countries.

Furthermore the Egyptian PA system is seriously under-staffed with less than 20% of the average staff levels for developing countries. Egypt is seriously out of line with all international norms, and even those of its regional neighbours. The lack of clarity with regard to management structure and responsibility is also an issue, particularly with regard to the Red Sea and Gulf of Aqaba, where budgets and staff numbers are conflated.

Recommendations

Funding. There is an urgent need to communicate the extent of under funding of Egypt's PA system, and to ensure that it is addressed by the GoE in a sustained, long term manner. Without this, no conservation or management measures are likely to be effective, and Egypt cannot fulfill its own National Biodiversity Strategy & Action Plan, to which all national stakeholders have agreed and signed.

Sustainable funding. In addition to establishing a sustained, long term source of Egyptian funds, alternative financial mechanisms should be established that allow the retention, by the NCS, of revenues generated by protected areas. Other countries have had good success with approaches such as 'special purpose accounts', non-profit 'Friends of Parks', corporate sponsorships and private donations. These can assist in reducing core funding needs from government and dependencies on donor projects.

[3] The study did not examine if staff have the right educational background, and so the number of "effective" staff in some areas may belie the truth about 'effective' capacity.

Business Planning. There is a pressing need to engender a 'business approach' to PA management to support sustainable conservation operations. This includes different levels of activity from instituting a facilitating policy and securing appropriate fee structures, to the preparation of site-level Business Plans.

Internal Communications. The PA system is in dire need of clear internal communications, at several levels, such as:

- The work of staff would be facilitated through the development of policies (what will be done), procedures (steps and responsibilities) and guidelines (technical how to). This will require training for NCS to develop these, and a review process to engage site staff.
- A 'NCS Best Practice Annual Report' should be prepared to highlight the best examples of good protection and management from across the nation. This would encourage PA staff to take pride and develop their programmes. The report should focus on all and any topics related to management effectiveness, and as such, can be a principal method for encouraging and profiling effective management.
- Staff at the managerial and ranger levels should be engaged in task force working groups. This will broaden their perspectives beyond their own PA, support the development of national initiatives, and promote internal communications and information sharing.

External Communications. A national NCS-level external-communications plan is needed to coordinate efforts. A working group comprising representatives from several PAs and NCS staff should be appointed.

Community relations. In line with the proposed national policy guidelines, the NCS should institute community outreach programmes in all PAs to ensure that local stakeholders benefit from, support and participate in, the PA's management. As a first step the NCS should invest in the development of a collaborative management model for the White Desert to demonstrate the mutual benefits of community outreach initiatives.

PA Data. The PA data are scattered and inconsistent and there is an urgent need to invest in a comprehensive, accessible and consistent PA information collection and management system. This should be part of a comprehensive and freely accessible database.

System Staff Audit. A comprehensive staff audit should be undertaken in the near future to review the disposition of staff in the PA system. This audit should be undertaken in parallel with the institutional review scheduled under the NCSCB project. This should lead to the development of human resource policies concerning hiring practices (fair competitive processes), rotation and transfers, training, etc.

(d) Management Processes

Site management planning is generally poor with few areas having management plans or definitive work plans. This is a major concern as the absence of planning documents makes it problematic to track effectiveness and or to develop business plans. Furthermore, though research was scored relatively highly, the results of research and monitoring do not generally inform the management of PAs, and as a result, the adaptive management approach is weak. However, there are encouraging signs that management effectiveness increases over time: older PAs seem to perform better, and this suggests that positive management feedbacks may be operating.

Recommendations

Management planning. At a minimum, every PA should develop an outline management plan, using the standard format, within the next two years. The Planning Technical Unit should focus support on those PAs with the greatest need or at the greatest risk. The NCS should ensure that management plans are formally approved and implemented, and are widely understood and supported by stakeholders and other partners. The PA staff should also be trained and then encouraged to practice adaptive management linked to monitoring programmes, and thereby ensure that existing plans are updated as needed.

Research and Monitoring. NCS should establish a policy and guidelines on research, inventory, monitoring and assessment. Each PA should use the guideline to prepare its own programme, with the review of NCS and other external experts. Each PA should have a concise description of its abiotic, biotic and cultural resources. NCS should introduce a standard template for each PA to complete, and be reviewed by national experts. Such information should be made available on the internet and used for staff training.

Permissions for scientific study. The whole process of permissions for scientific study is far, far too slow, and should be reviewed and speeded up considerably. There should be clear unambiguous guidelines which, if the proposal adheres to them, should imply *automatic* acceptance and issuance of permits. If in retrospect the guidelines were breached, then a blacklist can be maintained, and future applications can be very closely monitored to ensure compliance, or refused.

(e) Management Outputs

This part of the evaluation is problematic because the scoring is at variance with the scoring for some other questions that contribute to the outputs, such as planning. For example, staff supervision and evaluation are considered as output strengths while training and staff development are weaknesses. Though community outreach and education are scored relatively highly as an output, responses elsewhere indicate little outreach to local communities, and the management of relations with people seems to be an endemic problem, with both tourists and local people. The analysis suggests that the value of establishing good relations with local communities and partners is widely recognized but this aspect is not being properly addressed. A major issue raised by many PAs is the fact that they can detect violations, but then the law is not applied, because they have to rely on the police and the judiciary to carry it through.

Recommendations

Training. National and site-level training programmes are needed[4]. The principles of PA management should be developed as an 'in-service' programme for all new staff.

Applying the law. The NCS should take an active role in discussions and agreements with the police and judiciary at local and national levels to ensure that once violations are detected, the law is then applied, and people can then see that all contraventions will be punished in accordance with the law without fear or favour, including Government officials. It is the experience of the authors of this report that often local people feel victimized in this respect.

[4] The results of the 2006 Training Needs Assessment being implemented by the NCSCBP will provide concrete actions to implement this recommendation.

Interpretive/Eduational Programmes. A national effort to encourage and develop interpretive programmes is generally missing in Egypt's PA's. There is an opportunity to develop interesting programmes, which is a key ingredient of the eco-tourism product[5].

(f) Outcomes and Evaluations

This assessment did not examine outcomes or evaluations in the assessment cycle. Therefore, an assumption is made that the initial components of management effectiveness examined during the national workshop (i.e., context, PA design and planning, inputs, management processes, outputs), if implemented, will lead to positive outcomes.

Recommendations

National System Level Evaluation. A Management Effectiveness Evaluation should be conducted tri-annually at the system level.

PAs Action Plans. All PA managers should review the results of the national RAPPAM with their rangers and develop an action plan to address the key issues and challenges facing their protected area. This action plan should be integrated into management plans and annual work plans, where they exist. Indeed, an an annual RAPPAM review and action plan could serve as the basis for the annual work plan.

Site level Evaluations. Site level evaluations should also be conducted to assess local circumstances in greater detail and to confirm if the planned actions are being implemented, and if so, whether they are having an impact. This would need to be considered against goals and objectives set forth for the PA in the management plan (where it exists), or against national system-level goals and objectives. A methodology for site-specific MEE exercises should be developed as a priority to support planning and adaptive management, and then this should be conducted annually by each park, with the assistance of an independent facilitator.

3. Conclusions and an Agenda for Action

Conclusions

(a) The main lessons we take from this report are that we need to: substantially increase funding for our PAs; improve our record with developing and implementing management plans; work more closely with local communities and other stakeholders and critically we need to invest in our staff.

(b) This MEE report indicates where we are doing reasonably well and illustrates clearly those management aspects we need to improve. It presents us with a detailed and prioritized list of those management aspects of the protected area system that need immediate attention and has created recognition within the NCS of the need for better knowledge about the status and management effectiveness of our protected areas

(c) We are confident that there is a solid *conceptual* basis for Egypt's PA system that accords with the international agenda (such as the CBD programme of work) and best practices promulgated by IUCN. However the management status and conditions of the parks are far from ideal, and it is not clear that we are actually achieving our central aim to conserve biodiversity and an action plan has been developed to improve the protection and management of Egypt's PA that addresses the following key issues.

[5] Interpretive/educational programmes about an areas natural and cultural history are key ingredients of eco-tourism. Research shows that eco-tourists seek such programmes as part of their experience. Therefore this is an essential part of the eco-tourism product that Egypt aspires to.

(d) This MEE has shown that there are strengths in the way Egypt is developing its system of protected areas which we need to build on. We need to be able to demonstrate, in a transparent and quantifiable manner, just how we are performing with the management the nation's protected areas with which the NCS has been entrusted, and we believe that MEEs can offer that tool. This exercise has raised our collective understanding about what management effectiveness means, how it can be assessed, and what we can do to improve.

(e) Accessible and consistent information is a central need to enable us to run the Sector properly and manage our protected areas efficiently and the MEE is a useful tool to organise the mass of information in a way that helps us sharpen our focus and redefine our strategies. In addition to baseline data and trends on the ecological, social and economic values of the protected areas, and their immediate surroundings, we also need to understand the constraints and opportunities of the local and national socio-economic context.

(f) A further value of the exercise is that, hopefully, it has initiated a culture of critical transparency within the NCS generally and specifically within the Protected Area Management Units, but this will be tested when the exercise is extended to the individual protected areas.

(g) We now believe that the MEE should be integrated with the site level planning and monitoring system of protected areas, especially as it helps us assess our capability and success in achieving our long term aims, including our international obligations such as the Convention on Biological Diversity and the target of significantly reducing biodiversity loss by 2010.

An Agenda for Action

We have adopted a three-phase approach for the action agenda linked to the GoE's fiscal year, whereby activities scheduled under Phase 1 should be accomplished by June 2007; Phase 2 actions should be completed by June 2008; and actions under Phase 3 should be finished by June 2011. The action agenda in Part 3 spells out in detail where the responsibility lies for the actions and indicates what additional support could be available.

(a) Funding and Staff levels

Egypt falls well below international standards in two critical aspects for management effectiveness -- funding and staff levels for protected areas. Priority actions for funding will be to substantially increase funding by to the average level for the region, introduce policies and procedures for retention and recycling of revenue by PAs and the development of business plans. To address critical staffing shortfalls the NCS will conduct a Sector wide staff audit, introduce human resource development policies and aim for a gradual 5-fold increase in staff levels by 2010

(b) PA Data Accessibility

The MEE has revealed that much of the data on PAs held by the NCS are scattered, inconsistent and are not analysed or utilized in any meaningful way, for instance as a rationale for allocating resources and staff. As a priority the NCS will conduct a quality review of the PA data base to ensure that consistent, updated and accessible PA information collection and management system is put in place.

(c) Context and Policies

The MEE has indicated that the PA system generally is vulnerable to illegal activities and poor enforcement of relevant laws and regulations. NCS will prioritise work to achieve better law enforcement through, raising the police and judiciary's awareness, institute policies for nature conservation and for protected areas and review management approaches where threats are particularly high.

(d) PA Design and Planning

The NCS recognises that a strategy is needed that will better integrate the protected areas with the land and sea mosaics that surround them to form more effective ecological networks, following the CBD ecosystem approach. It is important that we commit to adaptive management and planning, and institute a culture of planning and evaluation in the NCS. The NCS will urgently ensure that Environmental Impact Assessment procedures are properly enforced and monitored and will explore options of management partnerships for PAs.

(e) Inputs

Besides funding and staff levels, other limitations to effective management are the lack of training opportunities, inadequate management resources (especially transport), poor internal communication, transfer of information, and inadequate infrastructure facilities. The NCS also recognizes that the highly centralized system of PA management and the lack of transparency in management decisions are impediments to efficiency. To immediately address these issues the NCS will enact the recommendations arising from the Training Needs Assessment, conduct training in PA planning and management and ensure that local managers have greater authority and responsibility by de-centralizing decision making to the most appropriate level and a procedure manual

(f) Management Processes

The NCS recognizes that management planning is still undeveloped and this makes it problematic to track effectiveness and or to develop business plans. NCS will ensure that every PAs is managed on the basis of a current management plan by end 2008, will formally approve and promulgate management plans and institute a unified reporting system in which implementation of the management plan will be the main basis for annual reporting and evaluation.

(g) Management Outputs and Outcomes

MEEs in other parts of the world have demonstrated the value of establishing good relations with local communities and partners but the NCS acknowledges this has not been properly addressed. Furthermore greater effort needs to be given to interpretive programmes for Egypt's PA's particularly to cater for the growing ecotourism market. So the NCS will develop management protocols with local communities; ensure that each PA manager reviews the results of this MEE and addresses the specific issues in their annual work plans and will also conduct regular site-specific MEE exercises to support planning and adaptive management.

PART 1

Context for Management Effectiveness Evaluation

The establishment of an ecologically representative system of Protected Areas is an important step in a nation's commitment to ensure the conservation of the country's biodiversity. Protected Areas also need to be managed, and this is a complex and evolving task that requires dedicated people with the right skills and resources to carry it out effectively. To ensure that existing Protected Areas are well managed, it is important to identify their various strengths and weaknesses, and so better understand the critical factors that can ensure their effective management. It is therefore instructive to consider some of the lessons that have been learnt internationally.

A. Internationally recognized key factors for management effectiveness
WWF (2004) has identified the minimum critical ingredients for effective management as:

1. **A well-funded, appropriately staffed set of Protected Areas**: the budget correlates closely with management effectiveness - typically the higher the budget, the better the performance.
2. **Good environmental education and community outreach**: management is more effective when a planned and effective education-and-awareness programme is in place, linked to PA objectives.
3. **Excellent enforcement capacity:** this element shows the strongest correlation to management effectiveness.

B. Internationally recognized success factors for good biodiversity condition
To ensure that biodiversity is well conserved inside Protected Areas, the following needs to be in place:

1. Appropriately staffed parks with clear legal documents of gazettement.
2. Capacity and means to manage critical ecosystems species and cultural values.
3. Monitoring and evaluation programmes that ensure adaptive management.

Furthermore it has been demonstrated in studies elsewhere that biodiversity condition is most strongly correlated with monitoring and evaluation, resource management, staff numbers and legal status.

Internationally a central premise for PAs is that they should be properly secured to conserve their biological and cultural values. However there is increasing evidence from around the world that many protected-area systems and many individual PAs are being degraded or destroyed, while others only exist as "paper parks", afforded neither the management nor the resources to protect heritage values. A number of surveys of threats to and the status of PAs have been conducted and methodologies for assessment have been reviewed.

A recent study of 12 countries in Africa, Asia Latin America and the Russian Federation carried out by the World Bank and WWF found that less than one quarter of forest PAs were "well managed with good infrastructure", but only one percent were judged to be wholly secure (Dudley & Stolton 1999). Other national and global studies estimate that between one- and three-quarters of all PAs outside Europe, Australia and North America are suffering serious threat or damage. Threats are particularly acute in developing countries, where a lack of finance and infrastructure create acute problems for PA managers. However, even developed

countries are not immune: in Canada, only one of the country's 39 national parks was considered by the Parks Canada Agency to be free from ecological stress.

The scale of the problem facing PAs worldwide has highlighted the need for better information on their status and management effectiveness. At the Vth World Congress on Protected Areas (2003), Recommendation 18 was adopted that called for the application of systems for evaluating protected area management effectiveness as a matter of routine. The concept of assessing protected area management effectiveness has won wide support and assessment systems are now being applied in a number of countries in line with the CBD's Programme of Work on Protected Areas (Goal 4.2) to evaluate and improve the effectiveness of protected areas management. See Box 1 below. To date RAPPAM assessments have been conducted in 24 countries with 11 in the Asia Pacific region, 3 in Africa, 7 in Europe, 2 in Latin America and 1 in the Middle East (Turkey). In 2004 the Department of Environment and Conservation in New South Wales (Australia) conducted one of the most ambitious system-wide approaches to evaluating management effectiveness (Cook and Sahukar 2005). The exercise reported here is only the second MEE to be reported in the WESCANA region and the first in the Arab world

Box 1. CBD Programme of Work on Protected Areas

Goal 4.2 – To evaluate and improve the effectiveness of protected areas management

Target: By 2010, frameworks for monitoring and reporting protected areas management effectiveness at sites, national and regional systems, and transboundary protected area level adopted and implemented by Parties.

Suggested activities of the Parties
4.2.1 Develop and adopt, by 2006, appropriate methods, standards, criteria and indicators for evaluating the effectiveness of protected area management and governance, and set up a data base, taking into account the IUCN WCPA framework for evaluating management effectiveness, and other relevant methodologies, which should be adapted to local conditions.

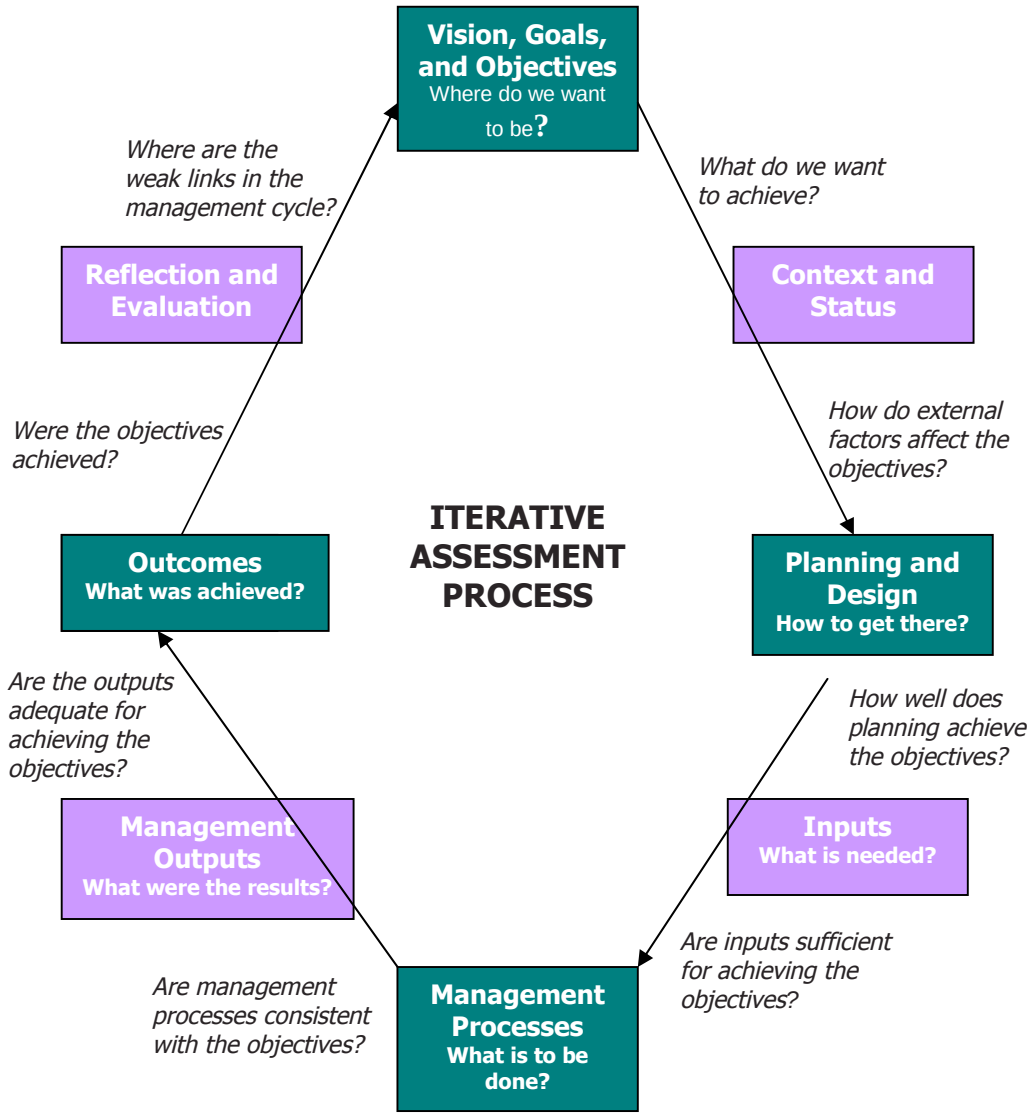
Application of Management Effectiveness Evaluation in Egypt

The MEE reported here was conducted within the IUCN World Commission on Protected Areas (WCPA) framework developed by a task force (Hockings *et al* 2000) in order to provide a consistent and universal approach to assessing PA management effectiveness. The framework is based on the premise that management starts by establishing a vision (within the context of existing status and pressures), progresses through planning and the allocation of resources and as a result of management actions eventually produces goods and services. Monitoring and evaluation provide the link that enables managers to learn from experience, and help agencies to monitor the effectiveness of PAs. The WCPA framework is based on the management cycle illustrated below (Figure 3) and includes six main assessment elements: Context, Planning, Inputs, Processes, Outputs and Outcomes. The RAPPAM methodology and lessons learnt from its application in Egypt are reviewed in Appendix 2.

It has to be realised that the RAPPAM is only one aspect of a MEE; the process should also involve a review of planning documents and field assessments to check responses and refine the interpretation. It should also examine the local situation in more detail to support planning and adaptive management at the PA site level, and consider if outcomes (impact) are being

achieved. Therefore it is proposed that the MEE exercise should be continued on a site-by-site basis, using a more detailed questionnaire structured around the same WCPA framework.

Figure 3. ***Assessment and the Management Cycle***



The WCPA Framework includes six main assessment elements: context, planning, inputs, processes, outputs, and outcomes. Outcomes were not examined in the exercise reported here. For the purpose of this report, the elements to be measured in the Management Effectiveness Evaluation are grouped as follows:

1. Background information

- Relates to basic PA data, such as its size, when established, staff numbers and budget.

2. Design issues relating to both individual sites and to PA systems.

- *Context* - Relates to existing status, importance and threats facing the area as well as the Policy environment.

3. Appropriateness of management systems and processes.

- *PA Design and Planning* – Relates to appropriateness of planning, policies and designs of individual PAs.
- *Inputs* – Relates to the adequacy of resources, including staff and funding
- *Management Processes* – relates to management planning systems, practices and activities.

4. Delivery of PA objectives.

- *Management Outputs* –Relates to the degree to which the management plan has been fulfilled and the products and services subsequently delivered.

Assessment Framework

Context	PA Design and Planning	Inputs	Management Processes	Management Outputs
• Pressures and Threats • Biological importance •Socio-economic importance • Vulnerability • PA policies • Policy environment	• PA objectives • Legal security • Site design and planning • PA system design	• Staff • Communication and information • Infrastructure • Finances	• Management planning • Management practices • Research, monitoring, and evaluation	• Threat prevention • Site restoration • Wildlife management • Community outreach • Visitor management • Infrastructure outputs •Planning outputs • Monitoring • Training • Research

The RAPPAM methodology can be thus used to:

1. Identify management strengths and weaknesses
2. Analyse the scope, severity, prevalence and distribution of threats and pressures
3. Identify areas of high ecological and social importance, and vulnerability
4. Indicate the urgency and conservation priority for individual PAs
5. Help identify and prioritise policy interventions to improve PA management effectiveness

Protected Area managers around the world have adopted the IUCN management effectiveness framework and are using it in a variety of ways but applying a consistent approach such as this across a PA system as large and diverse as Egypt's has been a considerable challenge. Though it is recognised that the system has its limitations, the MEE approach employed here does present a starting point from which the NCS can now work for improving management of the PA system.

PART 2

Key Results of the Assessment

A large volume of data was generated by the RAPPAM exercise, which will be extremely useful to analyse in considerable depth and in an almost infinite number of combinations. For the sake of clarity this report will review the salient, key results at the system level, but it is recommended that all PAMU managers should have access to the database to allow them to analyse and compare their individual PA relative to the PA system as a whole. The results for individual PAs are primarily used in this review to illustrate an issue, or to compare PAs at a system level. A detailed analysis of the individual RAPPAM questions from section 2 – 19 is presented in Appendix 3 to this report.

1. Background Information

Section 1 provides background data and descriptive information on each PA including size, date of establishment, budget and staff numbers, as well as brief descriptions on specific management objectives and critical management activities. The response was very informative. In some cases the individual responses from a single PAMU to these basic questions were variable, did not reflect reality, or in some cases were apparently unknown. Table 2 below gives the results reported by participants at the RAPPAM workshop, and the corresponding information from the NCS administration and official reports.

It must be stated at the outset that there is clearly a great deal of confusion about PA data such as staff numbers and budgets in different PAs, since they are sometimes agglomerated (e.g. in the Gulf of Aqaba PAs). However the analysis does reveal a worrying inconsistency between the data held by the different levels of the NCS and those reported in an official publication of the system plan (NCS Durban Report 2003). Furthermore, the way that data on individual PAs are maintained in the NCS makes any analysis of the system and the individual PAs extremely difficult. At a minimum each PA should have an unambiguous and regularly updated record of staff numbers and budgets.

A review of the separately obtained RAPPAM, NCS and NCS Durban Report data in Table 2 shows that not one of the PAs has consistent data for size, staff and budget. If the NCS, and/or the published data are presumed correct, the erroneous information reported at the RAPPAM workshop could be ascribed to a lack of reference information (although the participants were asked to bring management and work plans to the workshop). However, the responses also suggest an inadequate level of understanding of the PA by some PAMUs, which raises a doubt as to the credibility of other responses.

PA Areas.
The response of the participants to the size of their respective PA is interesting. Size data for four PAs were missing and there are significant differences between the sizes of 10 PAs among the different data sources. The NCS records state that the PA system extends over 100,152.5 km^2, while the system-plan report states that the same system extends over 94,183.5 km^2 – a difference of nearly 6,000 km^2.

PA Staff numbers.
The response to staff numbers may be ascribed to a misunderstanding of the question because the total number of staff reported in the responses is 159, whereas in reality there are 470 field

staff members. Some responses state the numbers of delegates to the conference, rather than staff of the PA itself.

Table 2: ***Comparison between RAPPAM reported Background Data and NCS Files***

PA	Size (km²)—RAPPAM Reported	Size-- NCS Records	Size-- System Plan	Date Establishment	Age as a PA (yrs)	GoE Budget RAPPAM Reported	Actual Budget 2004-5—NCS	Donor Budget (K_LE)	No.of staff RAPPAM Reported	No. of Staff (NCS)
Ras Mohamed	480	850	480	1983	23				5	
Nabq		600	600				1,105			95
Abu Galum	400	500	500	1992	14			0	4	
Taba	2800	3595	3,595	1998	8			0	0	
St Katherine	4250	5,750	4,350	1996	10	270	257	0	3	69
Al Ahrash	6	8	8	1996	10	30	25	0	2	3
Zaranik	250	230	230	1985	21	40	25	0	10	18
Ashtum El Gamil	175	180	180	1988	18	95	85	0	5	11
Omayed	700	700	700	1986	20		0		5	17
Petrified Forest	6	7	7	1989	17	45	15	0	7	7
Hassana Dome		1	1				15			5
Qaroun	1357	1,385	250	1989	17	40	206	0	6	19
Wadi El Rayan	1759	1,759	1,225	1989	17	100	149	3,000	42	41
Wadi Sannur Cave	11.8	12	12	1992	14	20	10	0	3	6
Wadi Assiuty	25	35	35	1997	9	75	50	0	4	10
Saluga & Ghazal	0.25	0.5	0.5	1986	20	75	71	0	8	17
Wadi Alaqi	23000	30,000	30,000	1989	17	85	70	0	7	20
Gebel Elba		25,600	35,600				160			37
Burullus	460	460	460	1998	8		6		2	15
River Nile Islands		160	160							
Wadi Degla	60	60	60	1999	7	100	229	0	14	15
Siwa	7800	7,800	7,800	2002	4	8	49	0	10	12
White Desert	3010	3,010	3,010	2002	4	30	49	0	6	6
Wadi El Gemal	6000	8,050	4,770	2003	3		0		16	47
Red Sea Islands		9,400	150				200			
TOTAL		**100,152.5**	**94,183.5**			**1013.0**	**2,776.0**		**159**	**470**
Central Office										42
TOTAL										**512**

PA Budgets.

The combined GoE non-staff expenditures for the PAs reported for RAPPAM amount to LE 1,013,000 whereas the NCS figure is LE 2,776,000. However, 8 of the PAs did not report budget figures, including the Gulf of Aqaba Protectorates, either as an oversight or lack of knowledge. It is possible that the discrepancy between NCS figures and those reported by PA staff involves the difference between running costs vs. total support including capital expenditure. The difference needs clarification and explanation.

The background information provides an opportunity to make a system-wide comparative review of two crucial management inputs (i.e. staff and financing) on a per-km^2 basis. The results of this comparison are shown in Table 3 below. For the purpose of this review the PAs have been separated into four size categories: it is misleading to compare funding and staff ratios between an area of less than 50 km^2 with another that is more than 20,000 km^2 because economies of scale operate. Particularly anomalous cases are highlighted in purple. The individual PA expenditures per km^2 are calculated on funds for operations and maintenance, the total expenditure includes all staff related costs.

Table 3: ***Comparisons of PA Staffing and Operation Funding per km²***

PA	Area NCS km^2	Area PA System km^2	Total Staff	Staff/ km^2	Op and Mtc Expenditure 2004-2005 (LE) *	Exp/km^2 (LE) *
Central Office			42			
less than 50 km^2						
Saluga & Ghazal	0.5	0.5	17	34.00	71,000	142,000.00
Hassana Dome	1	1	5	5.00	15,000	15,000.00
Petrified Forest	7	7	7	1.00	15,000	2,142.86
Al Ahrash	8	8	3	0.38	25,000	3,125.00
Wadi Sannur Cave	12	12	6	0.50	10,000	833.33
Wadi Assiuty	35	35	10	0.29	50,000	1,428.57
51-100 km^2						
Wadi Degla	60	60	15	0.25	229,000	3,816.67
101-500 km^2						
Red Sea Islands	9400	150	47	0.31	200,000	21.28
Nile River Islands	160	160	0	0	0	0
Ashtum El Gamil	180	180	11	0.06	85,000	472.22
Zaranik	230	230	18	0.08	25,000	108.70
Qaroun	1385	250	19	0.01	206,000	148.74
Burullus	460	460	15	0.03	6,000	13.04
501-1,000 km^2						
Omayed	700	700	17	0.02	0	0.00

Table 3 cont. *Comparisons of PA Staffing and Funding per km²*

PA	Area NCS km²	Area PA System km²	Total Staff	Staff/ km²	Op and Mtc Expenditure 2004-2005 (LE)*	Exp/km² (LE) *
1000-2000 km²						
Wadi El Rayan	**1759**	**1225**	**41**	**0.02**	**149,000**	**84.71**
2,000-5,000 km²						
White Desert	**3010**	**3010**	**6**	**0.002**	**49,000**	**16.28**
5,000-10,000 km²						
St. Katherine	**5750**	**4350**	**69**	**0.012**	**257,000**	**44.70**
Wadi El Gemal	**8050**	**4770**	**16**	**0.001**	**0**	**0.00**
Siwa	**7800**	**7800**	**12**	**0.001**	**49,000**	**6.28**
Gulf of Aqaba						
Ras Mohamed	850	**480**	**95**	**0.017**	**1,105,000**	**199.28**
Nabq	600	**600**				
Abu Galum	500	**500**				
Taba	3595	**3595**				
10,000-50,000 km²						
Gebel Elba	**25600**	**35600**	**37**	**0.001**	**160,000**	**6.25**
Wadi Alaqi	**30000**	**30000**	**20**	**0.00**	**70,000**	**2.33**
Totals	**100,152.5**	**94,183.5**	**512**	**0.005**	**2,776,000**	**29.50**
GoE salaries/ wages 04/05					**5,600,000**	
GoE wetland contribution					**1,851,000**	
Total GoE expenditure					**10,227,000**	**108.58**

* Calculated on NCS supplied data

The non-staff expenditure per km² for the different PAs is highly variable, and obviously fluctuates depending on specific protection needs as well as size: smaller PAs are relatively more expensive to manage, marine areas are more costly to protect, and in general strictly protected areas and National Parks (Category I to IV) require higher financial inputs than multiple-use protected landscapes. However it is apparent that Gebal Elba, Wadi Allaqi and Siwa receive between one tenth and one quarter of the average level of funding (LE 29.5 or $5.1 per km² per year) for PAs in Egypt, while the White Desert receives just over half the average level. When staff costs are included the average investment per km² per year is raised to LE 108.58, equivalent to $19.03.

The investment per km^2 is revealing especially when considered in the light of international and regional norms of expenditure on PAs. Chape *et al* (2003) calculated the average level of PA expenditure worldwide to be $ 1,300 per km^2 per year. James *et al* (1999) reported that the mean annual expenditure in developed countries was $ 2,058 per km^2 per year, while for developing countries it reached only $ 157 per km^2 per year. In Africa, government expenditures range from $200 to $300 per km^2 per year, while in the Middle East and North Africa the regional mean was $74 (in 1996 $US value). In Egypt the total expenditure on PAs (including staff costs) averages $19 per km^2 per year, approximately 11% of the average for developing countries. In order to match the regional, or developing countries, norms Egypt would need to invest between $7.4 million and $15.7 million annually in its national protected area system – a 4 to 9 fold increase on current levels of expenditure.

James (1999) further reported that the global mean for staffing in PAs is 27 staff per 1,000 km^2 (i.e. 0.027 per km^2), with developing countries having a slightly higher staff ratio than developed countries. For Egypt this global mean would translate into a PA staff complement of about 2,700 as opposed to the present 512 staff, which is only 18% of the average for developing countries.

It is very apparent that, from an international perspective, Egypt's PA system is both chronically under-funded and under-staffed and this has serious implications for overall management effectiveness.

2. Design issues relating to both individual sites and to PA system

Context

Pressures and Threats

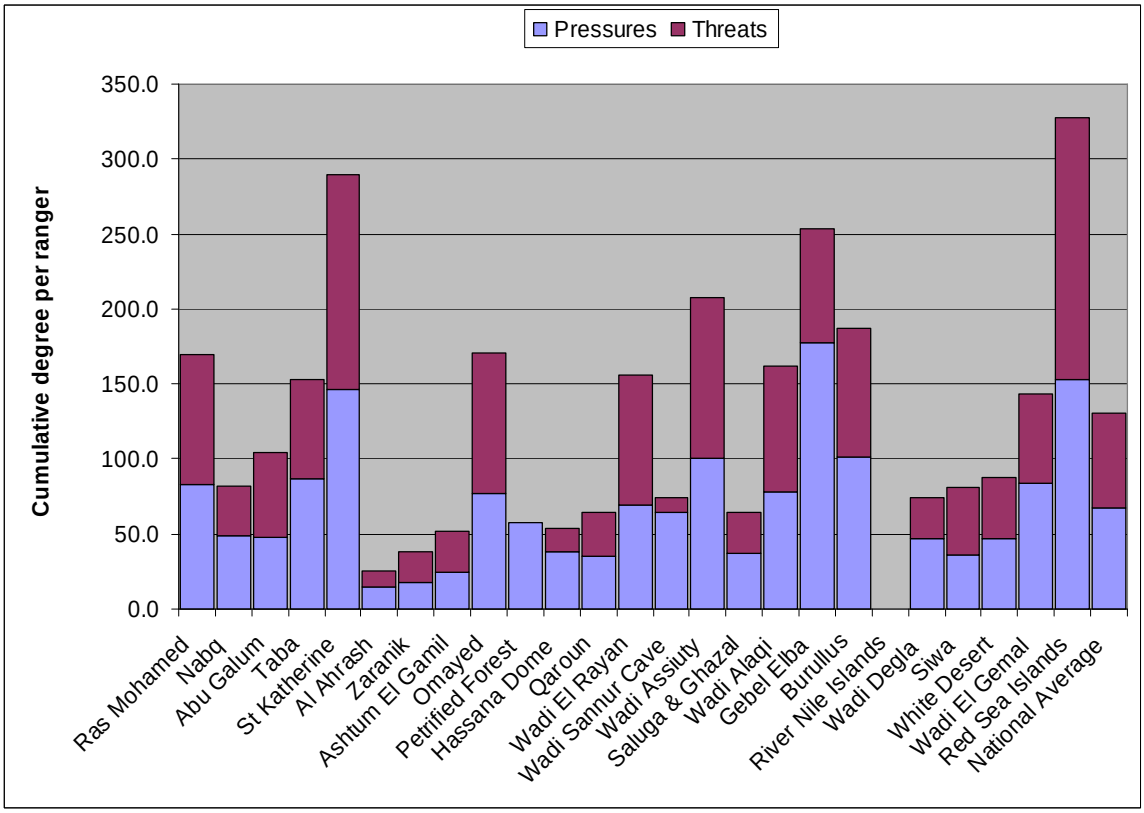
This analysis includes information from each pressure and threat assessed in section 2. The scoring for this is different from the subsequent sections (3-19) in that the "degree" of threat and pressure is the product of the three elements of Extent, Impact and Permanence, each rated on a scale of 1 to 4. The identified issues were categorized into the following groupings:

	Category	Examples
1	Conversion of land use	building, tourist development, conversion to agriculture
2	Mining	quarrying for rock, sand, etc. Oil prospecting
3	Grazing	by goats, camels, etc
4	Hunting	hunting and fishing
5	Over-collection	collecting for medicinal or scientific purposes
6	Recreational use	tourism and other recreational activities
7	Waste disposal	of solid and liquid waste
8	Semi-natural processes	drought, sedimentation, global warming
9	Invasive spp	crayfish, feral dogs, etc
10	Pollution	oil, chemicals, air pollution, etc
11	Land Ownership	conflicts with local people
12	Cross-boundary	pollution from nearby factories, etc
13	Agriculture	rearing animals, growing crops or drugs
14	Military	security conflicts, access permissions, etc
15	Social development	growth of villages and associated problems
16	Ranger time/facilities	lack of equipment, lack of time
17	Water abstraction	creating artificial drought

Relative Pressures and Threats to the System

In Fig 4 below, the degree of the pressures and threats that have been identified are combined and averaged by the number of respondents for each PA. One point to bear in mind is that PAs with relatively well-trained rangers with relatively more knowledge will have been better at identifying pressures and threats, and this will be reflected in greater cumulative degrees in the analysis. If there are such variable levels of training and knowledge among PA staff, then a high score might reflect either this, or a greater actual risk. The national average score for pressure and threats is shown in the final bar of the chart.

Figure 4: ***The degree of Pressures and Threats in Egyptian PAs****



*The Y-axis scale is the degree (= extent [0-4] * impact [0-4] * permanence [0-4]) summed for all the threats and pressures mentioned by the staff of each PA, and divided by the number of respondents

On a relative scale, taken at face value, the results suggest that four of the PAs (St. Katherine, Wadi Assuity, Gebal Elba and the Red Sea Islands) are considered to have high degrees of combined pressures and threats (i.e. over 200). These PAs may be regarded as "High Risk Parks", but it is noteworthy that the two with the highest pressure and threat ratings i.e. St Katherine and the Red Sea Islands, have both benefited from significant management and financial investments through donor projects. The fact that they are considered as the highest risk parks with double the average score, should be cause for concern and may raise questions as to the impact of the donor investment. However, it is also possible that the staff of these two PAs are simply more aware of the risks **because** of the prior management input.

Seven of the PAs (Ras Mohamed, Taba, Omayed, Wadi Rayan, Wadi Allaqi, Wadi El Gamal and Burullus) were considered to have above average levels of threats and pressures and may be regarded as "Medium Risk Parks". The remaining PAs were judged to have relatively low levels of pressures and threats, i.e. below average, and could be considered "Low Risk Parks". There were no responses for the Nile Islands which have no allocated staff or resources and can be considered simply as a "paper park".

Table 4 lists the most serious pressures and threats identified by the staff of these "High Risk" PAs. Conversion of land use from protection to tourism and/or agriculture appear to be the main issues in common, but there does not seem to be any systemic problem.

Table 4: *Pressures and Threats mentioned by staff of 'High Risk' PAs*

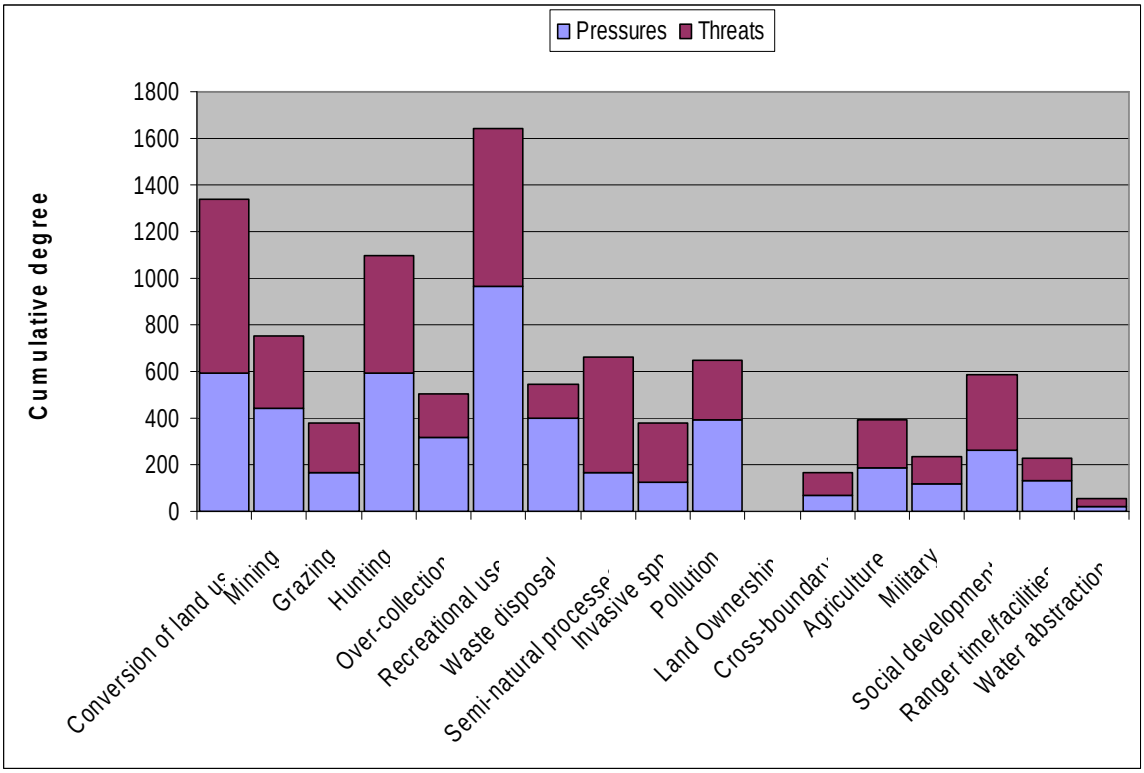
PA		Category	Average degree	Specific examples cited	Degree
St Katherine	Pressures	Agriculture	48.0	illegal cultivation	48
		Over-collection	31.3	over-collection of plants, esp. by researchers	48, 32, 27
				over-collection of wood/fodder	18
		Recreation	27.0	too many tourists	64, 36, 4
				undirected ecotourism	4
		Waste disposal	25.0	dumping of solid waste	48, 2
	Threats	Agriculture	48.0	harmful use of water	48
		Semi-natural processes	36.0	drought	36
		Social development	33.3	increased community & investment	48
				impact of tourism on landscape	36
				increased development & settlement from better water supply	16
		Conversion of land use	29.3	increased roads & tracks	32, 32, 24
		Mining	29.3	expansion of mining	48
				increasing cultural impacts	36
Red Sea Islands	Pressures	Ranger time/facilities	36.0	mis-coordination between staff	36
				long process of legal decision-making	36
		Waste disposal	33.0	waste from the ports in the water	48
				solid waste	27
				waste elimination, esp solid in mangroves	24
		Pollution	31.6	ports & port accidents	48, 48
				oil exploration & pollution	32, 18, 12
		Hunting	26.3	illegal fishing	36, 27, 16
		Recreation	25.1	lack of awareness	48
				tourism	36-12
	Threats	Conversion of land use	48.0	development for tourism	48
		Waste disposal	48.0	solid wastes esp bags & cans	48
		Semi-natural processes	45.3	climate change	64, 48
				coastal erosion esp mangroves	24
		Recreation	42.8	huge increase in number of visitors	64
				effects on coral	48, 27, 27
				community outreach	48
		Hunting	32.3	unregulated fishing causing declines	48, 48, 27
Gebel Elba	Pressures	Ranger time/facilities	32.0	interference from other authorities	32
		Social development	24.0	loss of cultural heritage	24
		Semi-natural processes	24.0	drought	24
		Hunting	24.0	illegal hunting & fishing	24
	Threats	Social development	32.0	changes in traditional land tenure system	32
		Pollution	16.0	oil & other pollution in sea	16
		Conversion of land use	12.0	roads & infrastructure	12
		Military	12.0	armed conflict	12
Wadi Assiuty	Pressures	Recreation	48.0	disturbance of animals	48
		Conversion of land use	24.0	land conversion into farms & other human activities	24, 24
		Hunting	24.0	hunting of gazelles & hawks	24
	Threats	Hunting	32.0	loss of biodiversity from hunting	32
		Conversion of land use	28.0	loss of land to local community, human activities	36, 24, 24
		Agriculture	22.0	impact on biodiversity & movement	24, 24, 18

Categories of Pressures and Threats

Respondents were requested to describe the various pressures and threats to their PA: these were subsequently grouped into 17 categories, and the cumulative degree of these pressure and threat categories are shown in Figure 5 below. The most salient result is that all pressures

identified are considered to persist as threats, and this suggests that existing management interventions are appropriate or are not properly geared to deal with the pressures. The results indicate that the conversion of land use, hunting and recreational use constitute the most serious pressures and are regarded also as the most serious threats.

Figure 5: ***Pressures and Threats of Egyptian PAs separated into categories***



Further examination of the responses in the 'Conversion of land use' category indicated some significant patterns, and so this was subdivided and reanalysed separately. The subdivisions were: Tourist developments, local community infrastructure, agriculture and fishing, roads, military, economic activities and illegal activities.

Figure 6 shows that seven PAs suffer badly or moderately from these problems: St Katherine, Petrified Forest, Omayed, Wadi El Rayan Wadi Assiuty and Wadi Degla all have double or treble the national average scores. Fig 7 also shows that the main issues here are the growth of local community infrastructure, agriculture and fishing, the building of roads and various industrial activities under the term 'economic'.

Mining, waste disposal and pollution are second-order pressures to the system but have different degrees of threat (Fig 5). Over-collection is a second-order pressure seen as diminishing slightly as a threat, while semi-natural processes, though not major pressures now, are seen as emerging as significant threats. Social development and invasive species are also regarded as second-order threats. The results of two categories are surprising: in spite of written comments to the contrary, grazing is not regarded as a major systemic pressure or a growing threat, and neither is the excessive demands on ranger time or facilities.

Figure 6: *Degree of Pressures & Threats for the 'Conversion of Land Use' category for Egyptian PAs*

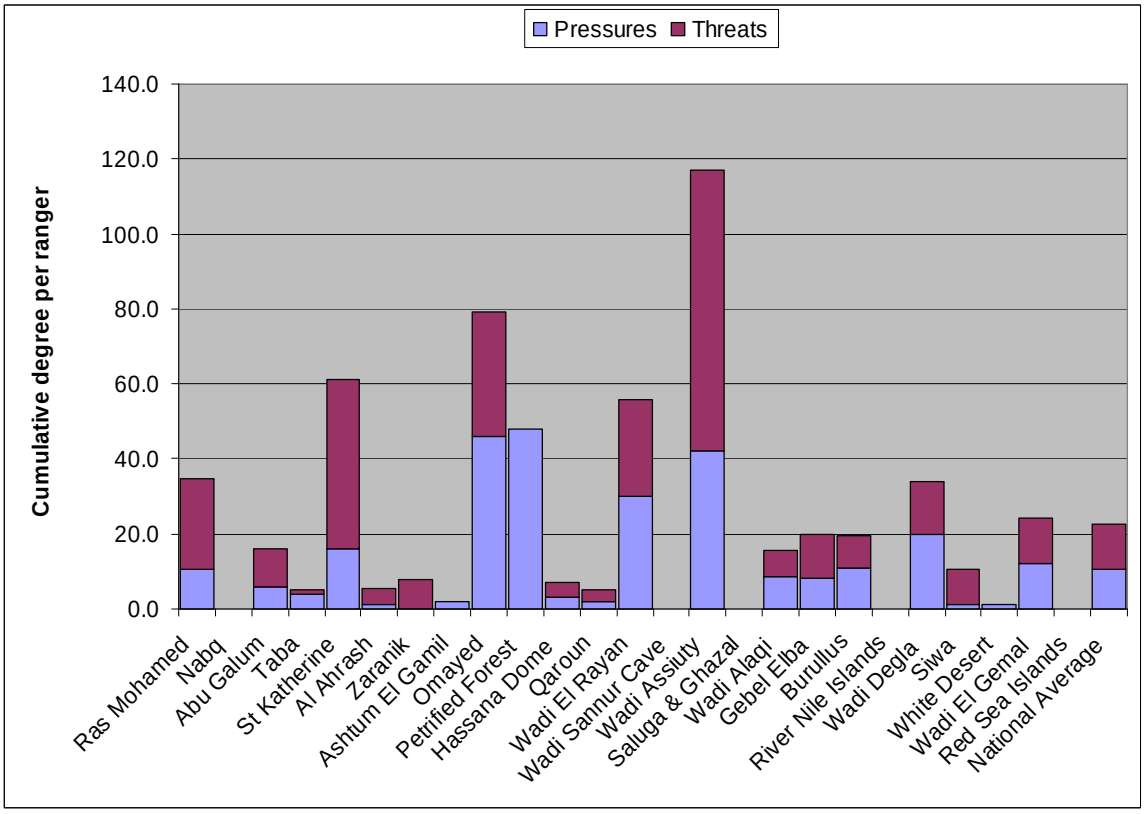


Figure 7: *Scores for subdivisions of the 'Conversion of Land Use' category*

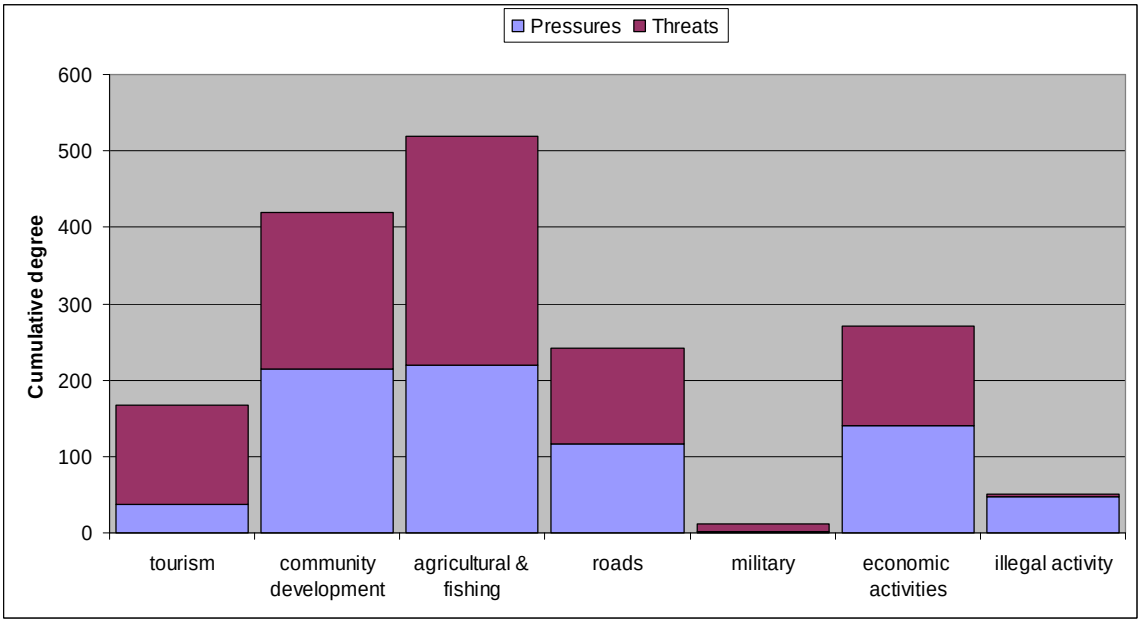
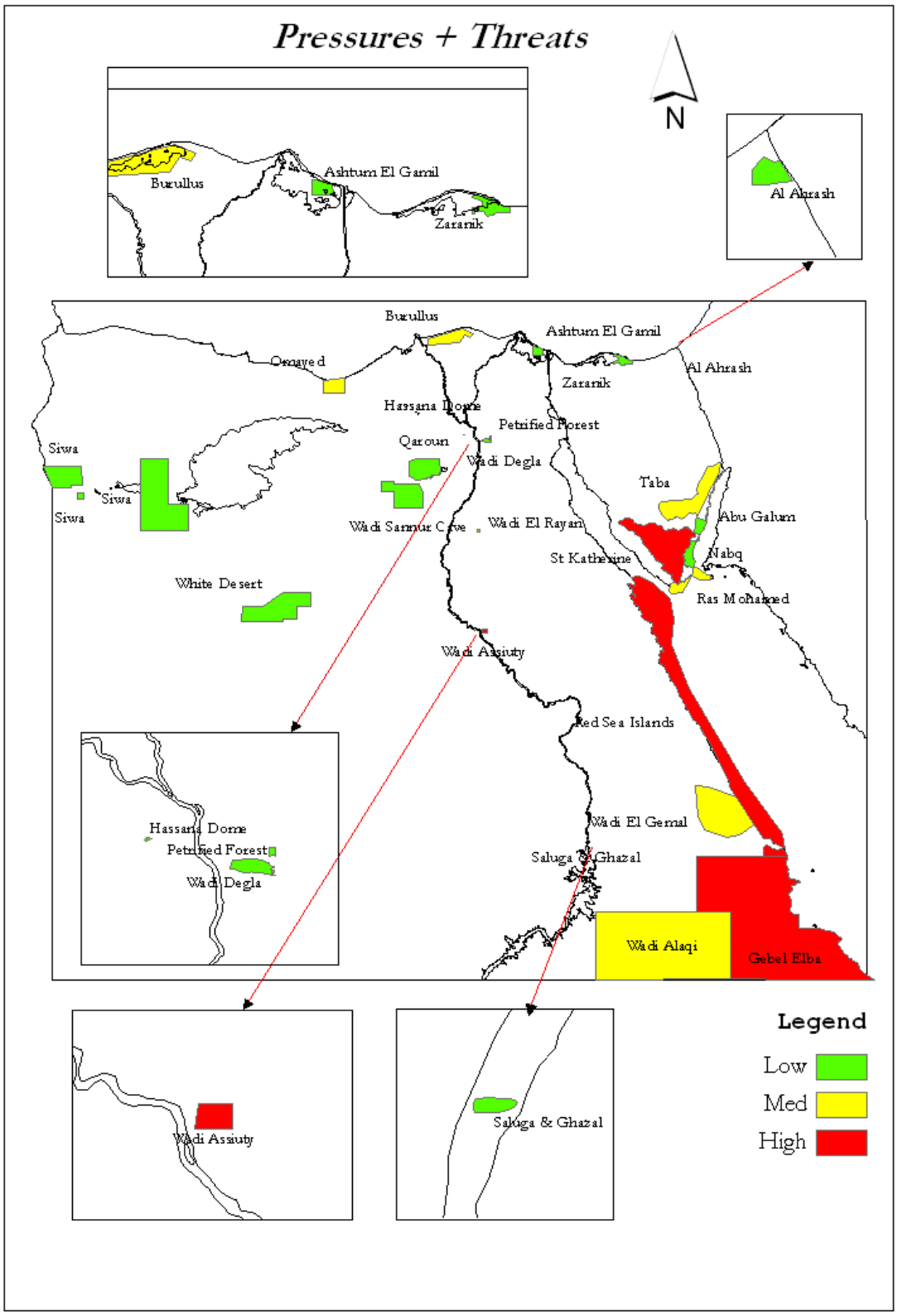


Figure 8 shows the distribution of the cumulative degree of Pressures and Threats geographically, and clearly the Red Sea is the crucial region where the risk is high.

Figure 8: ***Geographical distribution of the cumulative scores of Pressures and Threats identified for the Egyptian system of Protected Areas***



In Part 3 (below) the PA scores for each of the categories of Pressures and Threats are reviewed in greater detail.

Conducting a Pressure and Threat analysis on an individual PA helps determine the most serious concerns at a site level relative to those at the system level. A good example is the situation in Wadi Allaqi shown in Figure 9 below, where the pressure/threat profile is very different from that of the system as a whole. At Wadi Allaqi conversion of land use, the major systemic concern is not even considered as either a pressure or threat. The pressure and threats of the military combine to present the most serious risk to this PA. By far the most serious pressure in Wadi Allaqi is mining, although this is considered to be a significantly lower threat in the future. Grazing on the other hand is now a second-order pressure, as with the systemic analysis, but is regarded as being one of the most serious threats to the Park along with over-collection and invasive species. Hunting, semi-natural processes and agriculture are all serious pressures that are likely to persist as threats. The analysis is a useful guide for management interventions: apparently the threat of mining will diminish but whether this is a result of better regulatory controls, market forces or depletion of raw materials is unclear. For now, management should probably focus on grazing, invasive species and relations with the military.

Figure 9: ***Overall degree of Pressures & Threats in Wadi Allaqi***

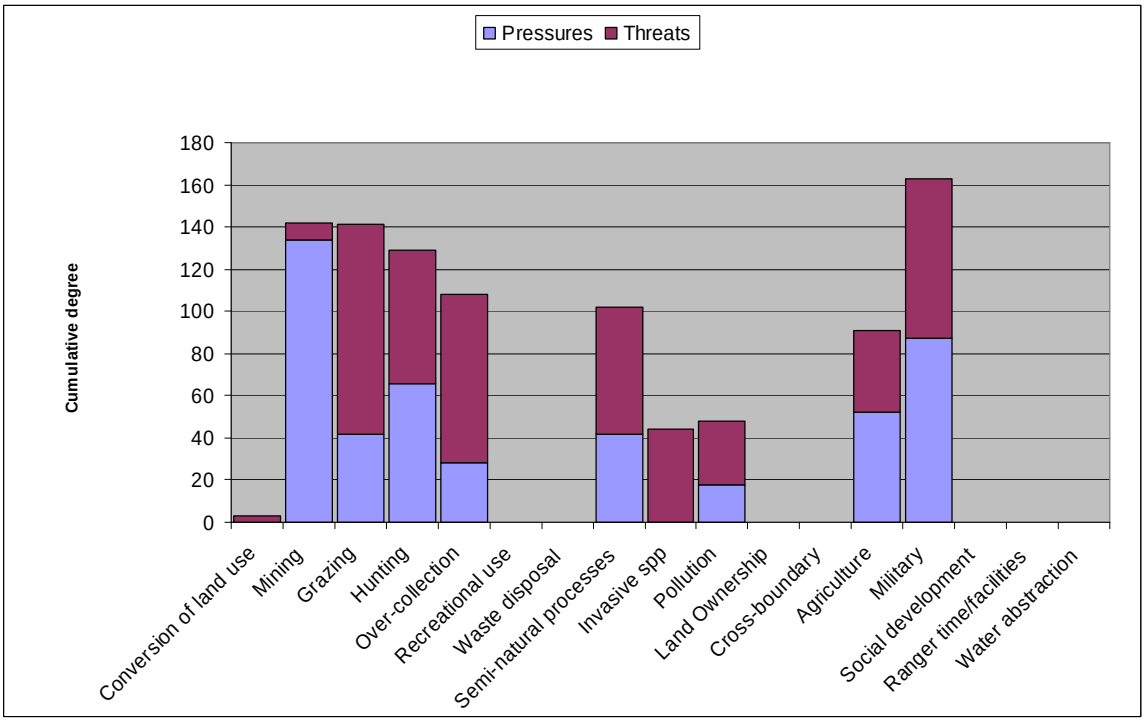
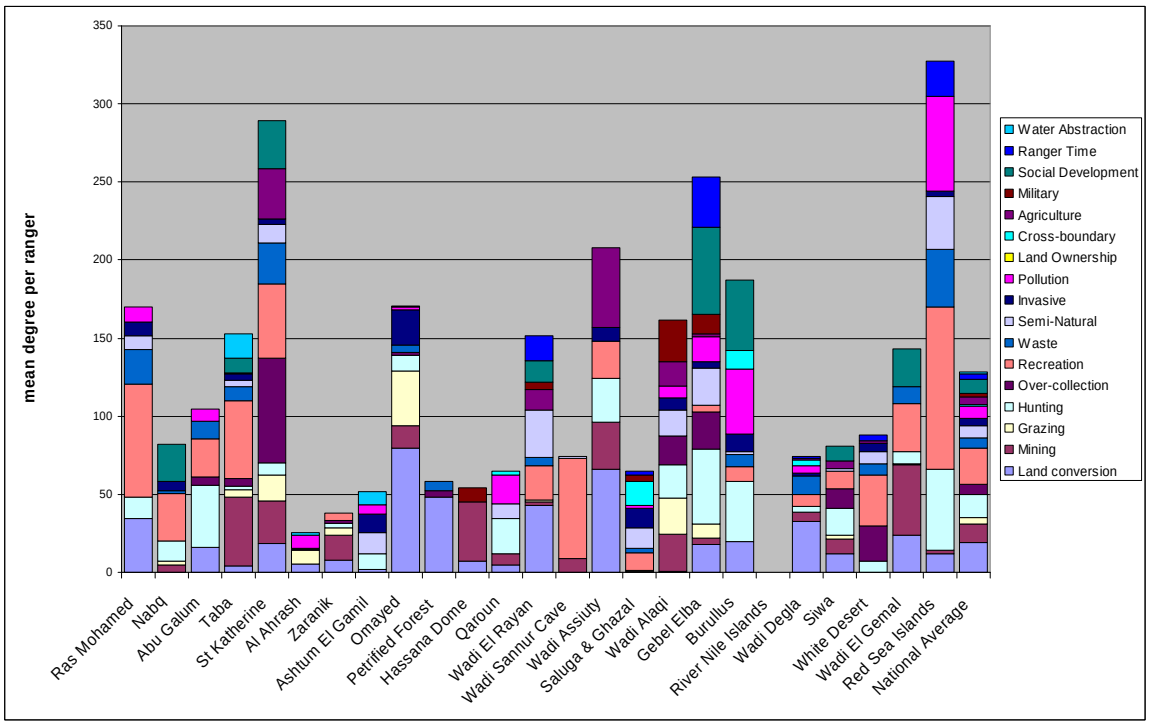


Figure 10 below shows the cumulative pressures and threats for all activities within each of the PAs, and allows a comparison of this total with the other PAs in the Egyptian system.

The analysis clearly indicates that within the PA system, St. Katherine Protectorate and the Red Sea Islands face the highest overall degree of pressures and threats from all activities with levels of more than double the national average. For St Katherine, it has 11 identified pressures and/or threats operating, with recreational use, agriculture (drug cultivation) and over-collection being the most serious. For the Red Sea Islands, tourist developments and activities, and water abstraction were identified.

Figure 10: ***Degrees of Pressures & Threats subdivided into activities***



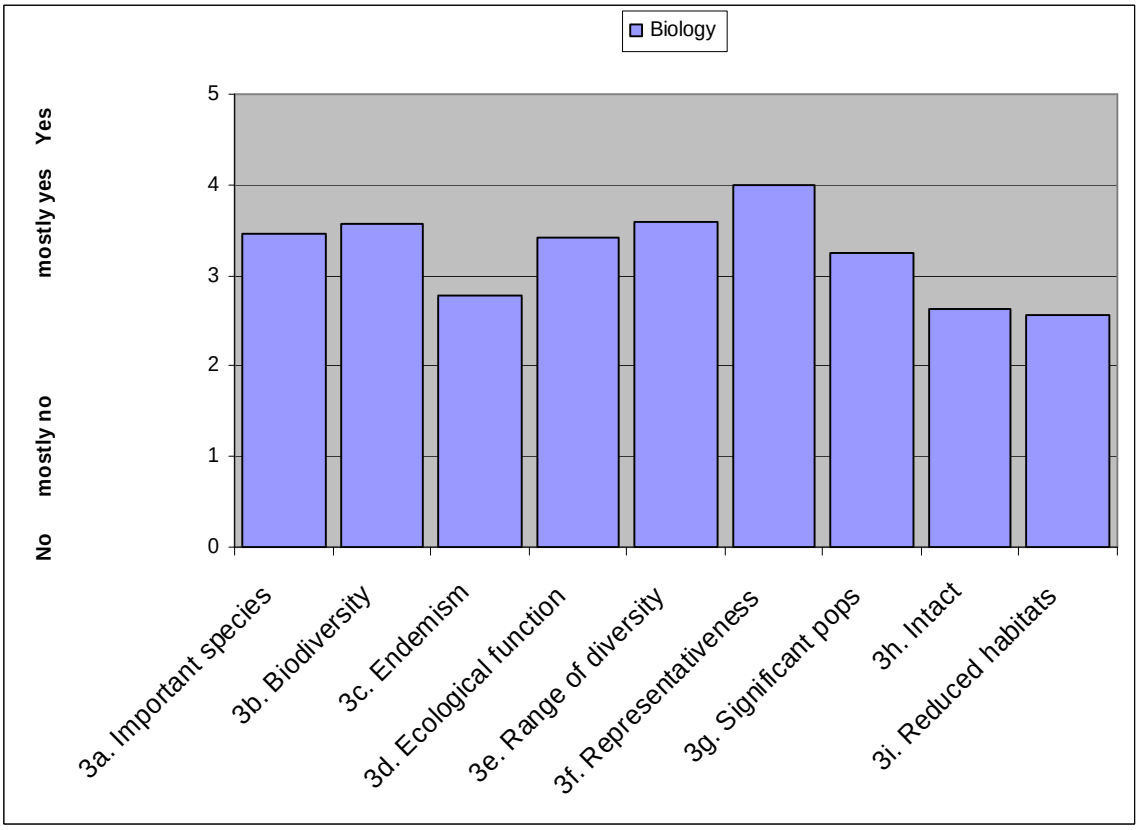
Gebal Elba has the third most serious overall cumulative level of pressures and threats, with hunting and the development of local communities being the most serious of the 12 activities identified. A number of PAs rank as second-order sites for concern, including Ras Mohamed, Taba, Omayed, Wadi Rayan, Wadi Assuity, Wadi Allaqi and Burullus, since these have generally fewer identified activities. Al Ahrash and Zaranik have the lowest overall degree of pressures/threats and number of activities operating.

Biological Importance

The values shown in Figure 11 indicate the relative values of different indices of biological importance of the national PA system. The results show that the system of PAs has almost equal importance for the conservation of most aspects of Egypt's biodiversity.

The system scores highest for representativeness, but the difference between this value and the values for most of the other indices (e.g. important species, biodiversity, full range of diversity, significant populations) is relatively minor. The only indices with noticeably lower values are for endemism (which is indeed comparatively low in Egypt), and intact or reduced habitats.

Figure 11: ***Responses to questions concerning the Biological Importance of PAs in Egypt***

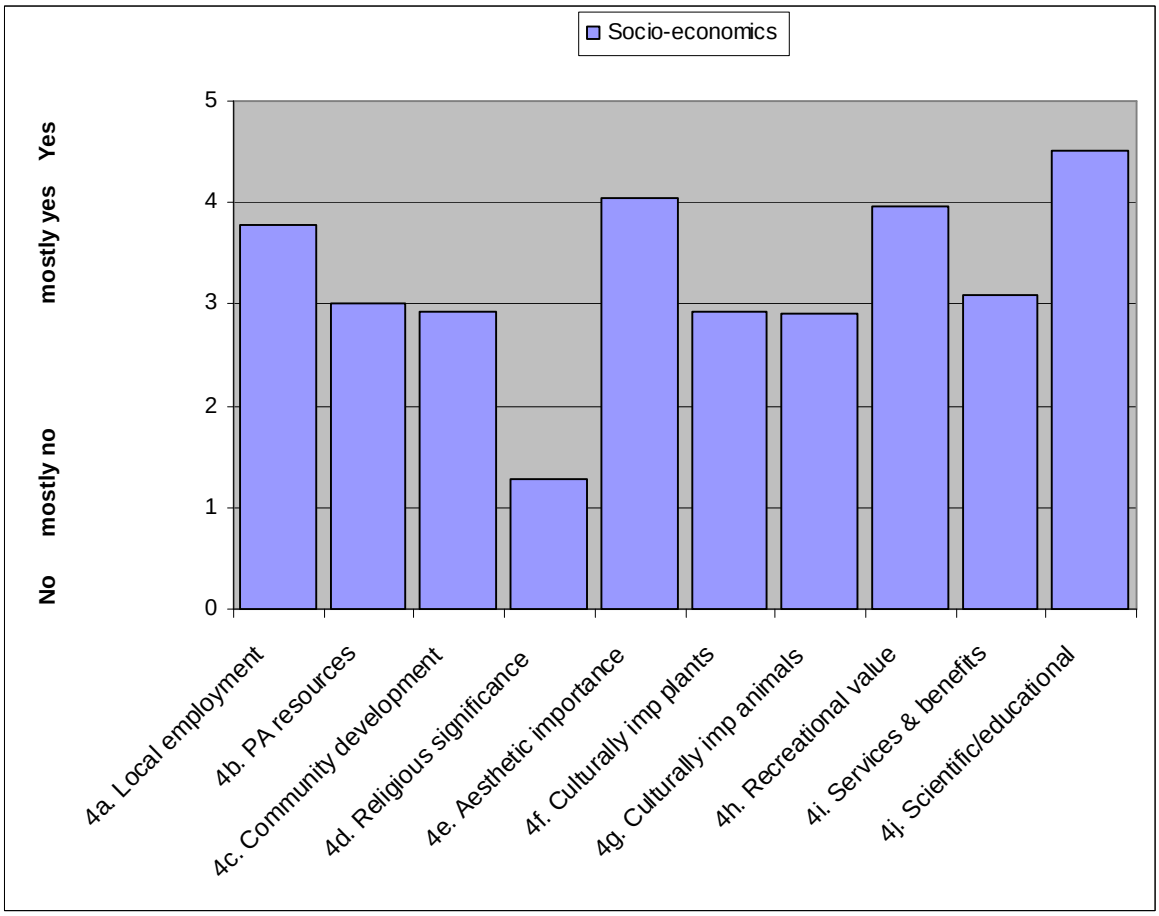


Socio-economic Importance

The results of the analysis of socio-economic value of the Protected Area system are given in Figure 12 and indicate that the system is considered to offer a very full range of social and economic benefits.

Overall the system receives relatively high values for aesthetic importance, and that it is considered an important source of local employment, services and benefits. The system is considered to have almost equal value for the subsistence of local communities and offering opportunities for their development, containing culturally important biodiversity and for its scientific and educational importance. The system is considered to have relatively low levels of religious or spiritual value, since only two sites – St. Katherine and Wadi Rayan - were considered to have important religious connections.

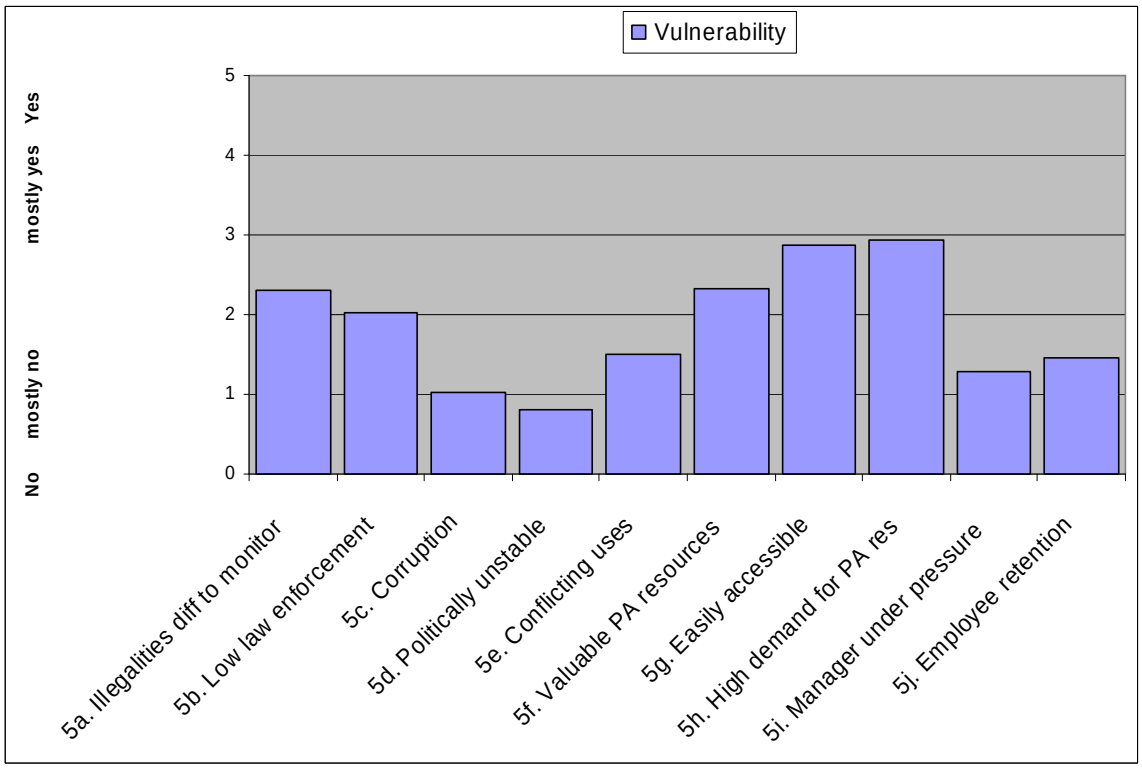
Figure 12: ***Responses to questions concerning the Economic Importance of PAs in Egypt***



Vulnerability

The analysis on responses to questions on PA vulnerability (Fig 13), ranging from law enforcement to political instability and corruption, is very revealing. The most problematic system-wide issue for staff in many PAs (despite its middling average) is monitoring illegal activities; this is not surprising given the large areas of many PAs, their inaccessibility and lack of transport. When this point is coupled with easy access, high demand for resources and low law enforcement, a significant challenge and potential higher degree of risk emerges.

Figure 13: ***Responses to questions concerning the Vulnerability of PAs in Egypt***

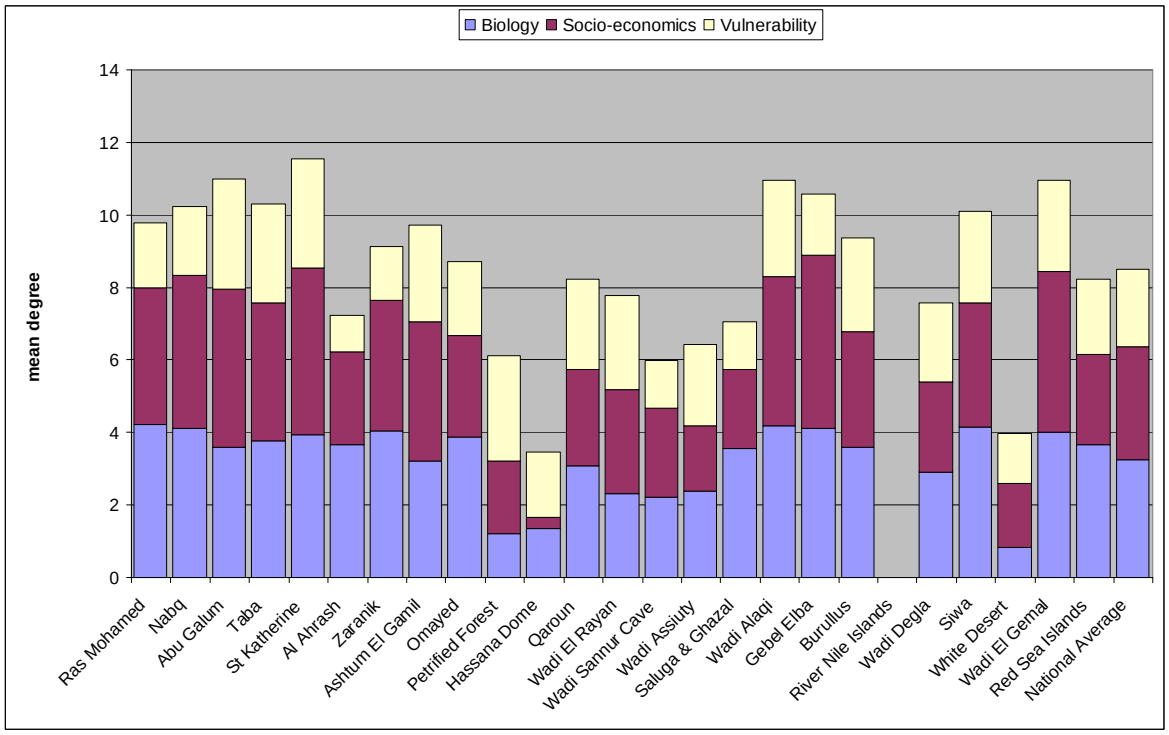


Context overall

The cumulative values for biological importance, socio-economic importance and vulnerability at the site level are given in Figure 14. The analysis indicates that the protected area system has significant biological and social values and 13 areas have scores above the national average. The analysis indicates that St Katherine has marginally the highest cumulative score but Abu Galum, Wadi Allaqi and Wadi El Gamal have almost similar values. Three of these PAs are characterized by the fact that they are very large areas and contain significant indigenous populations which make subsistence use the PA's resources. The results indicate that 16 of the PAs have similar levels of biological value, and 11 have similar levels of socio-economic importance. It is noteworthy that all PAs are considered vulnerable to some extent and this should be cause for concern.

A noticeable "anomaly" would appear to be the situation of the White Desert which has a biological and socio-economic rating well below the national average, scoring only marginally higher than Hasana Dome. The White Desert scores the lowest for biological importance (lower than the Petrified Forest and Hasana Dome), it is given a lower than average socio-economic value, and it scores low on the vulnerability index. This probably reflects its establishment mainly for landscape rather than biodiversity reasons. However the site is regarded as a potential World Heritage Site so the RAPPAM scoring needs to be treated with caution and should probably be challenged.

Figure 14: ***Cumulative scores for the Context questions***

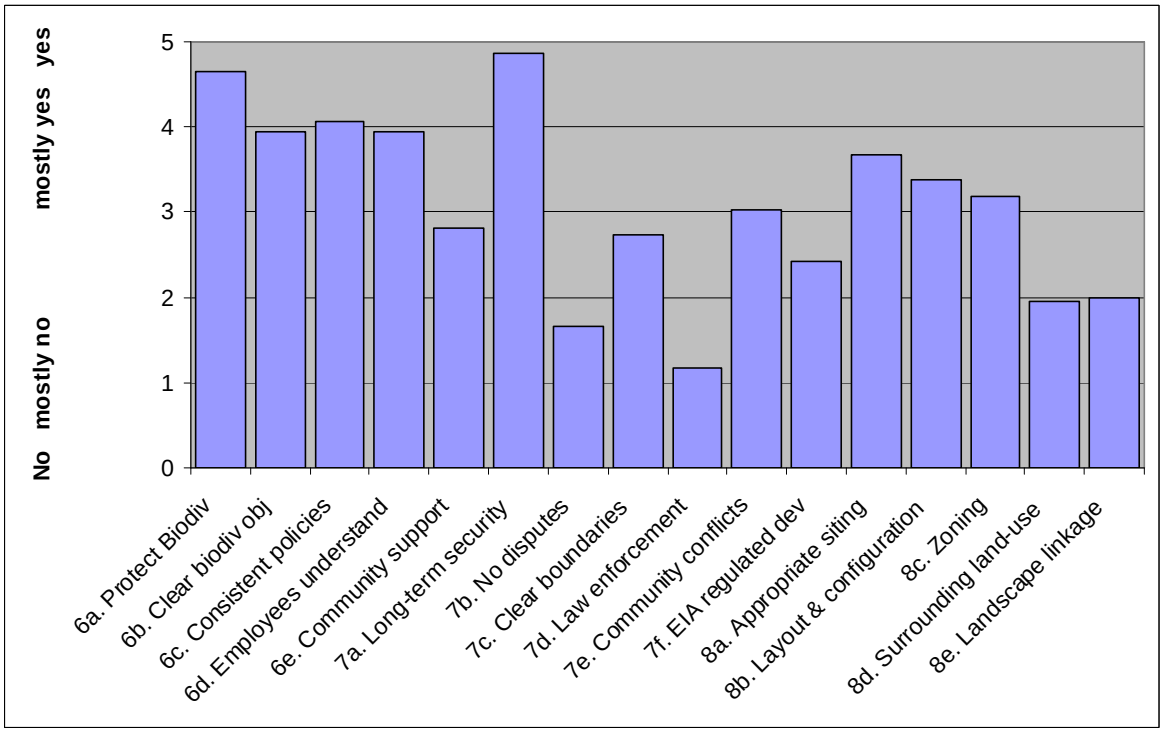


3. Appropriateness of management systems and processes.

PA Design and Planning.

The aspects of Planning that are included in this analysis include the RAPPAM sections (6 to 8) related to Planning Objectives, Legal Security of the PA and the PA Site Design and Configuration. The collective results for these indices are presented in Figure 15 below.

Figure 15: ***Responses to questions concerning the Design and Planning of PAs***

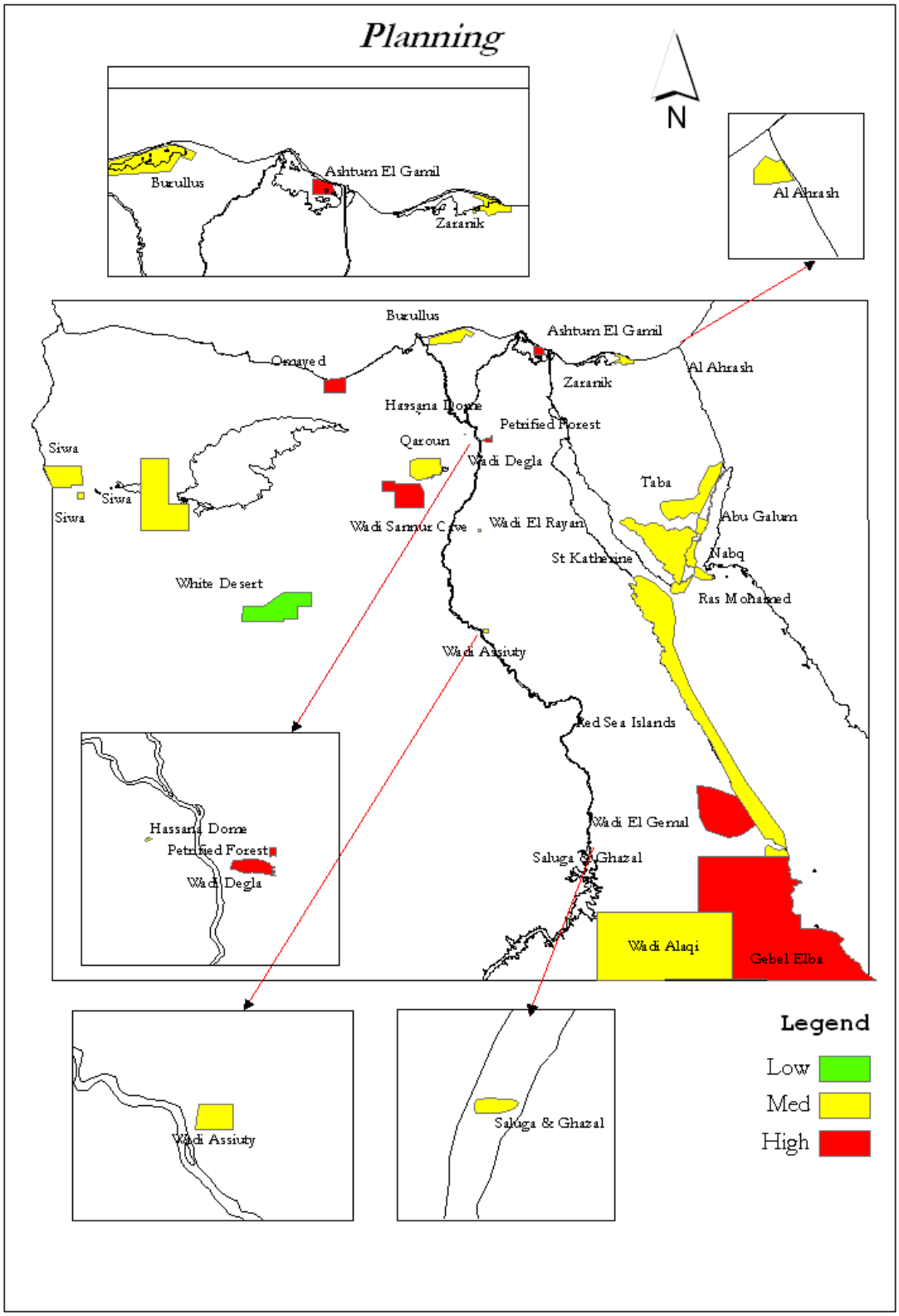


The results indicate that the PAs in general are considered to meet the Planning Objectives (section 6) for their establishment, but that there is only moderate support from the local communities for the overall objectives of the PAs. This makes an interesting and important contrast with the results for Inputs (see below), where Local Community Relations are scored very highly. Probably the rangers in the PAs have very good personal relationships with their local communities, but these communities do not necessarily support the PA objectives. The result for consistent management policies and plans is interesting in view of the relatively low value ascribed to the implementation of management plans shown in Fig 20 below. There would appear to be some inconsistency between the responses.

Legal Security (section 7) indices score relatively low, with the exception of long-term legally binding security. This latter contrasts with the markedly lower scores for other indices of security, notably land tenure disputes and law enforcement. Adequate boundary demarcation, and the application and the enforcement of EIA procedures, are also issues with relatively low scores that flag them up as issues needing to be addressed.

In terms of site design and configuration (section 8), the PAs are considered to be relatively well located, configured and zoned to achieve management objectives. However the incompatibility of surrounding land use, and the lack of landscape linkages to other conserved land, are apparently issues for many PAs, reflecting on the poor situation with regard to the adequacy and enforcement of buffer zones.

Figure 16: ***Geographical distribution of scores for the Planning section***

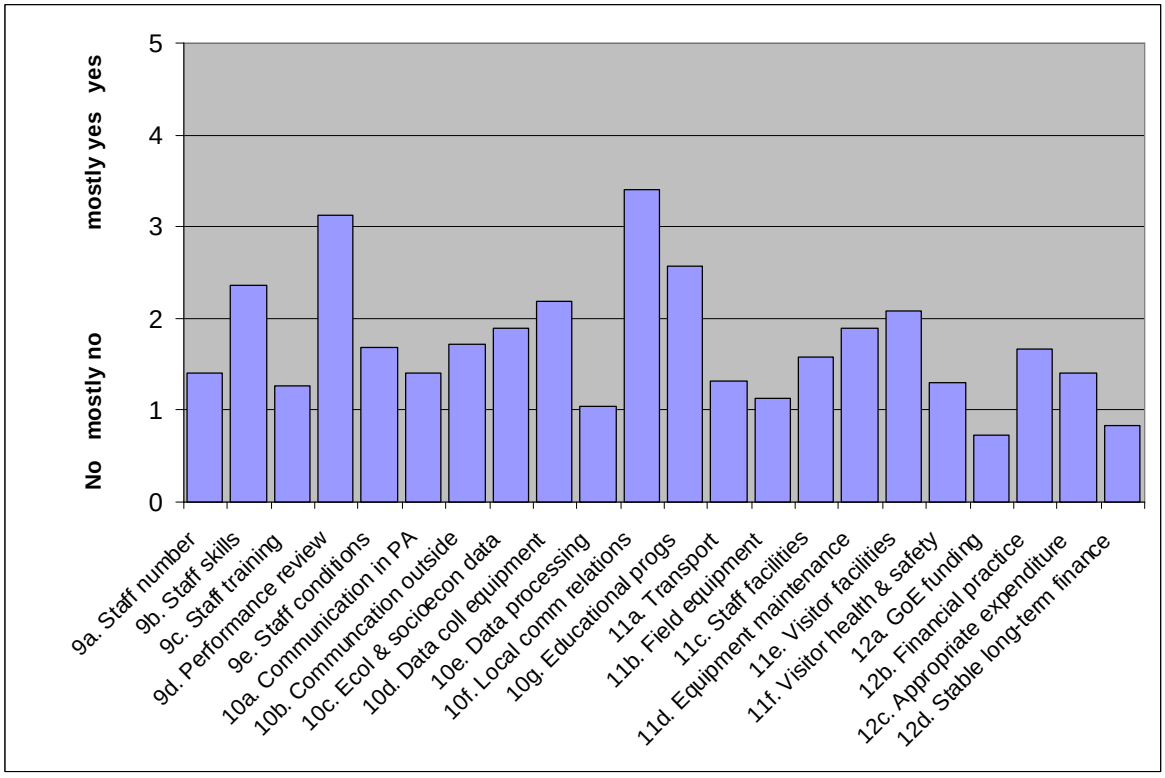


Inputs

The Planning Inputs (RAPPAM sections 9 to 12) include Staffing, Communication, Infrastructure and Finances. The collective results of the analyses of these indices are shown in Figure 17.

The mean degrees scored for the various Staffing indices (section 9) are rather variable within an overall very low score. Relatively high values are given to the skills levels of staff and staff performance evaluations. The high score of 'staff performance evaluation' seems anomalous, given the general lack of formal staff evaluations within the NCS. However, it probably reflects the view of the PA staff that they are continually being asked to provide reports on their activities, rather than formalised performance review, as is being conducted at Wadi Rayan on a monthly basis. It would probably be a good idea to convert informal reporting into a formal system of performance review. Staff numbers and the opportunities for appropriate training are clearly inadequate. The latter finding validates the Training Needs Assessment for the NCS that is currently being conducted. The outcome of this Needs Assessment probably will be the recommendation for a regular in-house or in-country training schedule for all staff who need the relevant skills for their jobs.

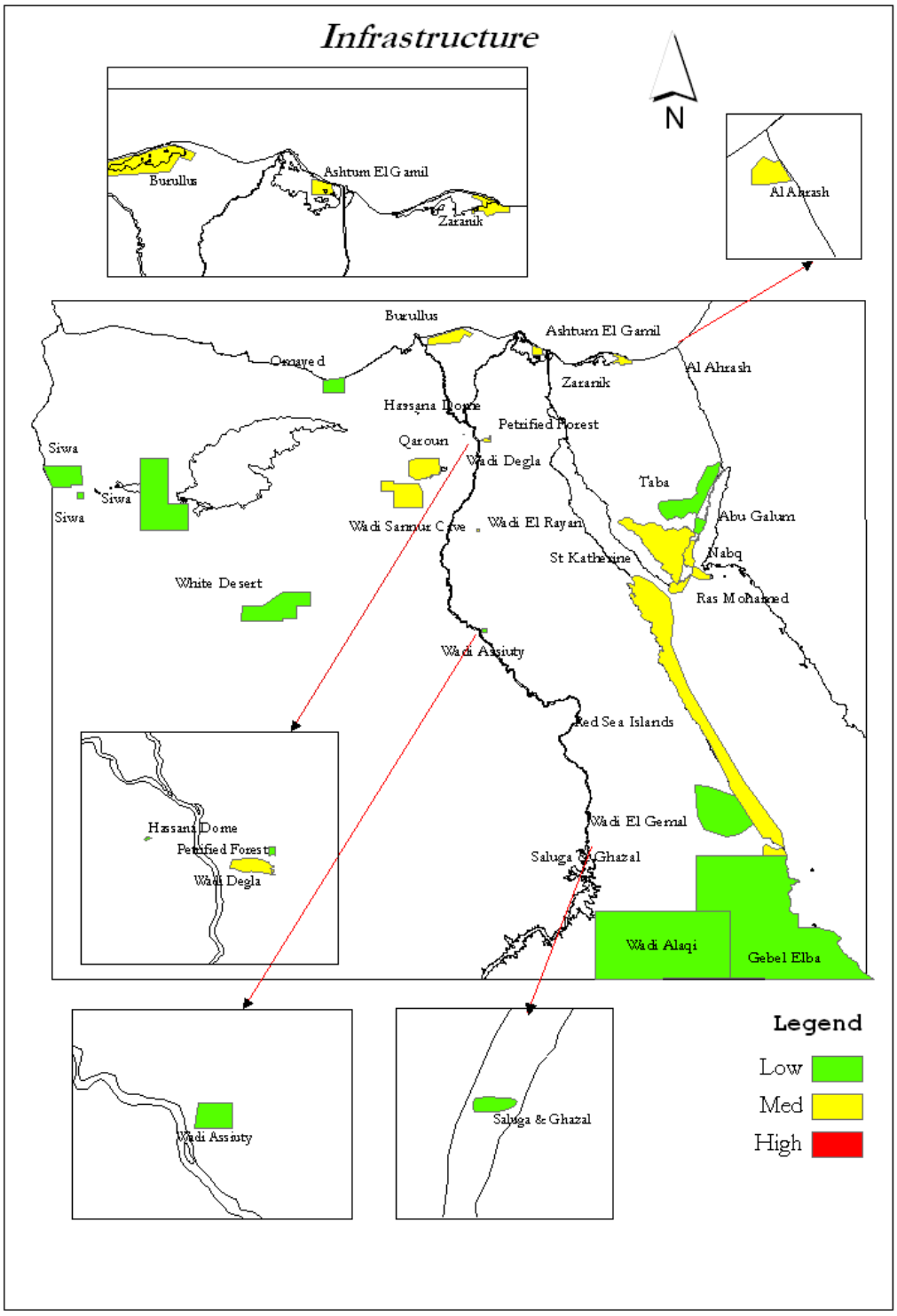
Figure 17: ***Responses to questions concerning the Inputs to PAs in Egypt***



The scoring of Communications and Information inputs (section 10) is also highly variable. Communications with local communities and the effectiveness of education and interpretation programmes are both scored highly. The scoring for the former index contrasts with the much lower value given to community support for PA objectives in Figure 15 above, and raises the question as to the impact of the community communications and outreach programmes.

The scores for Infrastructural inputs (section 11) are generally low. Transport, data processing (computers and software) and field equipment are poorly scored, and this is not surprising given that it is known as a systemic problem: these are issues that need addressing.

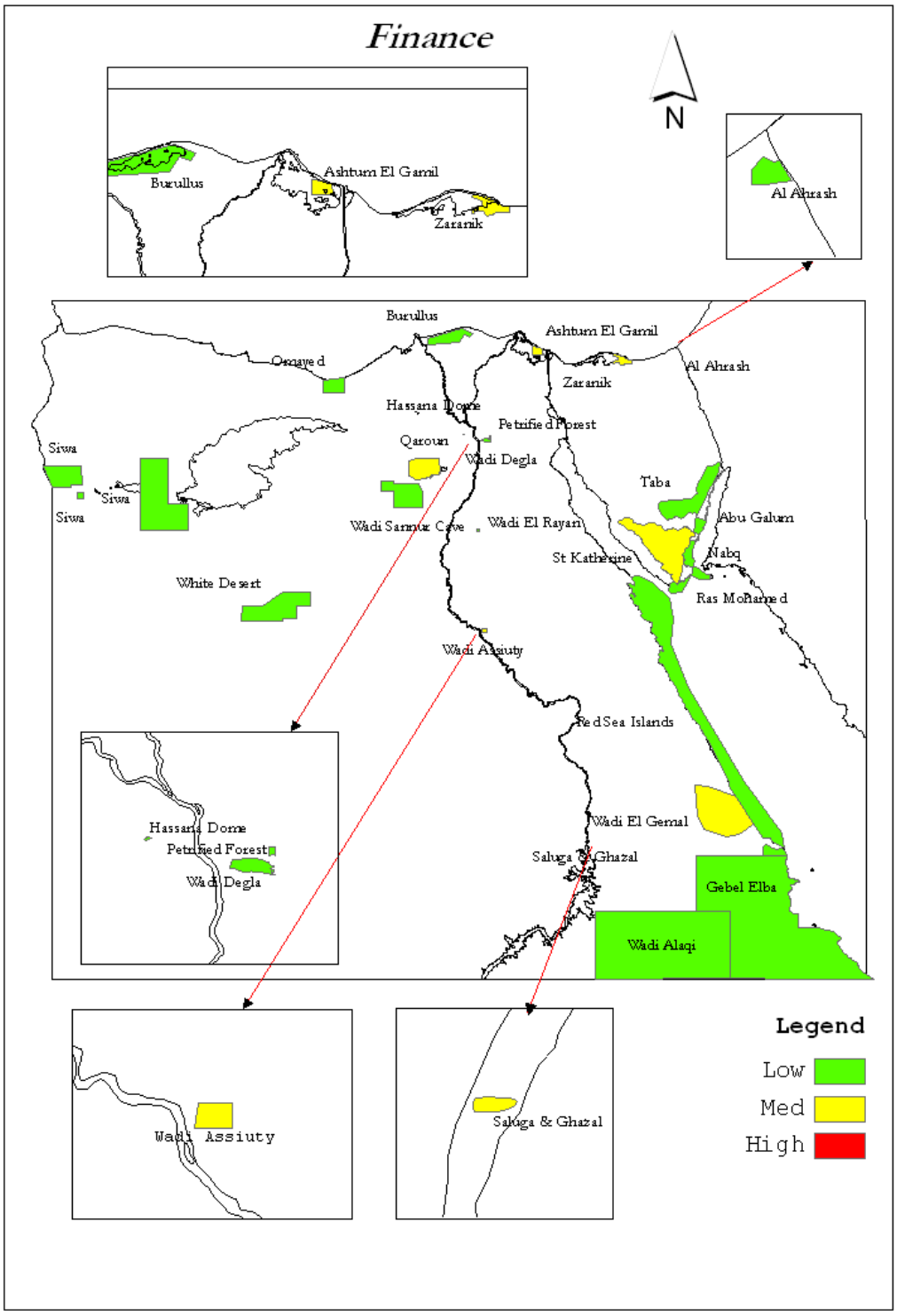
Figure 18: ***Geographical distribution of scores for the Infrastructure section***



However, the equipment maintenance score is surprising, given the known inadequacy of PA budgets for Operation and Maintenance, prevalence of inoperable equipment, etc. It is possible that responses may have been influenced by a concern that staff may be held to account for poor maintenance. The highest score for infrastructure inputs is given to "adequacy of visitor facilities", even though recreational use is regarded as the most serious threats to PAs! This is probably a misunderstanding of the question, which seems to have been interpreted as asking whether a Visitor Centre exists. The existence of such a Centre is not a

guarantee that adequate facilities for visitors exist. Furthermore, the related "adequacy of visitor health-and-safety provisions" is given a poor score, which is a cause for concern given the fact that PAs are being promoted as important ecotourism destinations.

Figure 19: ***Geographical distribution of scores for the Finance section***



Funding issues (section 12) have the lowest scores for Inputs. In the light of the fact that Egypt has a 10-fold lower level of funding than other developing countries, it is not surprising that the level of GoE funding scores the lowest of all Input indices. The index of "financial

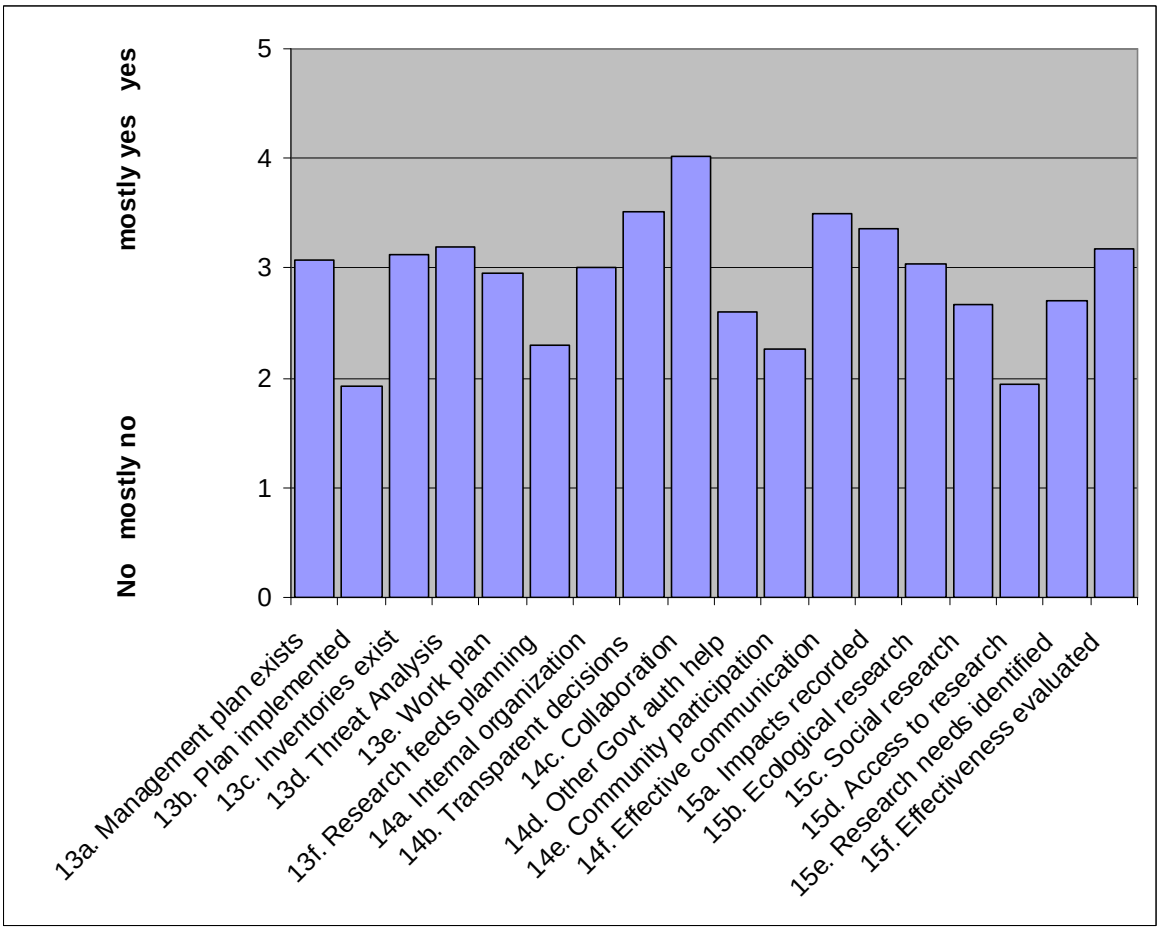
management practices enable efficient and effective PA management" scores relatively high – rather at variance with the other indices. The low score for the stable long-term financial position of PAs is obviously a pressing concern.

Management Processes

Answers to these involve RAPPAM sections 13 to 15, and are given in Figure 20.

Four of the management planning indices (section 13) receive almost equal and relatively high scores. The results indicates that the system has benefited from recent management planning for the PAs, though only 8 of the system's PAs have formal management plans, but the low score for plan implementation raises questions as to the perceived value of the process, or the appropriateness of the plans. Also the low score given to the incorporation of research and monitoring information into the plan suggests that the plans are not iterative, dynamic or updated, and raises questions as to the perceived value of the monitoring and research programmes being conducted. The management planning process in the PA system as a whole obviously needs to be thoroughly reviewed.

Figure 20: ***The results for the indices of Management Processes for Egyptian PAs***

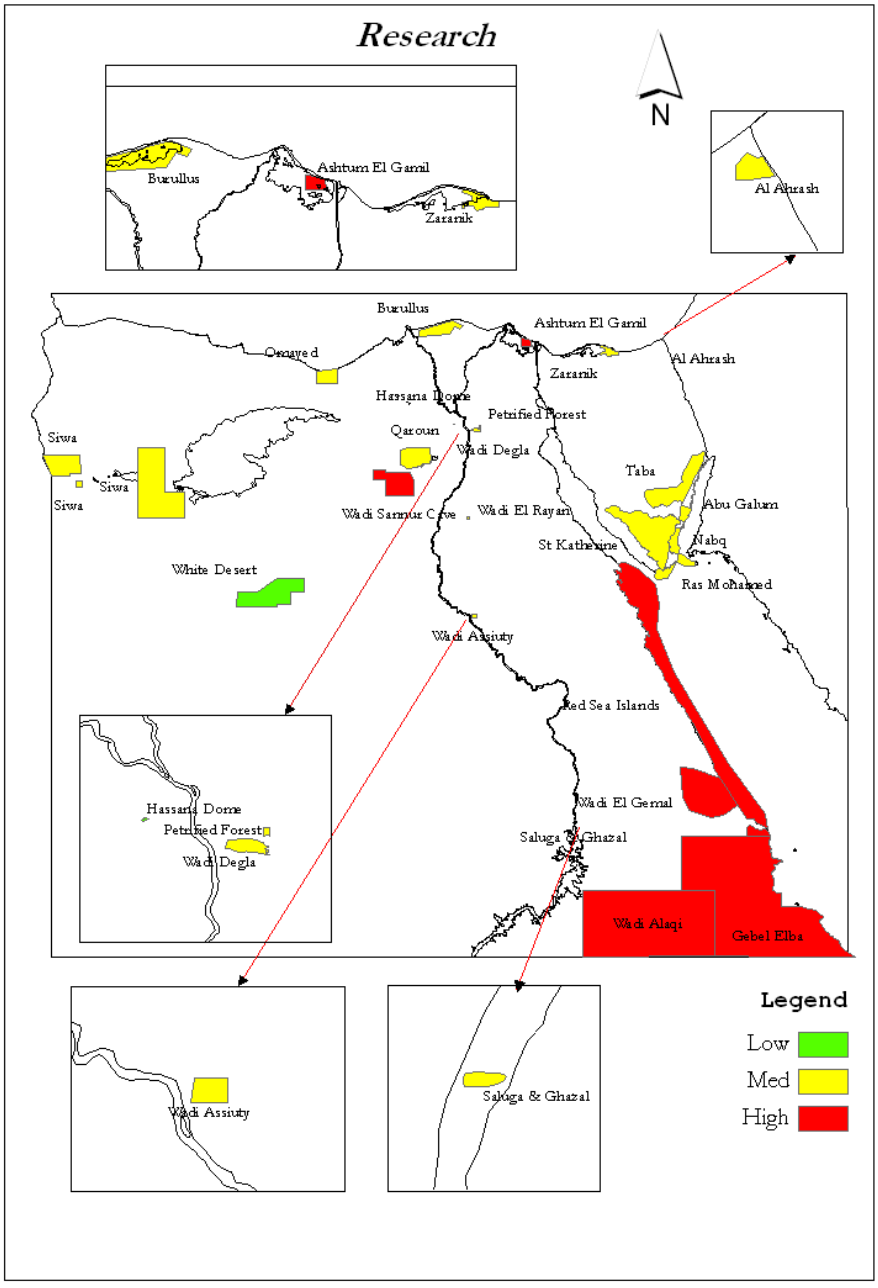


For management decision-making (section 14), the participants have scored collaboration and transparent decision-making highly, whereas the involvement of communities in decision-making receives a relatively low score. Does the high scoring for collaboration therefore relate to partners other than local communities? This is a policy issue that will need to be addressed in terms of the NCS's response to the CBD's programme of work for PAs. The

communication between all levels in PA administration appears to be satisfactory on a system-wide level.

In terms of Research and Monitoring (section 15), the major issue appears to be the PA staff's limited access to research information and technical advice. The high score given to the index for routine evaluation of management, including management effectiveness, is strange considering that the RAPPAM exercise was the first formal MEE conducted by the NCS. Clearly respondents had something else in mind when answering this question - presumably routine discussions with their own PA manager.

Figure 21: ***Geographical distribution of scores for the Research section***



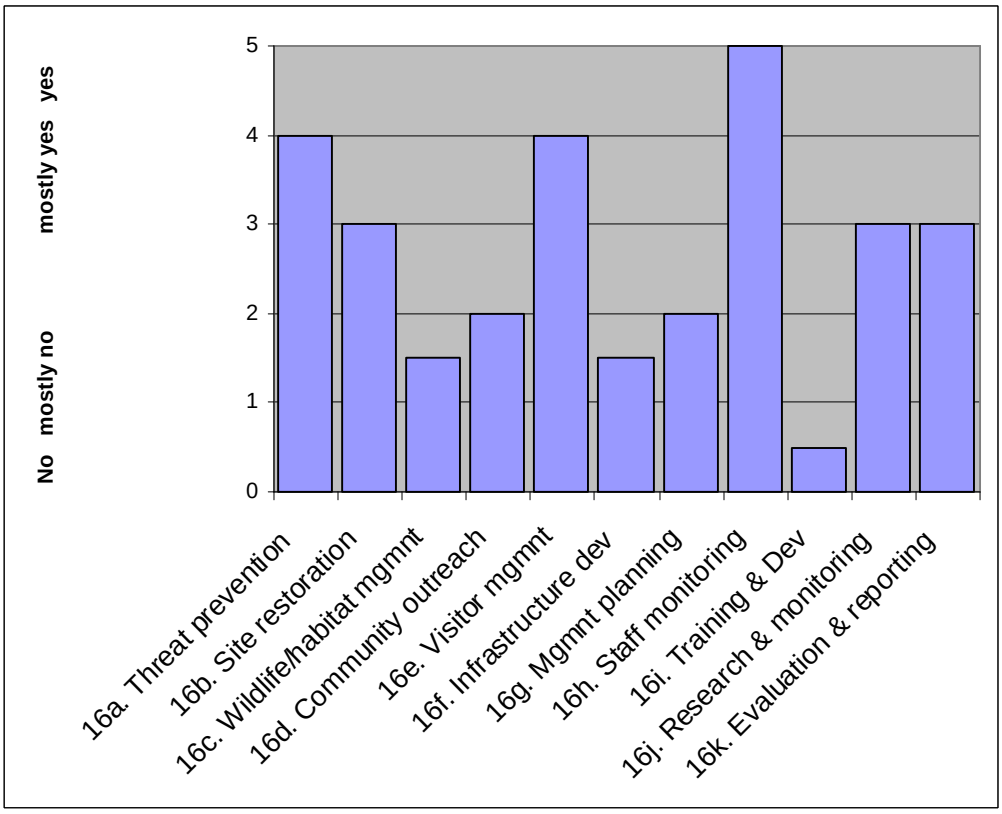
4. Delivery of PA objectives.

Management Outputs

The management outputs are the specific products and services that have been, or are being, accomplished by PA staff, as elaborated in RAPPAM section 16. The value of these outputs need to be assessed against the context of the PA (i.e. pressure mitigation and threat prevention), the PA's objectives and the targets of management and annual plans. The results are given in Figure 22 below. The results indicate that over the last two years the PAs would appear to have been reasonably successful in delivering a broad range of outputs. This will need to be scrutinised at the site level.

The PA system's most significant output has been staff monitoring, supervision and evaluation, and it has been weakest with the training and development of staff. This result again validates the current institutional-wide TNA being conducted for the NCS.

Figure 22: ***Scores of Managements outputs from Egypt's PA system***

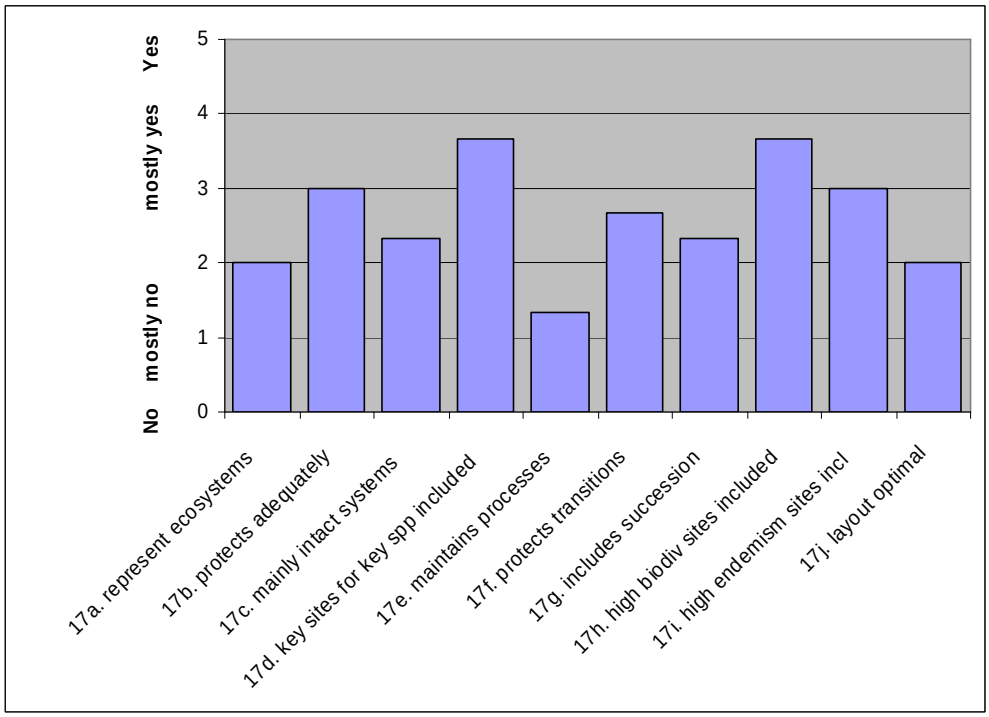


The output value for research and monitoring needs to be challenged as it is evident from Figure 20 that this output does not appear to be routinely utilised to inform management planning and interventions.

5. PA Policy Environment

The average results for the three sections on PA system-level questions are given in Figure 2, above. These questions were answered by senior NCS staff about the PA system to appreciate system-wide policy-level issues. The three sections are: Protected Area system-level design (Fig 23), Protected Area policies (Fig 24) and Policy environment (Fig 25). At the time of writing there were only 3 respondents to the three system level questions so the scores have to be treated with some caution.

Figure 23: ***Scores for PA system-level design***



The generally low scores in Figure 23 suggest that the PA system, as a whole may have some serious design flaws. It fails to adequately represent the nation's ecosystem diversity and it performs poorly with maintaining natural processes at a landscape level. The system is considered to function only marginally better at protecting vulnerable species and by containing some largely intact ecosystems but it appears to perform better with protecting sites of high conservation and biodiversity values.

The scores for the assessment of PA policies are shown in Figure 24. It is apparent from the scoring that there are fundamental weaknesses in the administration policy for the system as all the responses to the questions all lie in the "no" to "mostly no" range. The main concerns should be the perceived lack of a national commitment to the PA system in terms of clear policies and sustained financial commitments and the lack of an effective staff training and capacity-building programme. The situation regarding national biodiversity inventory will change with the initiation of BioMAP and the institution of a culture of self evaluation through this RAPPAM process.

Figure 24: ***Scores for PA policies***

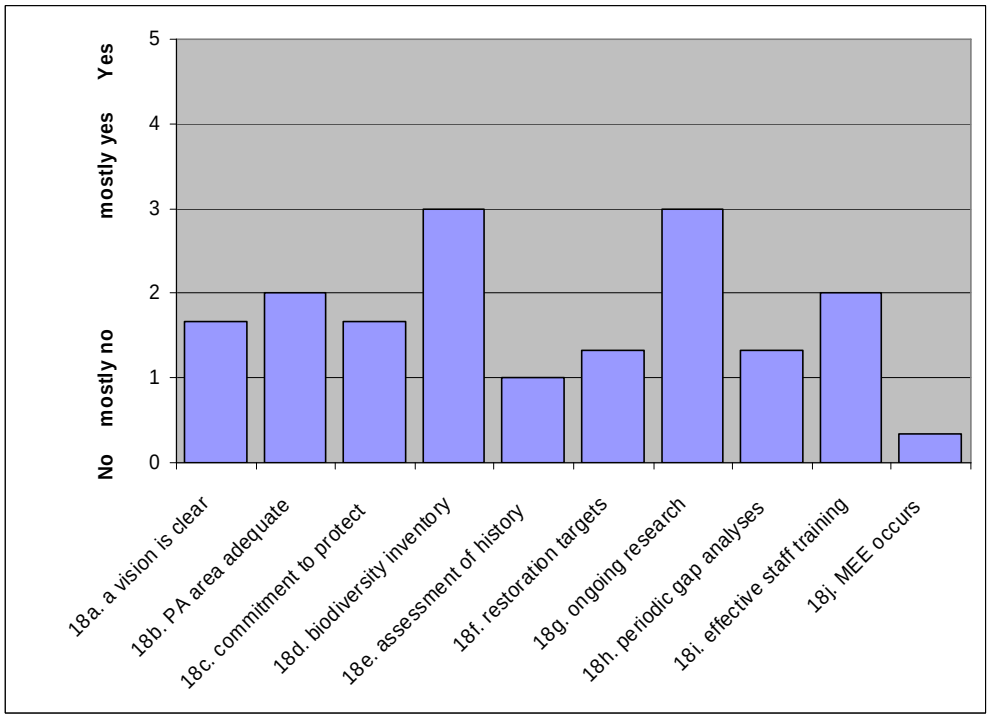
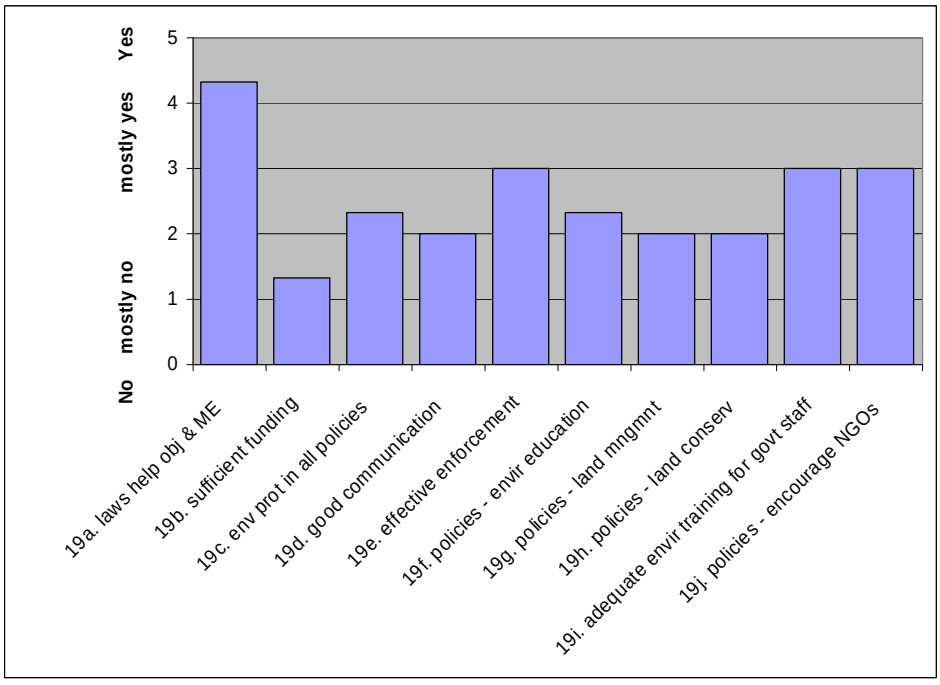


Figure 25 illustrates the scores for the assessment of the general policy environment. Generally policy environment issues are again poorly perceived ("no" to "mostly no") with the highest scores awarded to the legal support afforded to the PA system i.e. complementary laws and enforcement. However at the site level legal enforcement was considered a major weakness. The most serious problem is the low level of political commitment and inadequate funding for the PA system to guarantee it security.

Figure 25: ***Policy environment***

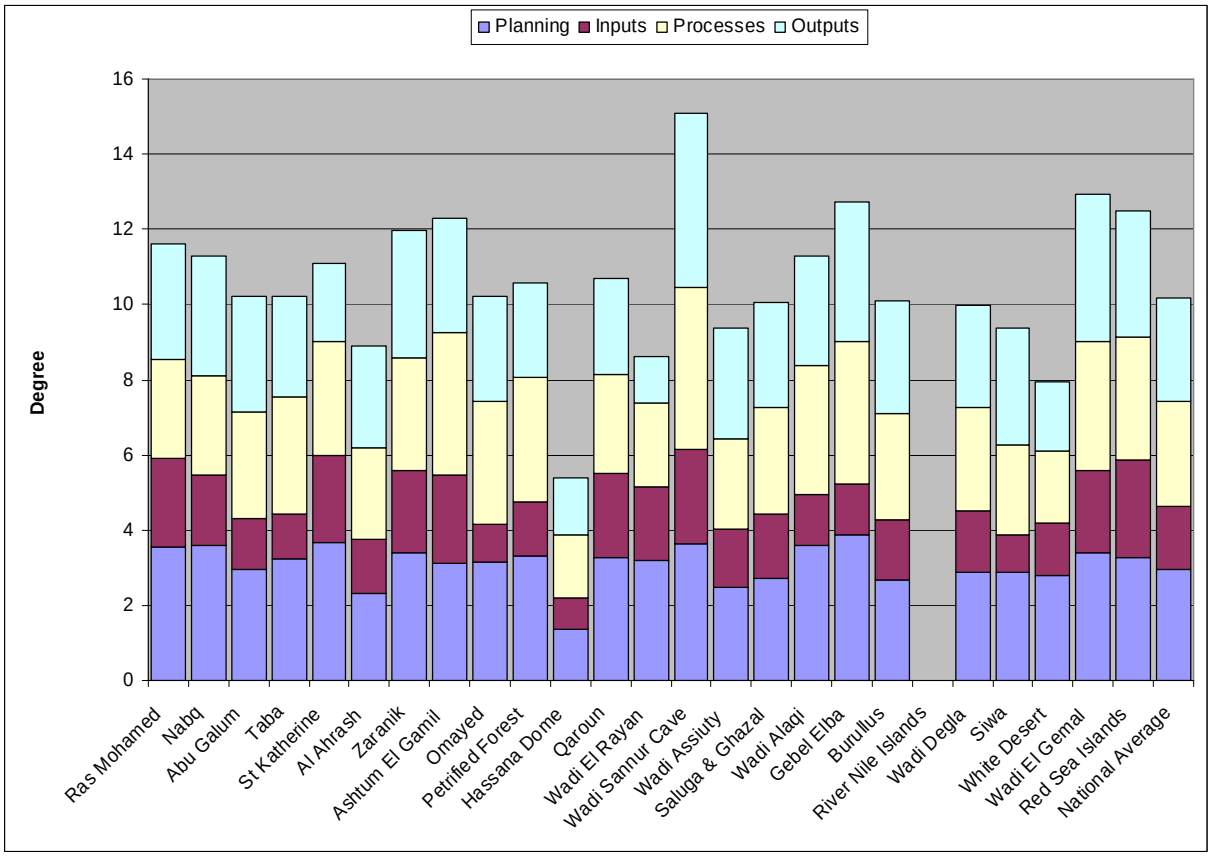


6. Overall pattern of the results

Summarising the results for RAPPAM sections 6 to 16 (i.e. Planning, Inputs, Processes and management Outputs) allows for a broad comparison of management effectiveness at the national system level. The results of this cumulative analysis are given in Figure 26. It is rather difficult to draw out substantive conclusions from this graph since many of the PAs have closely similar values for the four ME aspects. The national average for overall management is just over 10.0, and 50% of the PAs exceed this figure. There is some indication of the impact of project-directed support to the PAs, since most of the south Sinai Protectorates, along with Zaranik, Omayed, Gebal Elba, Wadi El Gemal, and the Red Sea Islands, score above the national average. However other protected areas also score above the average value, including both small (Saluga) and very large (Gebal Elba) PAs that have not benefited from major donor support.

Wadi Sannur Cave also scores highly on the criteria, but it is difficult to draw conclusions from this except that it is a small protectorate with a relatively high number of staff and expenditure per km^2 (see Tables 2 and 3, above). The analysis indicates that Hasana Dome is the weakest PA in the system in terms of management effectiveness, even though it is only 1 km^2 in area and has the second highest expenditure and staffing levels per km^2 in the system.

Figure 26: Overall scores for the main RAPPAM aspects for Egyptian PAs



7. Analysis of all the data together (Principal Components Analysis)

In addition, a more rigorous statistical analysis of the data was performed using Principal Components Analysis (PCA). The advantage of this is that allowances can be made for correlations among the answers to the questions, so as to reveal other important features of the results that are obscured in the raw data. The analysis used the average values for each PA of each of the 16 RAPPAM sections, combined with data for PA size, length of time it has been protected, the size of the budget, and the number of staff. These data were analysed using PCA to pick out the major independent axes of variation within the data. This analysis allows for inter-correlations among the variables so as to pick out truly independent features of variation in the data.

In the case of the Gulf of Aqaba PAs which do not have their budget and staff separated into the different PAs, we allocated 4 staff to each of Nabq, Abu Galum and Taba, and the rest to Ras Mohamed: we then divided the common budget among the separate PAs in the same ratio. Preliminary analysis showed that three PAs were outliers (Hasana Dome, Petrified Forest and Wadi Sannur Cave), skewing the results. All these PAs are small and have different objectives from all the others: they were therefore excluded from this analysis. Table 5 shows the results of the analysis. Seven axes of independent variation were detected within the dataset. The first four contained two-thirds of the variation, and all seven together accounted for almost 85% of the variation in the data. These are relatively high values for this kind of analysis, a sign that the main features of the data have been captured in the analysis.

Table 5: ***Main axes of the PCA analysis***

	Axis 1	Axis 2	Axis 3	Axis 4	Axis 5	Axis 6	Axis 7
Eigenvalues	5.492	3.215	2.289	1.899	1.532	1.254	1.085
Percentage	27.46	16.08	11.44	9.497	7.662	6.271	5.427
Cum. Percentage	27.46	43.54	54.98	64.48	72.14	78.41	83.84

Fig 27 plots the first two axes. The plot contains the positions of each PA along these new axes of variation, together with vectors of the original variables that show how they contribute to the new axes.

Inspection of this figure shows that along the first (horizontal) axis that contains almost 27% of the variation, all the original variables contribute positively, including PA size, budget, staff levels and length of time protected. This shows the unsurprising fact that the larger PAs tend to have higher budgets and numbers of staff, and have been protected for longer. However, it also shows that larger PAs tend to have higher scores for all the questions of RAPPAM, including Pressures and Threats. The positions of the PAs show that at one extreme (low values) lies the White Desert, and at the other (high values), Gebel Elba.

The second (vertical) axis accounts for a further 16% of the variation. The vectors of the original variables show that positions along this axis are correlated positively with scores for questions such as Infrastructure, Communication & Information, Finance and Staffing, and with PA features such as the budget and numbers of staff. In contrast, positions on the second axis are correlated negatively with scores for questions such as Decisions, Outputs, and Objectives, and also with PA size. This means that there is an axis of variation among PAs where high scores for Infrastructure, Communication, Finance and Staffing are simultaneously associated with low scores for Decisions, Outputs and Objectives. It also shows that small PAs have relatively higher budgets and numbers of staff. The extreme positions along this axis are occupied by Ras Mohamed (positive) and Gebel Elba (negative).

Figure 27: ***Plot of the first two axes of the PCA analysis***

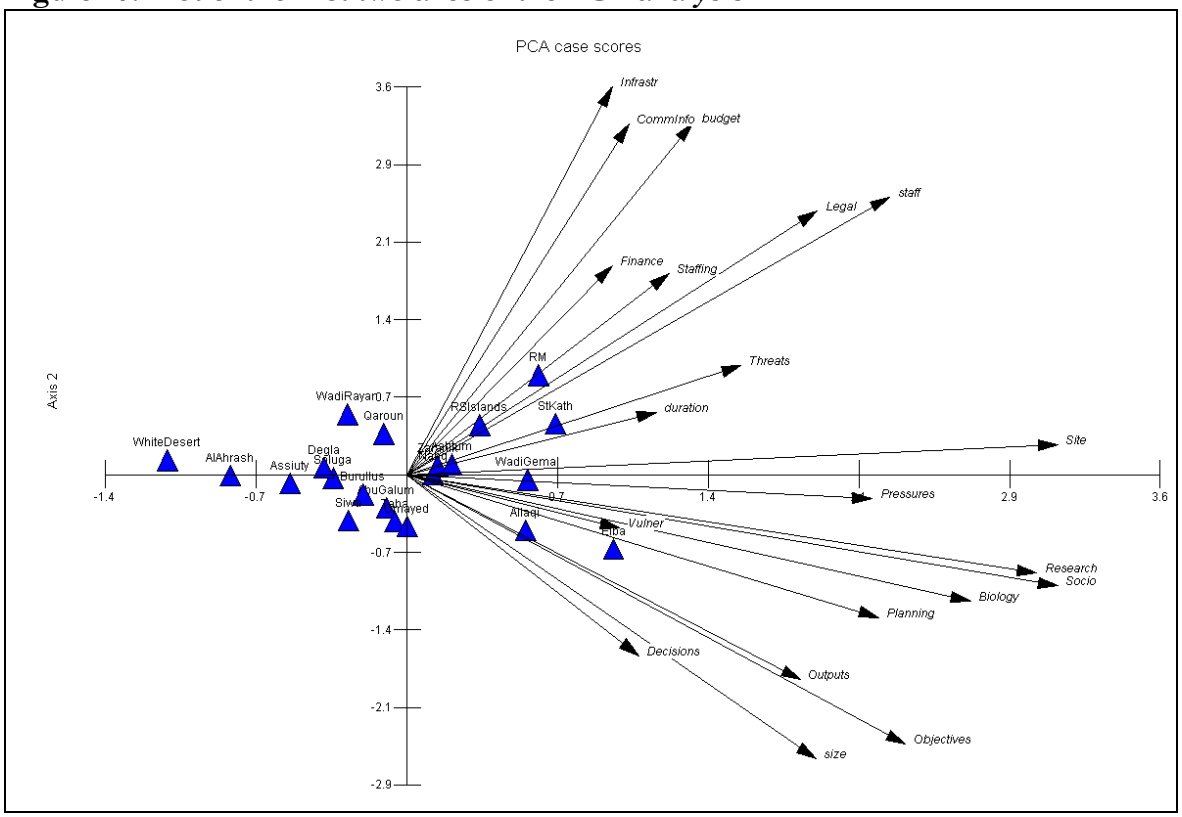
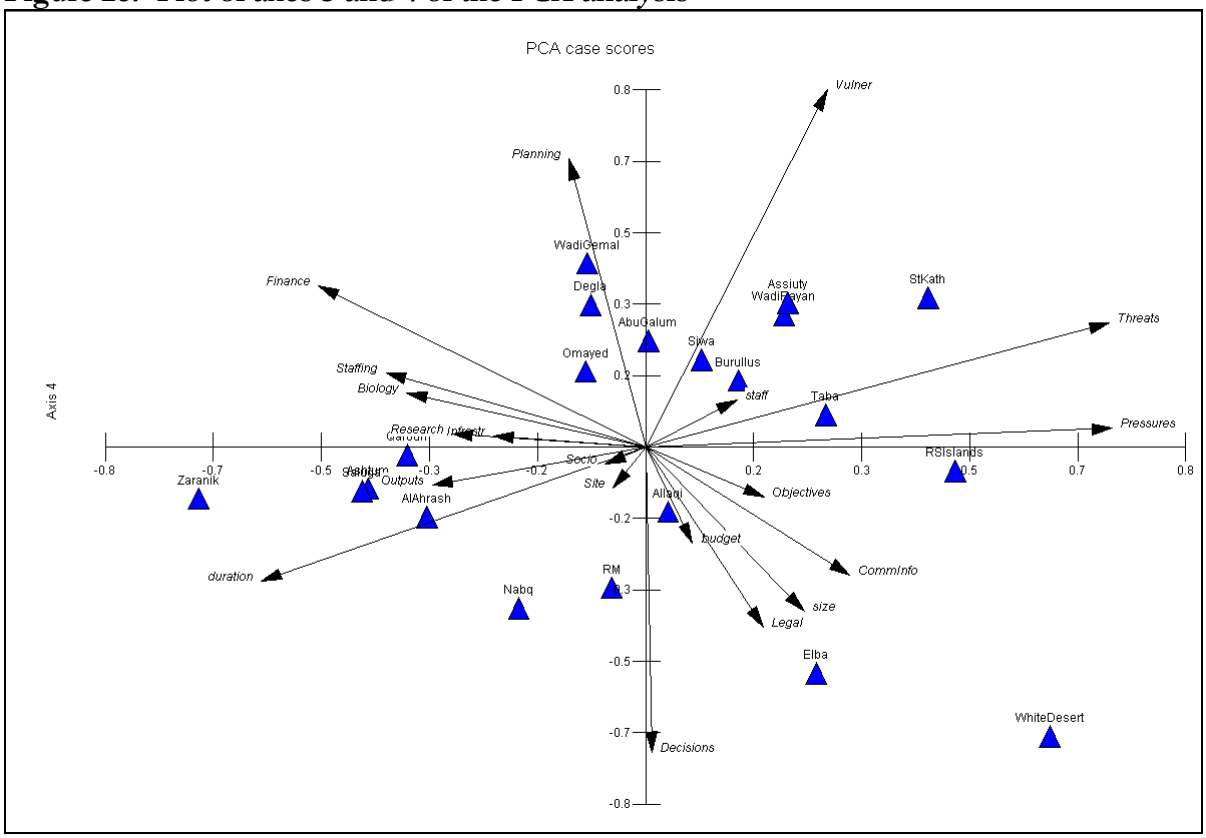


Fig 28 shows plots of the positions of PAs along the third (11% of the variation) and fourth (9%) axes of independent variation.

Figure 28: ***Plot of axes 3 and 4 of the PCA analysis***



This shows that the third axis (horizontal) contrasts the levels of Pressures and Threats (positive) with scores for questions such as Outputs, Research, Infrastructure, Biology, Staffing and Finance, and with the length of time the PA has been protected (negative). This is also very interesting, because it suggests that PAs with greater Inputs, Biological richness and Outputs have been protected for longer, and also have relatively low degrees of Pressures and Threats. The extremes here are the White Desert and Red Sea Islands (positive) as against Zaranik (negative). This is encouraging, because it suggests that management input is effective in mitigating Pressures and Threats.

The fourth axis (vertical) contrasts scores for Planning and Vulnerability (positive) with scores for Decisions (negative). It suggests a trade-off between these factors. The extreme positions are taken by Wadi Gemal (positive) and White Desert (negative).

In summary, from the PCA four main patterns can be discerned in the data. These are, in order of importance:

1. Larger PAs tend to have more infrastructure (staff, budget, etc), to have been established for longer, and to have more Pressures & Threats, but tend to score more highly on all questions i.e. they are in a better condition.
2. Large PAs are much harder to manage effectively because even though they have greater inputs, this does not compensate for their greater size, and therefore they have lower outputs.
3. Even so, the impact of management input on the longer-established PAs is detectable in reduced levels of Pressures and Threats.
4. Greater planning by managers occurs in the more vulnerable PAs, but these coexist with weaknesses in the decision-making processes.

8. Summary of Written Comments

The NCS staff who attended at both workshops were requested to submit additional written comments.

Workshop Comments.

The participants were asked to write comments to explain, or amplify, their responses to the RAPPAM questions. Most of these comments are contained in the Appendix 3 to this report. It is worthwhile summarising the main themes that emerge from a cursory review of these comments, because they help inform the interpretation of the MEE results. Most of the comments relate to staff, financial and management issues, and the comments are grouped accordingly.

1. *Pressures and Threats*: The participants considered that the impact and extent of the numerous pressures and threats facing the PA system are exacerbated by the shortage of rangers and the lack of transport and other tools.

2. *Vulnerability*: Many of the participants considered that the generally low salaries, particularly for local park staff, contribute to the PAs vulnerability.

3. *Management planning: objectives and processes*: Over half the participants thought that management plans or definitive work plans are not available for most of the PAs, and where they do exist, they are either waiting for formal approval or are not being applied.

4. *Staffing inputs*: This aspect attracted considerable comment. A majority of the participants considered that there were too few staff to fulfil the PAs' management objectives, that salaries

were too low to attract well-qualified and motivated individuals, and that there was no assessment of new staff before they were appointed. Other comments related to career development, since promotion prospects are considered to be poor, training opportunities are few and many think there is no career future as members of the staff of the PAs/NCS.

5. *Communication and Information*: A large number of the participants complained about poor information and outreach resources, citing lack of internet access, no public awareness materials, inadequate signage and few means for communicating with local communities.

6. *Financial aspects*: This issue attracted numerous comments relating to the general inadequacy of the budget, the delay in financial disbursement from the NCS and the inflexible administrative arrangements for local payments.

7. *Management and administration*: Many of the participants considered that administrative arrangements at the PA level were generally adequate, but that they are let down by the weak central administration. Significant complaints relate to delays or lack of response to requests for action, uncoordinated requests for information or action, inadequate notice on issues, and poor feedback from Cairo.

8. *Research, Monitoring and Evaluation*: A common response was the inability to conduct adequate monitoring due to lack of facilities, especially transport. They also comment that little applied research was being conducted, and that there was insufficient exchange of information among PAs.

9. *Outputs*. Virtually all comments on this issue related to the problems staff have to eliminate threats to the PA system because of their inability fully and properly to apply the law, together with their inadequate means for moving around and patrolling large areas.

Review Meeting Comments

This meeting was held to review the report of the Management Effectiveness (RAPAM) Workshop held in January 2006. The purpose of the meeting was two-fold:

- to evaluate the outcome and conclusions of the RAPPAM exercise and,
- to obtain written comments on the report and recommendations for action that are to be included in Section 3 of the report General Conclusions and Way Forward.

Participants were requested to briefly comment on these elements from the perspective of how the NCS should address the issues, particularly those weaknesses that have been identified (summarized in Table 1), in terms of recommendations for policies, strategies, administrative action etc. The comments centred on the following main themes:

- The NCS needs to develop policies and approaches to increase the support, involvement and coordination of the local communities and other stakeholders in order to improve management effectiveness of the Protected Areas. In particular the local communities should be invited to participate in management planning and implementation and not simply informed of the process.

- There is a need for better law enforcement which must be achieved through better coordination with other Government authorities and raising the same authorities' awareness of the Protected Area laws and regulations.

- The NCS should ensure that non-sustainable (e.g. quarrying, mining, over harvesting) or inappropriate activities (use of quad runners) inside PAs are better

regulated and that carrying capacity limits (number of visitors, dive boats) are respected

- The NCS must ensure that EIA procedures and properly enforced and monitored for compliance in protected areas and that local government authorities, particularly, should be made aware of the procedures.

- The NCS's should prioritise the issue of inadequate funding of the Protected Areas and introduce measures to ensure that sufficient revenue (both from fees and penalties) is returned to those parks that generate funds.

- The NCS should establish a system of staff evaluation; all ranger candidates should be properly evaluated in the field before they are recruited and the performance of all staff should be periodically reviewed.

- Staff training is inadequate, highly selective and poorly targeted and the NCS must introduce a comprehensive staff training system that ensures all staff receive appropriate and individually tailored training. As a priority the NCS should conduct training in planning and management of Protected Areas.

- The NCS should as a matter of policy ensure that all PAs should be managed on the basis of a current management plan and that clear management indicators should be developed. The management outputs of protected areas need to be better described and emphasized in the PA management and there should be periodic evaluation of these outputs.

- The highly centralized system of PA management and the lack of transparency in management decisions are impediments to efficiency. Greater authority and responsibility needs to be given to the local managers and management decisions need to be shared with those who are affected.

PART 3

The Way Forward

This Part contains the general lessons and conclusions arising from this first national management effective evaluation (MEE) and outlines how we, as the NCS family, intend to address the issues and respond to recommendations that have emerged. Following the MEE workshop in January, and the drafting of the initial report, a review workshop was held in May when the NCS participants were asked to evaluate the findings and provide recommendations as how the NCS should proceed to address the weaknesses that had been identified in terms of policies, strategies and administrative actions.

The main lessons we take from this report are that we need to: substantially increase funding for our PAs; improve our record with developing and implementing management plans; work more closely with local communities and other stakeholders and critically we need to invest in our staff.

The Value of the Management Effectiveness Evaluation (MEE)

1. This MEE report summarises essential information on the management of Egypt's protected areas in a structured way, indicates where we are doing reasonably well and illustrates clearly those management aspects we need to improve.

2. The advantage of evaluating the PA network in a systematic manner is that it presents us, for the first time, with a detailed and prioritized list of those management aspects of the protected area system that need immediate attention. Until now there had been no proper appreciation of the scale of problems facing Egypt's protected areas and we believe this preliminary exercise has created recognition within the NCS of the need for better knowledge about the status and management effectiveness of our protected areas

3. This MEE has shown that there are strengths in the way Egypt is developing its system of protected areas which we need to build on. We need to be able to demonstrate, in a transparent and quantifiable manner, just how we are performing with the management the nation's protected areas with which the NCS has been entrusted, and we believe that MEEs can offer that tool.

4. The NCS has for too long relied on a few knowledgeable individuals who have a good understanding about the management status of individual protected areas, but much of this information is not generally available or is patchy at best. This exercise has raised our collective understanding about what management effectiveness means, how it can be assessed, and what we can do to improve.

5. As the NCS Director and the managers of Egypt's protected area system, we all need adequate and accessible information to be able to run the Sector properly and manage our protected areas efficiently. Sometimes though this information flow can be overwhelming, and at other times, it is lacking. The MEE can be a useful tool to organise the mass of information in a way that helps us sharpen our focus and redefine our strategies or identify the information gaps that need to be filled.

6. In addition to baseline data and trends on the ecological, social and economic values of the protected areas, and their immediate surroundings, we also need to understand the constraints and opportunities of the local and national socio-economic context.

7. The MEE however has also demonstrated that much of the PA data held centrally by the NCS are scattered and inconsistent and there is an urgent need to invest in a comprehensive, accessible and consistent PA information collection and management system.

8. A further value of the exercise is that, hopefully, it has initiated a culture of critical transparency within the NCS generally and specifically within the Protected Area Management Units, but this will be tested when the exercise is extended to the individual protected areas.

9. We now believe that the MEE should be integrated with the site level planning and monitoring system of protected areas, especially as it helps us assess our capability and success in achieving our long term aims, including our international obligations such as the Convention on Biological Diversity and the target of significantly reducing biodiversity loss by 2010.

10. We recognise that the MEE process described here has relied on the subjective impressions of managers and other staff, though this may well be their perceived reality, and furthermore it is weak at allowing comparisons between protected areas; in future the evaluations will involve local stakeholders and others to enable fresh insights into our work and help deepen our understanding. It would also help identify risks and pressures that otherwise may be overlooked and also provoke a dialogue between us and our current and future stakeholders and partners.

An Agenda for Action

On the basis of the findings of this review of the management effectiveness of Egypt's protected area system, we now need to take steps to make things better for the system as a whole, and for individual protected areas. This section now lays out a realistic and prioritised action agenda to address the recommendations that have been made above, in terms of NCS strategies, policies and activities.

We have adopted a three-phase approach for the action agenda linked to the GoE's fiscal year, whereby activities scheduled under Phase 1 should be accomplished by June 2007; Phase 2 actions should be completed by June 2008; and actions under Phase 3 should be finished by June 2011. The action agenda spells out where the responsibility lies for the actions and indicates what additional support could be available.

Accord with international standards.

We are confident that there is a solid *conceptual* basis for Egypt's PA system that accords with the international agenda (such as the CBD programme of work) and best practices promulgated by IUCN: for instance Egypt has a protected area system plan in place, criteria for PA selection; PA planning processes including management and site planning; participatory approaches for planning and management are being explored; PA business plans are now being developed for some PAs; monitoring programmes are being standardised; and site level management effectiveness evaluations have been initiated. However, as with many countries, the reality does not match our aspirations, and in Egypt we recognise that the management status and conditions of the parks are far from ideal, and it is not clear that we are actually achieving our central aim to conserve biodiversity. Thus the following action plan aims to improve the protection and management of Egypt's PA

Funding and Staff levels

Egypt falls well below international standards in two critical aspects for management effectiveness -- funding and staff levels for protected areas.

Funding

Action Points	Phase	Responsibility (Support)
Senior decision makers will be informed of the chronic under-funding of the PA system, and urged to remedy it, at least to the average level for the region or preferably for African countries. This implies a 4- to 9-fold increase in funding.	1	NCS Director
NCS will build coalitions with stakeholders (government, communities and the private sector) to establish policies and procedures and win support for retention and recycling of revenue by PAs.	1	NCS Director and individual PAMUs
NCS will ensure that the cost implications for managing new PAs are made clear to decision makers prior to their declaration to avoid further reducing average expenditure levels.	1	NCS Director (NCSCB)
NCS will develop business plans for 3 PAs by end of 2006.	1	Marketing and Outreach Unit and (NCSCB)
NCS will introduce a more systematic approach to PA funding to ensure that funding imbalances between PAs are corrected, and PA management performance and relative importance of the PA (size, sensitivity of resources, etc.) will be a pre-condition for funding priorities.	2	Protected Area Dept and Planning Unit (NCSCB)

Staffing

Action Points	Phase	Responsibility (Support)
New field staff are to be recruited only after a rigorous selection and following completion of basic training.	1	NCS Director, Personnel Manager and PAMUs
The NCS will conduct a staff audit in all PAs to review the disposition of staff in the PA system, with a view to ensuring more equitable staffing levels and to maximize the value of senior and experienced staff.	1	Personnel Manager and PAMUs
The NCS will introduce human resource development policies and practices concerning hiring practices (fair competitive processes), rotation and transfers, training, etc.	1	Personnel Manager, PA Dept Manager (NCSCB)
The NCS will review staff salaries and establish clear policies in relation to performance, experience and career structure.	1	NCS Director, Personnel Manager (NCSCB)
NCS will aim for a gradual 5-fold increase in staff levels by 2010 to match international levels.	3	NCS Director and Personnel Manager

PA Data

The MEE has revealed that much of the data on PAs held by the NCS are scattered, inconsistent and are not analysed or utilized in any meaningful way, for instance as a rationale for allocating resources and staff.

Action Points	Phase	Responsibility (Support)
NCS will undertake a thorough data quality review of the PA data base and ensure that a comprehensive, consistent, updated and accessible PA information collection and management system is put in place.	1	Biodiversity Unit (BioMAP)

Context and Policies

The MEE has indicated that the PA system generally is vulnerable to illegal activities and poor enforcement of relevant laws and regulations. Conversion of land use, recreational use, hunting and over-collecting are the greatest pressures operating on the PA system as a whole and the lack of an appropriate policy framework probably contributes towards this situation. A major concern is that the two protectorates containing the highest levels of terrestrial biodiversity in Egypt (Gebal Elba and St. Katherine) appear to face the most serious combined pressures and threats.

Action Points	Phase	Responsibility (Support)
NCS will work to achieve better law enforcement through, raising the police and judiciary's awareness of the Protected Area laws and regulations.	1	PA Dept Manager and PAMUs and LIFP
NCS will formally institute policies for nature conservation and for protected areas, with options for community-based conservation initiatives by end of 2006.	1	NCS Director and PA Dept Manager (NCSCB)
NCS will develop and test a management protocol with the local communities for the co-management of the White Desert NP by end of 2006.	1	White Desert PAMU (NCSCB)
NCS will review management approaches in Gebal Elba and St. Katherine where threats are high and prioritise these two areas for site level management effectiveness evaluation in 2006.	1	PA Dept Manager (NCSCB)
NCS will support PA managers interventions that regulate damaging and non-sustainable activities (e.g. quads and quarries) by rescinding licenses by 2008 and enforcing carrying capacities for sensitive sites (e.g for reefs, islands and mountains).	2	NCS Director and PAMUs
The NCS will negotiate with the military to facilitate and coordinate the permit issue to border PAs i.e. Wadi Allaqi , Siwa, Gebel Elba and Gilf El Kebir	2	NCS Director and PAMUs

PA Design and Planning

The NCS recognises that there are serious pressures from land use changes both within PAs,and in their surrounding buffer zones. A strategy is needed that will better integrate the protected areas with the land and sea mosaics that surround them to form more effective ecological networks, following the CBD ecosystem approach. It is important that we commit to adaptive management and planning, and institute a culture of planning and evaluation in the NCS.

Action Points	Phase	Responsibility

		(Support)
The NCS will ensure that Environmental Impact Assessment procedures are properly enforced and monitored for compliance in PAs and that local government authorities are made aware of the procedures.	1	NCS Director, EIA Unit and PAMUs
NCS will explore options of management partnerships for PAs with other GoE authorities, local stakeholders and the private sector to win their support and understanding and pilot these in PAs where: 1. pressures and threats are considered highest (St. Katherine, Wadi Assuity, Gebal Elba, Qaroun and the Red Sea Islands). 2. where development pressure is most severe (such as Nabq, Wadi Degla and the Petrified Forest).	2	Protected Area Dept and individual PAMUs
The NCS will review options (including degazettement) for dealing with non-functional PAs and assess the status of highly degraded and badly designed PAs (e.g. El Ahrash, Wadi El Assiuty)	2	PA Dept Manager and Planning Unit
The NCS will review the system plan in order to establish corridors and transition zones between PAs.	3	PA Dept Manager and Planning Unit
NCS will undertake a "Gap Analysis" of threatened/rare species (Red Data Book) to check of the adequacy of current conservation actions and PA coverage.	3	Biodiversity Unit (BioMAP, IUCN Red Data Book Training)

Inputs

Besides the inadequacy of Government funding and the low staff levels, other limitations to effective management are the lack of training opportunities, inadequate management resources (especially transport), poor internal communication, transfer of information, and inadequate infrastructure facilities. The NCS also recognizes that the highly centralized system of PA management and the lack of transparency in management decisions are impediments to efficiency.

Action Point	Phase	Responsibility (Support)
The NCS will introduce a comprehensive staff training system by enacting the recommendations arising from the recently completed Training Needs Assessment.	1	NCS Director, Training Dept (NCSCB)
NCS will conduct training in PA planning and management	1	Training Dept
1. PAMUs will ensure field staff receive adequate and sustained on-job training	2	PAMUs
A national NCS-level external-communications plan will be developed by 2007.	2	NCS Director (BioMAP/NCSCB)
NCS will ensure that local managers have greater authority and responsibility by decentralizing decision making to the most appropriate level and a procedure manual (NCS Directives) will be developed to support this.	2	NCS Director and PA Dept Manager (NCSCB)
A 'NCS Best Practice Annual Report' will be prepared to highlight examples of good protection and management.	3	PA Dept Manager and PAMUs

Management Processes

The NCS recognizes that management planning is still undeveloped with about one third of the PAs having management plans and this makes it problematic to track effectiveness and or to develop business plans.

Action Point	Phase	Responsibility (Support)
NCS as a matter of policy will formally approve all management plans and ensure that existing and future plans are widely promulgated amongst stakeholders.	1	NCS Director, PA Dept Manager and PAMUs
A unified reporting system will be established by end 2006 in which implementation of the management plan will be the main basis for annual reporting and evaluation.	1	PA Dept Manager and PAMUs (NCSCB)
NCS will enact a policy and guidelines for research, inventory, monitoring and assessment in PAs by end of 2006.	1	PA Dept Manager (BioMAP/NCSCB)
NCS policy is to ensure that every PAs is managed on the basis of a current management plan by end 2008 and will prioritise management planning for those PAs with the greatest need or at the greatest risk i.e. Ras Mohamed, Gebal Elba.	2	PA Dept Manager and PAMUs
NCS will develop standard templates for the inventory of natural and cultural resources within all PAs by 2007.	2	PA Dept Manager and PAMUs (BioMAP)

Management Outputs and Outcomes

MEEs in other parts of the world have demonstrated the value of establishing good relations with local communities and partners but the NCS acknowledges this aspect has not been properly addressed thus far in Egypt Furthermore greater effort needs to be given to interpretive programmes for Egypt's PA's particularly to cater for the growing ecotourism market.

Action Point	Phase	Responsibility (Support)
NCS will develop, agree and test a management protocol with the local communities for the co-management of the White Desert NP by end of 2006.	1	Planning Unit and White Desert PAMU
During 2006 every PA manager will be required to review the results of this MEE including the key issues and challenges facing their respective protected area and address these in the annual work plans.	1	PAMUs
NCS will ensure that local communities and other stakeholders are meaningfully involved in PA management planning though workshops by 2007.	2	Planning Unit and PAMUs
From 2006 NCS will conduct regular site-specific MEE exercises to support planning and adaptive management; every PA will then be required to report annually on implementation of management actions and their effectiveness, how existing plans and activities will be adapted, and key directions for the new annual work plan.	2	PA Dept Manager and PAMUs (NCSCB)
NCS will develop a system wide interpretative programme for Egypt's PAs to serve both national and international visitors.	2	Marketing Unit (BioMAP/NCSCB)
A MEE will be conducted at the system level every 5 years and will involve wider stakeholder participation.	3	PA Dept Manager and PAMUs

Conclusions and Revalidation of CBD's Programme of Work

The RAPPAM methodology used here has provided us with a country-wide overview of the effectiveness of protected area management, threats, vulnerabilities and degradation. It has

been an important first step in assessing and improving protected area management at a system level and it has provided recommendations that now need to be followed up.

In early 2004 the CBD developed a Programme of Work (PoW) on Protected Areas, in which all Parties to the Convention (including Egypt) with the objective of "the establishment and maintenance (by 2010 for terrestrial and by 2012 for marine areas) of comprehensive, effectively managed, and ecologically representative national and regional systems of protected areas that collectively, inter alia through a global network contribute to achieving the three objectives of the Convention and the 2010 target to significantly reduce the current rate of biodiversity loss".

In this Programme of Work parties are called upon to assess the management effectiveness of at least 30 per cent of their parks AND their networks of protected areas, by 2010. The MEE exercise reported above is considered to meet the latter target and the extension of ME evaluations to individual PA sites, scheduled to begin during 2006, will go a long way to meeting the former target.

The Programme of Work further urges Parties "to achieve fully the goals and targets of the work programme, while (at the same time) recognizing that Parties should implement the activities of the programme of work on protected areas in the context of their nationally determined priorities, capacities and needs".

In 2005 the NCS drew up an "Egyptian Protected Area Work Plan" in response to the CBD Program of Work on Protected Areas. However in the light of the findings of this evaluation of management effectiveness, the recommendations that have emerged and the action agenda scheduled above will now be used to update this Work Plan with a view to rescheduling priorities and activities.

Managing Egypt's large and diverse PA system is a huge challenge and very few management agencies in the world have assessed their entire PA system as we have attempted here. We now have a much better understanding of what condition the PA system is in, how well we are managing it and what improvements and changes we need to make. It now beholds us to follow through on the findings of this report to ensure that Egypt's PAs, with which we have been entrusted, are more effectively and efficiently managed.

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APPENDICES

1. **Workshop Agenda and List of Participants**
2. **The RAPPAM Workshop – methodology and limitations**
3. **Detailed analysis of individual RAPPAM questions - sections 2-19**

Appendix 1

AGENDA

NCS WORKSHOP ON MANAGEMENT EFFECTIVENESS
Rapid Assessment and Prioritisation of Protected Area Management (RAPPAM) Methodology
JANUARY 22nd to January 23rd 2006

CAIROTEL, MAADI

Purpose of Workshop
The purpose of the workshop is to enable NCS staff to undertake a rapid assessment of the overall management effectiveness of Egypt's system of protected areas. During the workshop NCS staff will be introduced to and apply one of the specific assessment tools that have been developed for this purpose - the Rapid Assessment and Prioritisation of Protected Area Management (RAPPAM) Methodology. The RAPPAM methodology is designed to allow broad-level comparisons among protected areas and has been adapted to the situation in Egypt. Using this framework, participants will be engaged in evaluating the management effectiveness of Egypt's protected areas, assessing the results and implications and identifying priorities and next steps. This will be the first time that Egypt's protected areas will have been evaluated on a systematic and consistent manner and it will allow the NCS to better understand and address important management issues at a system level.

Program
21st January: Participants requiring accommodation in Cairo register at Cairotel, Misr Helwan Al Zyrae, Maadi.

Sunday 22nd January
09.00. Session 1. Work Shop Introduction: Moderator – Mr. Waheed Salama, Manager, Protectorates Department

- Introductory remarks: – Egypt's Protected Area System the Vision and Reality (Dr. M. Fouda, Director NCS).
- Purpose and implications of the management effectiveness workshop:– Why assess effectiveness, what it means and what are the benefits (Dr. S. Baha El Din, NCM NCSCB)
- Overview of RAPPAM:- how the questionnaire is structured and how it will be administered (Mr. D. Paleczny, ICM Wadi Rayan Protectorate)
- Analysis and Findings of RAPPAM:- how the information will be analysed and reported (Dr. F. Gilbert ICM BioMAP project)

Coffee Break

11.00 Session 2. RAPPAM Workshop

- General Questions 1 and 2: introduced by Mr. Waheed Salama

Lunch

- Context Questions 3 to 5: introduced by Dr. Sami Zalat
- Planning Questions 6 to 8: introduced by Dr. S. Baha El Din

16.00. End of First Day

Monday 23rd January

09.00 Session 3. RAPPAM Workshop

- Input Questions 9 to 12: introduced by Mr Waheed Salama

Coffee Break

- Process Questions 13 to 15: introduced by Dr. S. Baha El Din
- Output Questions: introduced by Dr. Sami Zalat
- (PA System Level Questions to be answered by senior NCS HQ staff)

Lunch

14.00 Session 4.

- Introduction to proposed standard reporting system for protected areas:- Drs. S. Baha El Din and Taher Isaah
- Preliminary presentation of results:- Dr. F. Gilbert/Dr. S. Zalat

16.00. Workshop summary and closing remarks – Dr Fouda

Management Evaluation process: financial and staff costs

The workshop was organised, facilitated and funded jointly by the NCSCB and BioMAP Projects; the final cost of the workshop including hotel accommodation, conference facilities, food and travel for all participants amounted to LE 26,200. The total commitment in terms of staff time was as follows:

	person-days
Modification of the RAPPAM questionnaire for Egyptian conditions	4
Translation of the RAPPAM questionnaire in Arabic	22
Preparation of the analysis in Excel	2
Running of the workshop, 6 people for 2 days	12
Data input, including translation of Pressures & Threats	3.5
Translation of comments on responses	10
Dr Fouda's time	1
Reporting	18
PAMU/NCS staff time at workshop	136
Total person days	208.5

of which,	International Consultants	31.5
	National Consultants	8
	Egyptian staff	169

Staff cost (using current rates)	LE	53,650
Total cost of workshop	LE	79,850
	£	7,394
	$	13,767

Appendix 1 continued

List of Participants

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50	Hatem Abd El Menem	Ranger	Wadi Alaqi			hatemky@yahoo.com
51	Hoda Abd El Latif	Ranger	Wadi Alaqi	0107029345		
52	Mohammed Abd El Satar	Ranger	Wadi Alaqi	0125563237		sattar_eg@yahoo.com
53	Mohammed Anwar Ali	Ranger	Wadi Alaqi	0124190800		
54	Moneir Mohammed Mahghoub	Manager	Wadi Alaqi	0125475250	972312760	
55	Usama Fathalla Ghazaly	Ranger	Gebel Elba	0127598407	653305157	ughazali@redseaparks.org
56	Abbass Metwaly Hamada	Ranger	Burullus	0121734010		
57	Fayed Ibrahim	Manager	Burullus	0126585383		
58	Hani Mansour	Ranger	Burullus	N/A		
59	Seham Baraket	Ranger	Burullus	0101283971		sehambar@yahoo.com
60	Ahmed Rashad	Ranger	Wadi Degla	0103835713		
61	Ahmed Salama	Manaager	Wadi Degla	0123874166		
62	Mazhar Muhammed El Dimiry	Ranger	Wadi Degla	0101646350		mazhar_eldemery@yahoo.com
63	Mohammed Mahmoud Ibrahim	Ranger	Wadi Degla	0127590228		
64	Mohammed Saeed	Ranger	Wadi Degla	0106120020		
65	Ali Matrash	Manager	Siwa	0101892188	464600871	alimetrash@yahoo.com
66	Ibrahim Omar Mohammed	Ranger	Siwa	0464601325		
67	Mohammed Ali Qotb	Ranger	Siwa	0103866723		
68	Riham Ahmed Metwalli	Ranger	Siwa	0122775910		
69	Ahmed Kamal El Din Hassan	Ranger	White Desert	0126502986		
70	Ra'afet Said Ateya	Lawyer/Ranger	White Desert	0126572116		
71	Tarek Kanwaty	Manager	White Desert	0122631843		
72	Abu El Hagag Ahmed Nasr El Din	Ranger	Wadi El Gemal	0127867032		
73	Mohammed Abbas El Said	Senior ranger	Wadi El Gemal	0121272281		matahoon2000@yahoo.com
74	Ayman Mohammed Ahmed Afifi	Park Manager	Red Sea Islands	0127785911	653447719	aafify@redseaparks.org
75	Mohammed Hafez	Ranger	NCS - Cairo	7041215		
76	Tamer Kamel El Din	Senior ranger	Red Sea Islands	0106073076		k_el_tamer@hotmail.com
77	Yasser Saeed	Senior ranger	Red Sea Islands	0101034500		sahmed@redseaparks.org

Appendix 2

The RAPPAM Methodology and its Limitations.

Assumptions and Limitations of Methodology

The application of the RAPPAM methodology to MEE is dependent on a number of assumptions that may or may not hold true, which should be borne in mind in the interpretation of the results.

1. The methodology assumes that participants have a comprehensive knowledge base to provide sufficient and comprehensive data, that they have confidence in the process, and that they supply reliable PA data that will provide meaningful and useful results.
2. The RAPPAM methodology was initially developed specifically for forest PAs; it has not been applied to marine PA systems before.
3. While the methodology can be applied to all six IUCN Protected-Area categories, it seems most applicable to IUCN categories I to IV, and is less suitable, as it stands, for application to Protected Landscapes (Category V) or Managed-Resource Reserves (Category VI).
4. The methodology may also be more useful when used to compare PAs that have broadly similar objectives, or for similarly-sized PAs.

The RAPPAM methodology is not designed to provide site-level adaptive-management guidance to PA managers, but allows for broad-level comparisons among many PAs. It can answer a number of questions, such as:

1. What threats face which PAs, and how serious are they ?
2. How do PAs compare in terms of infrastructure and management capacity ?
3. What is the urgency for action in individual PAs ?

RAPPAM Procedure

The authors of the RAPPAM approach suggest that the most effective way of administering the questionnaire is to hold a participatory workshop involving PA managers, administrators and stakeholders, because this is likely to generate more accurate and thorough data. The most important RAPPAM issue is the accuracy and credibility of the responses: this is predicated on a confidence in the process, the use that will be made of the information (both from a personal and PA perspective), and a consistent interpretation of the questions and response options.

The measures taken to achieve reliable data have been reported separately below, but included the adaptation of the RAPPAM questionnaire to the situation in Egypt, its translation into Arabic and detailed presentations to the participants on each of the questions by facilitators in the workshop.

The RAPPAM Workshop

The RAPPAM workshop was held over two days in the Cairotel, close to the NCS office in Maadi. Participants from all 24 PAs in Egypt were invited to attend, together with selected individuals from the NCS central office.

Workshop preparations, conduct and agenda

Prior to the workshop, the RAPPAM questionnaire developed by WWF was carefully reviewed by a team comprised of staff from the NCS, BioMAP, NCSCB and Wadi Rayan projects. The questionnaire was significantly modified to suit the conditions in Egypt; this involved adding and deleting questions in several of the questionnaire sections, as well as editing the guidance notes to bring clarity and local examples for the interpretation of the questions. The modified questionnaire was then translated into Arabic for use by the participants. The modified and translated RAPPAM questionnaire is attached as Appendix 1 to this report: it constitutes a significant output of the process, and will be useful for other Arabic-speaking countries when modified further in the light of our experience here.

It was agreed that the questionnaire should not be sent out to the participants in advance, the reasons being that it needed to be presented and explained in a systematic manner, responses needed to be transparent to bring greater credibility to the process, and, crucially, there needed to be several independent responses in order to produce an estimate of the average response to any particular question. The questionnaire was then presented and explained to the participants, one section at a time, by the different facilitators. The workshop was moderated by Mr. W. Salama, Manager of the Protectorates Department, NCS.

Workshop Programme

The Agenda for the Workshop is attached as Appendix 2. The first session of the workshop established the context for the evaluation exercise. Introductory remarks by Dr. Fouda, NCS Director, laid out the vision for, and the reality of Egypt's PA System and the imperative for self evaluation. This was followed by a presentation on the purpose and implications of the MEE process by Dr. S. Baha El Din, in which the rationale and benefits of the process to the individual PAs and the Egyptian PA system as a whole were explained. Mr. D. Paleczny then presented an overview of the MEE process from international and institutional perspectives, which emphasized the importance and values of instituting a transparent evaluation culture. The session ended with a presentation by Dr. F. Gilbert on the approach to analyzing the data from the workshop and the format for reporting on the analysis; it was proposed to present a preliminary analysis of some of the data to participants, at the end of the workshop, to illustrate the value of the exercise.

Subsequent sessions were devoted to presenting the questionnaire to the participants. Workshop facilitators presented each of the various sections (e.g. Context, Planning, Inputs etc.) on a question-by-question basis, interpreting the questions and explaining the guidance notes in some detail.

- General Questions 1 and 2: introduced by Mr. Waheed Salama
- Context Questions 3 to 5: introduced by Dr. Samy Zalat
- Planning Questions 6 to 8: introduced by Dr. Sherif Baha El Din
- Input Questions 9 to 12: introduced by Mr Waheed Salama
- Process Questions 13 to 15: introduced by Dr. Sherif Baha El Din
- Output Questions: introduced by Dr. Samy Zalat

Participants were encouraged to respond credibly to the questionnaires, and sufficient time was given for due consideration of each section. Staff from the same PAMU were separated in an attempt to secure the diversity of views that may be held; the responses were standardized by averaging the resultant scores (see Data Analysis below).

The PA System-Level Questions 17 to 19 were not distributed since these were to be answered only by senior NCS HQ staff. Results of these questions are treated separately.

During the final session on the second day Dr. Gilbert was able to make a short presentation on some results that had emerged from a preliminary analyses of the data.

Participants were encouraged to write comments or notes to expand or explain their responses, particularly if their answers (to sections 3 to 16) did not involve an unqualified "yes" or "no", but a "mostly yes" or a "mostly no". The total number of notes or comments was 1,226: these constitute a valuable source of corollary information for the interpretation of the results and for the PAMU managers themselves, and are attached as Appendix 4 to this report.

General Assessment of the Workshop.

Attendance.
The workshop was well attended, with 78 participants registering for the first day and 65 registering on the second day (some NCS HQ staff were not required on the second day). All the PAs in Egypt were represented with the exception of the Nile Islands (which currently has no staff).

Data and Quality Control.
There are two issues here, the quality of the replies and the quality of transcription from the questionnaires to the electronic dataset for analysis.

No questionnaire is ever answered by respondents completely straightforwardly, and hence all replies need careful assessment and interpretation. However, we believe that a sufficient number of the PA staff took enough care over their responses to be reasonably confident about the answers to many of the questions. In some cases it is obvious that their own knowledge is inadequate, especially in being able to place the information from their PA into the context of the PA system in Egypt as a whole, or in a global context. But in most cases, the answers are informative and illuminating for strategic planning.

As to the quality of transcription, the quantitative data of the replies were transcribed by a single experienced person, and hence mistakes are probably relatively few. Some rangers forgot to tick the odd reply, and in these cases their reponses were estimated from those of their colleagues in the same PA (because it was important to obtain complete sets of replies with no missing values). Gaps in the data were more serious for five workshop participants, who missed entire sessions. Apart from Pressures and Threats, the data from these participants were deleted as unusable, but luckily these only involved two rangers. There were 72 complete sets of replies, and a further five replies to questions 2 and 3 were also usable. If only 65 participants were registered as present on the second day (see above, Attendance), then some questionnaires may have been filled in by proxy. There can be no allowance made for this in the analysis.

In the case of the qualitative information (the comments on the scores given to individual questions by individual respondents), these were translated into English by members of the BioMAP team. The descriptions of the pressures (Q.2) and threats (Q.3) also required translation from Arabic before they could be categorized consistently. The issue of in which language to conduct the RAPPAM questionnaire is therefore an important one, since it involves the lion's share of the staff time in analysis. We have therefore included staff time in the costs of the workshop.

The scoring system is not on a linear scale, for reasons explained in the RAPPAM document itself. This is not really the important issue, which instead is that the replies from all PAs are treated equally in scoring, and hence are comparable.

One difference between the RAPPAM methodology and ours involves using more than one respondent for each PA. RAPPAM itself assumes that only the manager will fill in the questionnaire. However, since no one person knows everything about the true situation in a PA, it is better to have a number of rangers from each PA filling in the questionnaire, however roughly they may guess their answers, because if enough replies are obtained, the mean value will be accurate. Thus we encouraged up to five or even six people from each PA to attend and participate. We therefore took the replies from all the people of each PA as the data for analysis. When comparing across PAs or issues, the averages per person are taken for comparability. It might be better to have the staff from a single PA discuss each question, and emerge with a single answer: this will, however, take much more time, and necessitate three or four days to complete the evaluation.

Questions 2 (Pressures) and 3 (Threats) are of a different form from the rest of the questionnaire, because they are open-ended, inviting staff to list as many issues under each heading that they consider affect their PA. The analysis is correspondingly different, involving categorizing the pressures and threats under a set number of headings, and summing the scores attributed to each. When comparing these values across PAs, it is vital to use averages per respondent, for comparability. When comparing across categories, however, this is not neccessary or desirable because each category has an equal chance of being mentioned by each respondent; simple summation is used in these cases.

Each issue is presented graphically in the way recommended by RAPPAM, as a simple bar chart, either stacked or not depending on the issue. To explore further the reasons why the pattern of answers takes the form that it does, a Principal Components Analysis was performed using the average scores for each issue together with data on the characteristics of each PA (size, budget, number of rangers, etc). This is useful because it looks at the scores as a whole rather than question by question, allows for correlations among the scores for the various questions (eliminating redundancy in questions), and allows an assessment of whether factors such as PA size influence the scores.

Reaction of participants

There was no formal evaluation of the workshop, but in open and private discussions the participants appeared to be enthusiastic about the process because it allowed them to address and debate many common issues in a systematic manner. The preliminary results presented in the final session of the workshop gave the participants an opportunity to appreciate the value and implications of the exercise.

Follow Up

The exercise reported here was a rapid assessment of the PA system as a whole. The next step will be a detailed assessment of the management effectiveness of individual PAs.

Lessons Learnt at the Workshop

The workshop was the first attempt to conduct a systematic MEE process in Egypt and several lessons stemmed from the exercise.

1. In future the MEE should be conducted in smaller groups, each with a facilitator, as it is considered that this will enhance the process and bring a more consistent interpretation of and response to the questions. There are certainly some places where it is clear that many of the PA staff misinterpreted what the question was asking, or

had inadequate knowledge with which to make an informed answer. This is itself an issue that requires some attention.

2. There was some concern among participants that the RAPPAM exercise would be used to evaluate individual performance, and this probably has resulted in some questions being treated cautiously. It was repeatedly stated at the workshop, by Dr Fouda and others, that this was not the case. The format of this report and the outcomes of the exercise will be important to allay such concerns.
3. For future exercises, stakeholders in an around protectorates should be invited to the exercise, including representatives of local communities.
4. Participants should bring PAMU planning and other reference documents to the exercise to ensure correct information is supplied.
5. The MEE should include some field assessments to evaluate results.
6. The MEE should be extended to detailed evaluations of individual PAs, using the same WCPA framework.
7. The MEE project should be guided by a Terms of Reference, developed at the outset. A clear purpose and objectives will guide subsequent decisions related to scope of questions, the design and application of the RAPPAM process, treatment of results, distribution and review of results, internal and external communications, subsequent action planning and integration with annual work plans, monitoring of actions, and follow-up MEE to assess changes over time. This 'life-cycle approach' is consistent with the MEE framework and the adaptive management cycle, and should be considered from the outset. This implies a long term organizational commitment to evaluation, which is inline with international best practices. Accordingly, organizational capacity should be put in place to house this programme.
8. The RAPPAM questionnaire itself needs further modification: the way participants responded to individual questions indicates a need to modify the wording of some of them. This is needed to clarify the management issue under review, reduce the variables within the questions and elaborate more specific indicators.
    1. Questions in sections 3-16 should be answered along a scale from *Strongly Agree* to *Strongly Disagree*, rather than from *Yes* to *No*
    2. Particular questions should be cut (especially from Section 3 - Biological Importance), since their value is questionable. There is some duplication too, which could be removed.
    3. The staff of each PA should get together and discuss the answers to each question, and disagreements thoroughly explored. This will itself constitute an important element of the value of the workshop. Only a single reply will emerge for each question, obviating the need for the calculation of mean values.

Observations

Validity of responses – a general pattern can be seen in the scoring whereby PAMU staff tend to be more conservative when scoring questions relating to issues over which they have immediate responsibility and accountability (e.g. planning, staff performance and administrative issues), but are more radical in scoring issues over which they have less control (such as funding, staff levels and legal issues).

Staff awareness – there appears to be a lack of general knowledge among PA staff of the relative value and role of their particular protected area in terms of the national or international context.

There also appears to be a generally low level of awareness among PAMU staff of the general features (biological and physical) of their particular protected area.

Review Meeting

The 21 participants at the MEE Review held in May were requested to evaluate the outcome and conclusions of the RAPPAM exercise and Subsequent Report and the results are given below.

A. In your opinion is the outcome of the RAPPAM workshop useful?
   Yes (20)
   Comment: none

B. Do you think that detailed Management Effectiveness Evaluations of each protectorate would be useful, and if so, why?
   Yes (19)
   Comment: It covers all points of PA requirements and shows the strengths and weaknesses of the PA system
   No (2)
   Comment: we should use the IUCN effectiveness standards instead (there appears to be some confusion here).

C. Does the report identify the main issues accurately in your opinion?
   Yes (17)
   To some extent (3)

D. Are there other issues which have not been revealed?
   Yes (5)
   Comment: need more emphasis on decentralization of decision making, legislative arrangements and follow up of management plan implementation
   No (13)

E. Do you think that the proposed solutions are practical?
   Yes (19)
   To some extent (1)

Workshop Evaluation.
Participants were asked to anonymously evaluate the RAPPAM workshop using the following scoring system.

	Poor……..Excellent				
	1	**2**	**3**	**4**	**5**
Work shop material	-	3	4	8	4
Presentations	-	-	5	8	6
Facilitation	-	-	4	7	8
Your preparation	1	1	5	7	5
Outputs	-	1	2	10	6
Expectations	-	-	4	12	3
Overall evaluation	**-**	**-**	**4**	**10**	**5**

APPENDIX 3

Detailed analysis of individual RAPPAM Questions from Sections 2-19

Part 2 provided a national view of the results from the RAPPAM questions. However, many PA staff will want to see how their area scored, especially relative to other PAs and the national average. PA staff are encouraged to examine and discuss their results, and to formulate actions to improve protection and management.

NCS and PA site staff should find this information helpful to:

- Identify and understand local-level circumstances in the context of the national picture.
- Compare results across the system of PAs and begin to understand the reasons for the differences.
- Determine if individual questions are (or are not) of value for future evaluations.
- Identify better questions for future use, perhaps for site-level applications.

Overall observations

The general feeling among those running the workshop and analysing the results is that the answers should not be framed along a gradient from *Yes* to *No*, but instead from *Strongly Agree* to *Strongly Disagree*. This would correspond more with the norms of questionnaire design, and hence avoid the problem of double negatives when "yes" or "no" are in the wording of the question as well. Even native English speakers are confused as to the meaning of such questions.

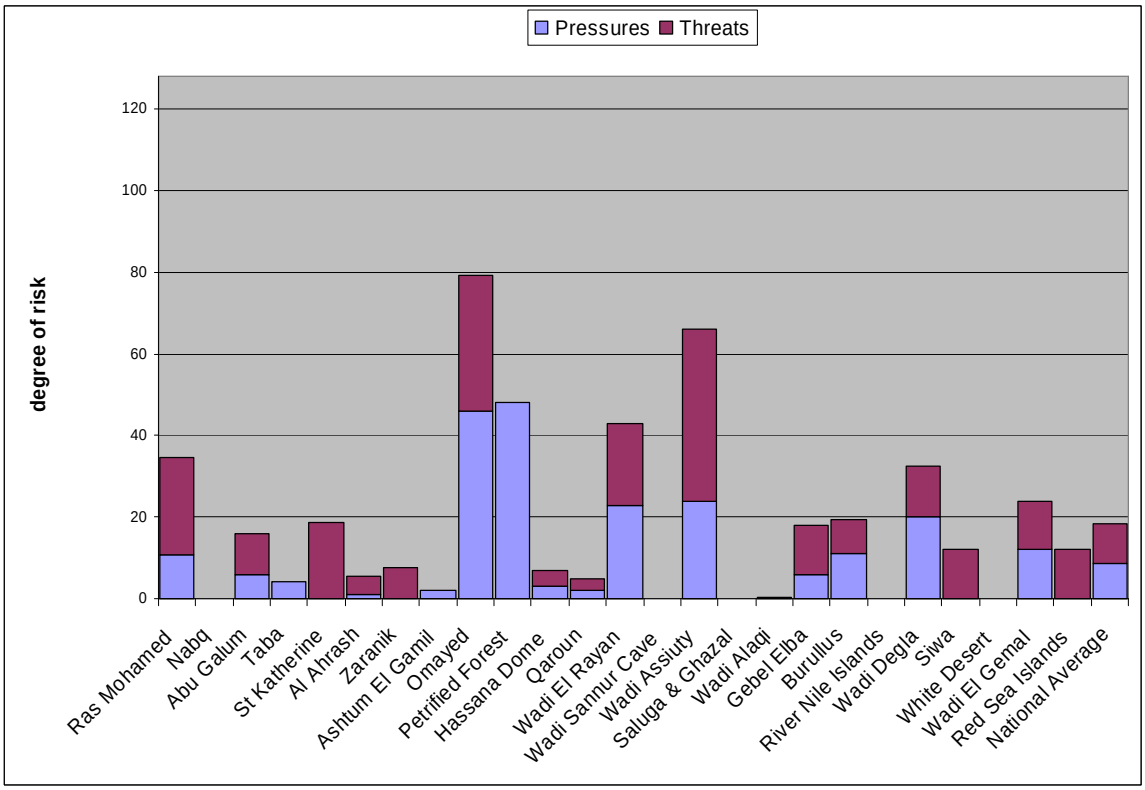
In addition, the questionnaire contains several similar questions found in different sections. There may be validity in testing respondents using multiple questions from different perspectives, but this tends to increase the time needed to complete the questionnaire. Sometimes the results are contradictory

SECTION 2 Pressures & Threats

Staff were asked to identify as many current pressures or anticipated future threats to their PA as they could. These were subsequently sorted into 17 categories, as outlined above (Part 2[2]), p.27). We present these as graphs of each separate category, together with comments by the staff. These comments often lump together a number of different issues.

The Y-axis scale is the average degree (= extent [0-4] * impact [0-4] * permanence [0-4]) mentioned by the staff of a PA. The maximum degree for a Pressure is 4 * 4 * 4 = 64, and the same is true for a Threat. Since the graphs are stacked histograms, the Y axis runs from 0 to a maximum of 128.

Category 1: *Conversion of land use*

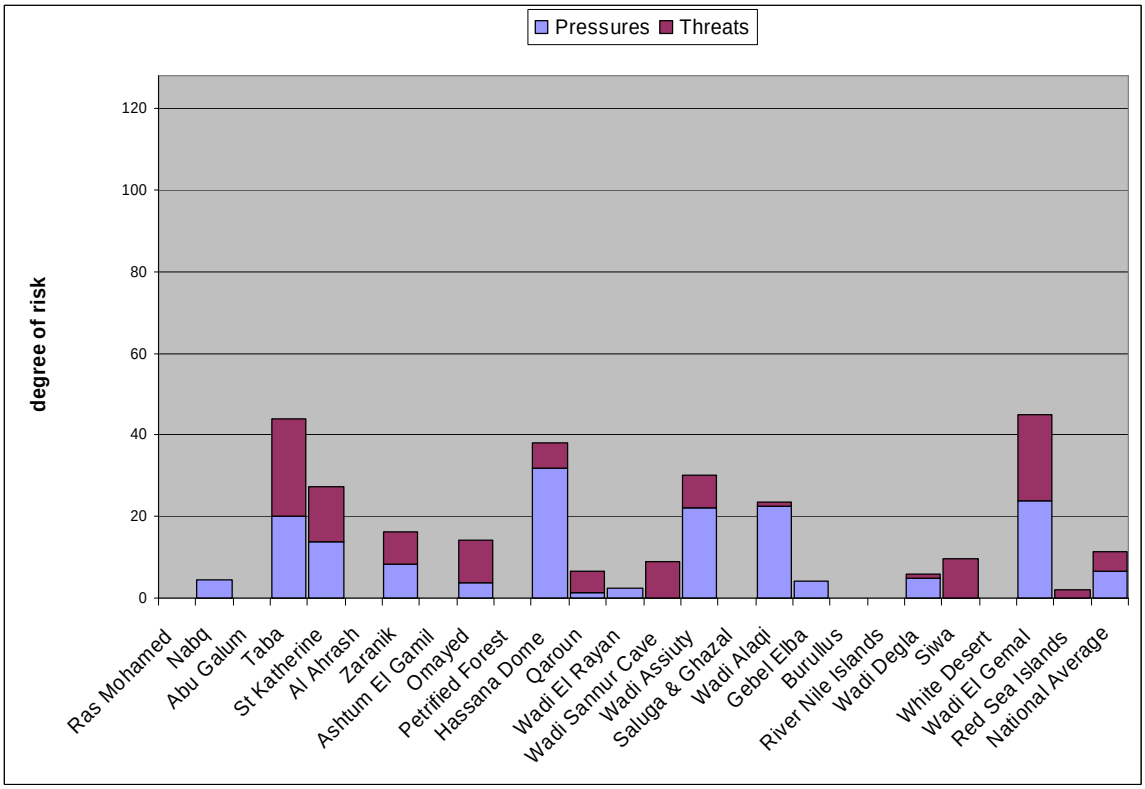


This graph has already been discussed above (see Part 2), and the category broken down into sub-categories (see Part 2).

Ashtum El Gamil	decreased slightly	drying out because of planting , fishing, roads, land reclamation
Red Sea Islands		small but damaging projects are approved, net fishing, oil pollution, boat and ship wastes, tourism (diving), boat accidents
Taba	medium-term permanence	culture for the AquaKatrin company
Wadi Alaqi		beach planting (FAO project)
Wadi Allaqi	high impact	the dam caused down-stream plants to die
Wadi Assiuty	increased sharply	land conversion from sandy to muddy will make an extreme change
Wadi Assiuty	medium-term permanence	land reclamation leads to enviromental changes followed by the disappearance of some plant species
Wadi Degla		roads, presence of waste recycling factory, invasive species (dogs), collection of petrified wood, discarding solid wastes
Wadi El Gemal		roads inside the PA, solid wastes

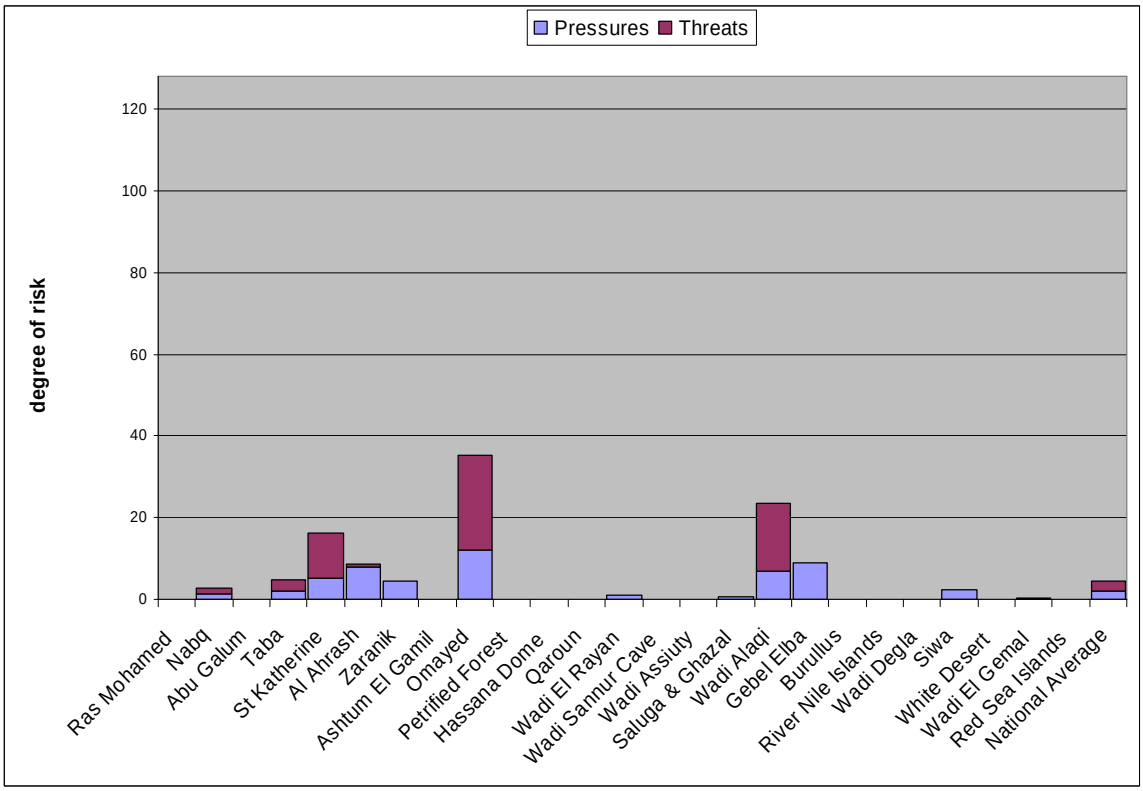
Wadi El Rayan	increased slightly	licenses given to people to practise economic activities make no sense; the PA has no role in giving the licenses, and existing licenses are weak and not effective
Wadi El Rayan	increased slightly	growing number of monks, conversion of natural spring area to vegetables with irrigation pipes, proposed pipe-line to monastery, excavating caves to live in. All these will impact water quality and quantity, gazelles and exotic species
Wadi El Rayan	increased slightly	road may have affected gazelle population by bisecting their range
Wadi El Rayan	unchanged	the allowed economic activities are not stated clearly
Wadi El Rayan	increased slightly	multiple permitted economic activities are practised inside the PA (land reclamation, fishing, christian monastery) but when there is a water shortage, there are ecological effects
Wadi El Rayan	medium-term permanence	expansion of economic activities affects water quantity; increasing population causes invasive plants and animals; illegal activities (hunting, wood collection)

Category 2: *Mining*



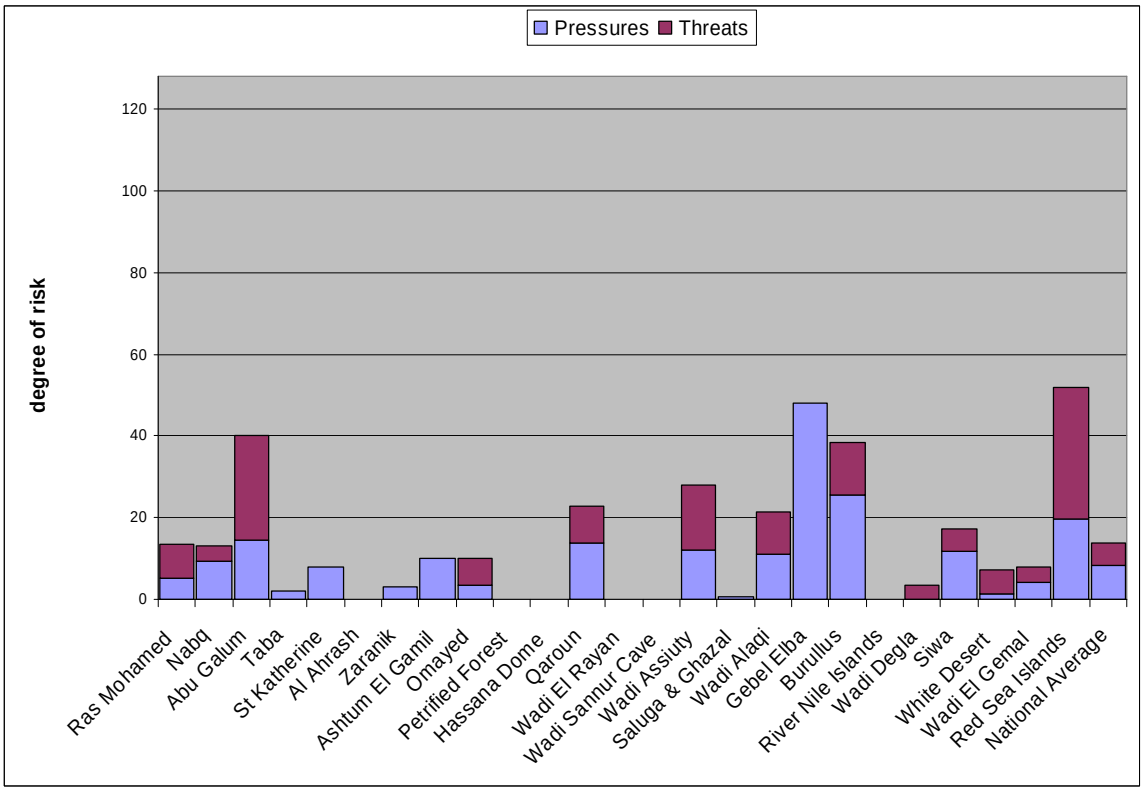
Taba	localized in extent	present in the core zone of the area surrounding Ain Hadra and Wadi Ghazala - these are forbidden zones
Taba	permanent presence	future quarries for kaolin extraction by the armed forces & middle east company near to Ain Hodra
Wadi Assiuty	medium-term permanence	sand removal for building will destroy the beauty of the landscape
Wadi Assiuty	increased sharply	the quarries in the western side of the PA (about 3% of the whole PA) are left without repair or even attention
Wadi El Rayan	increased slightly	causes unsightly tracks, bulldozing and piling of sand, drilling, etc

Category 3: *Grazing*



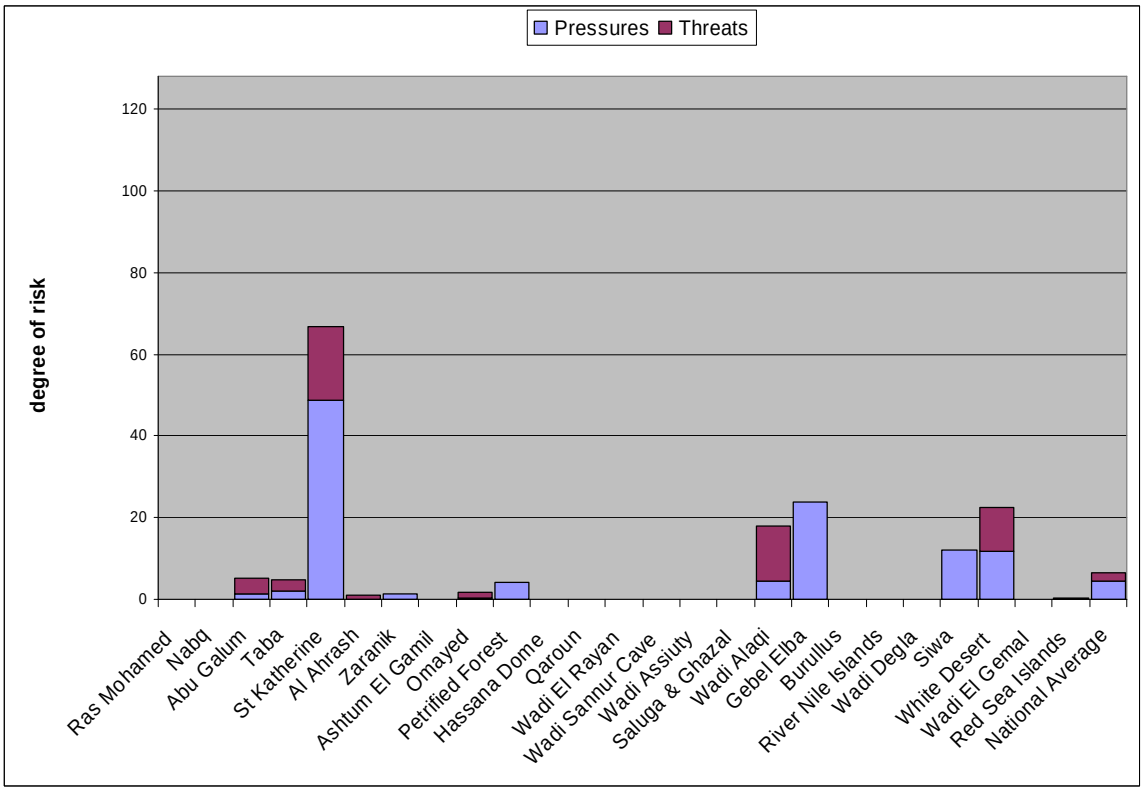
Saluga & Ghazal	decreased slightly	farmers send their animals to graze in the PA, and they cause pollution from their waste products
St Katherine		grazing, planting of drugs because of poverty (which is itself a product of lack of tourist or grazing income)
St Katherine		unorganized scientific research, over-grazing

Category 4: *Hunting and fishing*



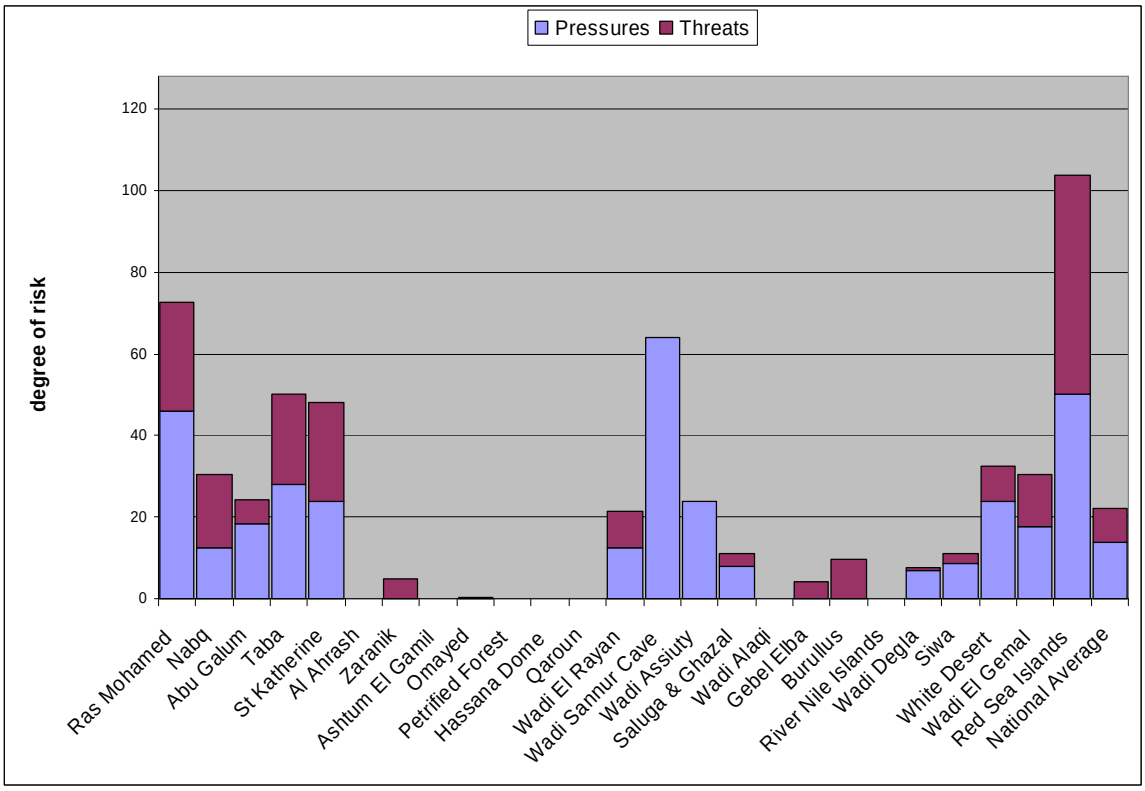
Ras Mohamed	unchanged	hunting migratory fish causes both direct and indirect harm
Burullus	severe impact	over-fishing, pollution with waste water
Abu Galum		fishing in reproductive season; divers destroy coral reefs
Saluga & Ghazal		over-fishing
Wadi Allaqi		hunting of gazelle, crocodiles and birds in particular seasons; planting of beaches; insecticide and pesticide use
St Katherine	high impact	over-hunting of wild animals for commercial purposes or as a hobby, and by local people for subsistence

Category 5: *Over-collection*



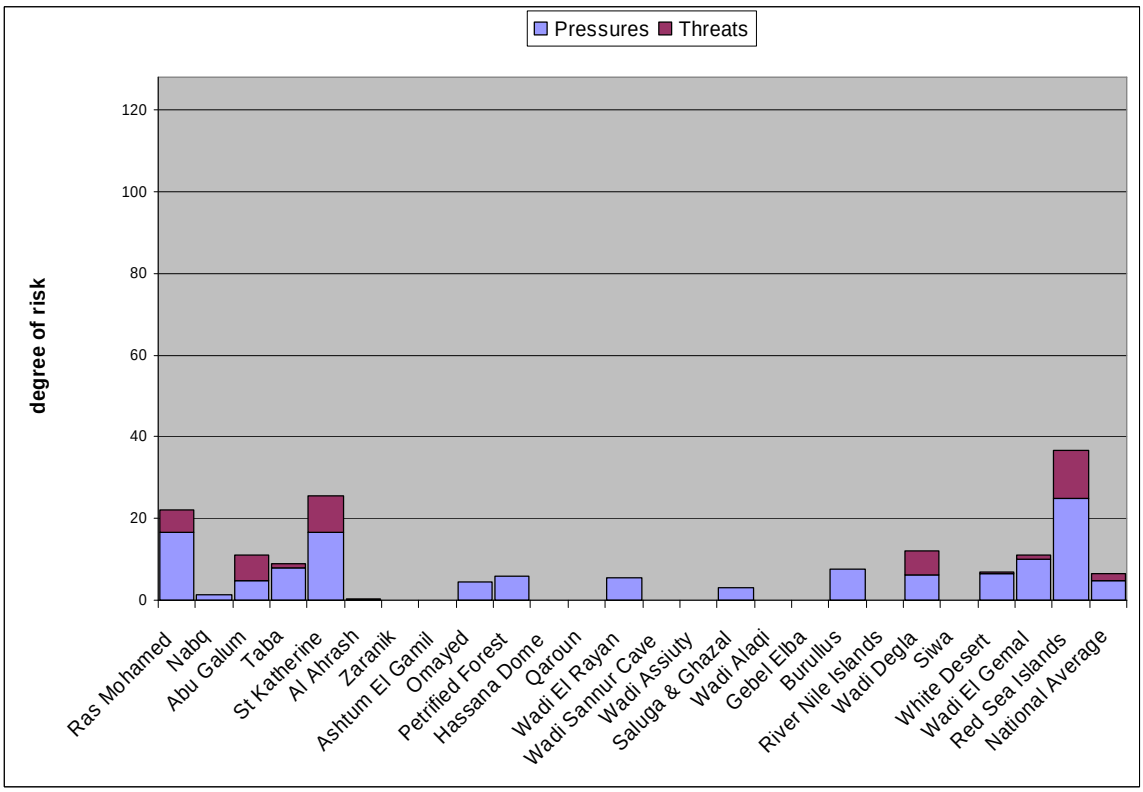
St Katherine	over-harvesting of plants, hunting, mining, unorganized development, ecologically unsound tourism
St Katherine	over-harvesting of wild plants, especially in the north (the high-mountain region)

Category 6: *Recreational use, mainly tourism*



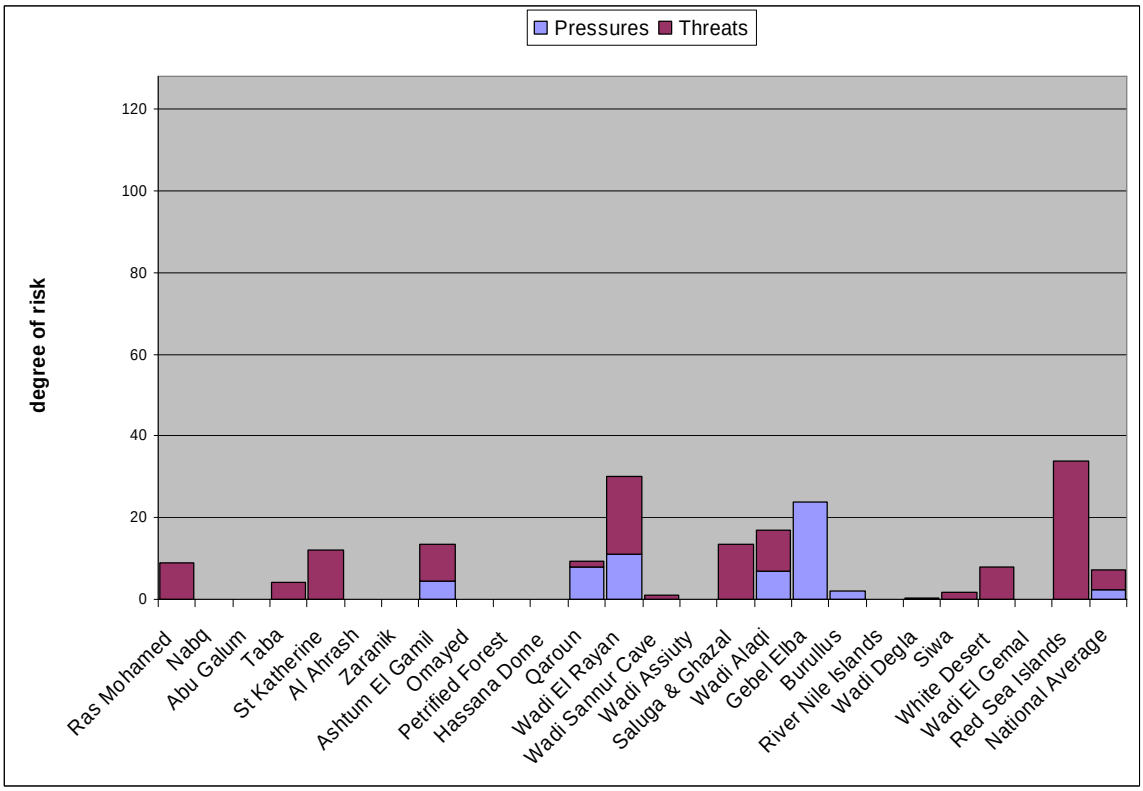
Abu Galum		hunting, too many camels and cars
Abu Galum		sedimentation rates will increase between Nuweiba and Taba due to the increasing building rate; destruction of coral reefs due to unregulated fishing; local Bedouin culture affected by tourism
Nabq		disappearance of Egyptian gazelle in tourist areas
Ras Mohamed	increased sharply	using natural resources in PA for making money from tourism, such as diving for sea anemone; tourist numbers increase each year
Ras Mohamed		too many tourists, pollution from water purification stations
Red Sea Islands		future decrease in coral-reef growth rate due to diving; plastic wastes; increased oil drilling, uncontrolled over-fishing, developing islands for tourism
Saluga & Ghazal	increased slightly	hotels use fire to control grass, which may affect the PA
Saluga & Ghazal	increased slightly	student visitors do not care about the disturbance they make to birds, nor the wastes they leave
Siwa	increased slightly	safari tourism affects the Sand Sea, destroys fossils, and leads to the accumulation of waste materials
St Katherine		future uncontrolled tourism, fragmentation by asphalt roads, migration of Bedouin for work and the education of their children
Taba	increased sharply	cars causes ridging of the unmade roads
Taba	permanent	drawings on stones; removal destroys the external layer
Wadi Degla		bad visitor habits (writing on stones, etc, waste recycling factory, undeclared building, industrial activities, continued working in Shaq El Te^{c}ban region
Wadi El Rayan	increased sharply	dogs cause waste on beach and trails, possible safety issues, likely preying on native wild life
Wadi El Rayan	medium-term	wadi Heitan, new road, more tourists, more need for infrastructure
White Desert	increased slightly	increasing numbers of tourists and guides
White Desert	severe impact	off-road driving causing destruction

Category 7: *Waste disposal*



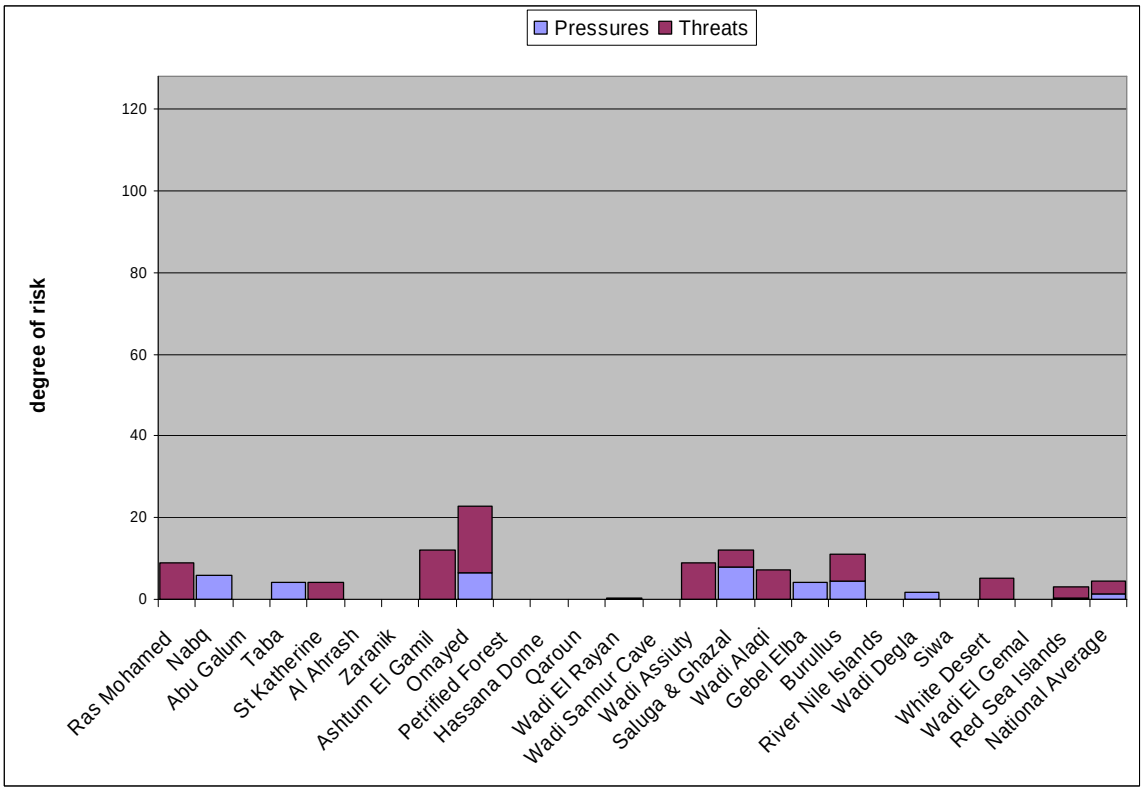
Red Sea Islands		discarding solid wastes in mangrove regions, diving activities
St Katherine	increased slightly	new dump for Dahab, lower efficiency of management of the existing dump
St Katherine	localized	dumps, visitor destinations
St Katherine	moderate impact	aesthetic and physical
St Katherine	high impact	increasing wastes in the future
White Desert	unchanged	due to cleaning processes done regularly during times other than the tourist season

Category 8: *Semi-natural processes*



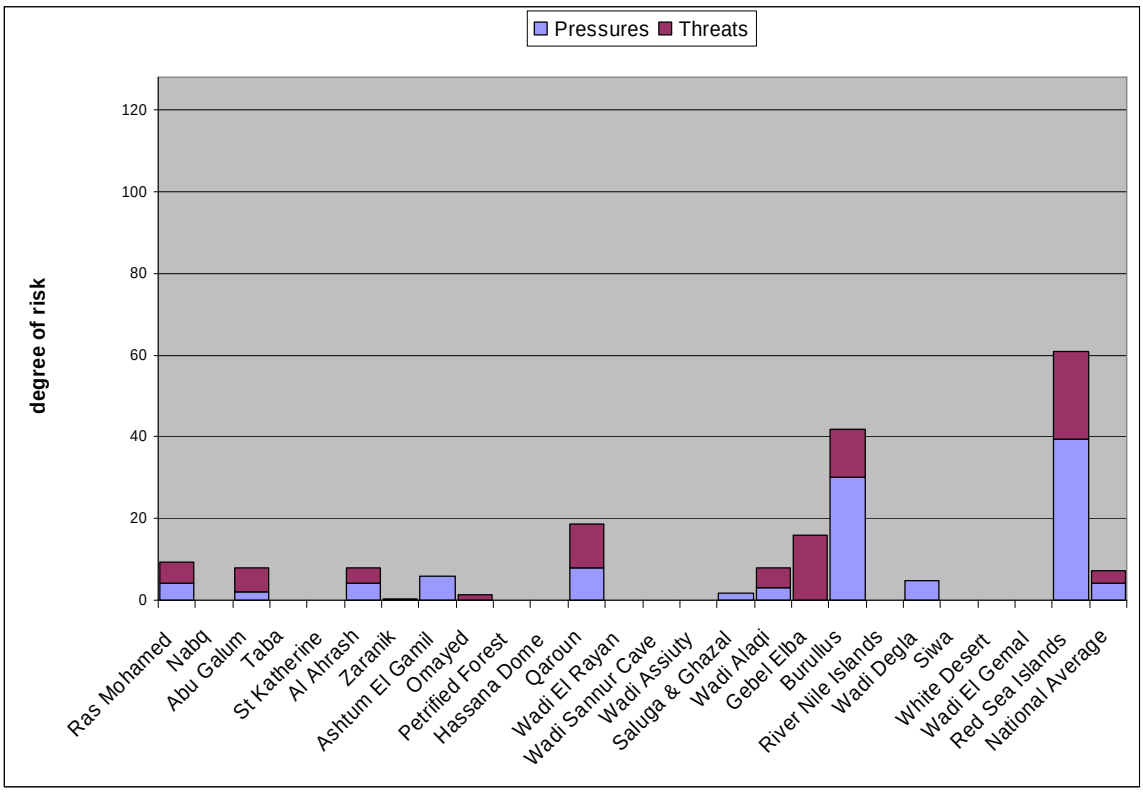
Burullus	very high probability of occurrence	increasing mud deposition leads to spreading of aquatic plants, and this exacerbates the problem
Qaroun	medium	increasing water salinity, water-level changes lead to damage and biodiversity losses
Saluga & Ghazal		beach erosion
Taba	medium-term permanence	rainfall causes the land to be smoothed
Taba	throughout	rainfall rates are not enough; over-population leads to higher consumption; Aqua Katrin factory for underground water
Taba	short-term permanence	as rains rarely falls, vegetation decreases without being renewed, and some endemic plants will disappear
Wadi Allaqi	high	rain shortage in addition to overgrazing lead to biodiversity loss
Wadi Degla		future increasing erosion in PA boundaries
Wadi El Rayan	very high probability	water loss will cause bird migration to other places, losing visitors; fishermen will suffer and may be diverted to practise other activities
Wadi El Rayan	medium probability	water loss will cause biodiversity and tourism losses
Wadi Sannur Cave	low probability	there is a system to protect caves from sudden heavy rain, but it needs more attention to be effective
White Desert	increased, scattered extent, high impact	some geological components disappear naturally due to erosion, this is a threat because the PA is based on them

Category 9: *Invasive species*



Ashtum El Gamil	high probability	water can not be recycled due to presence of dams; *Eichornia* absorbs lots of water and blocks sunlight; unregulated fishing occurs and interferes with local sailing
Ras Mohamed		future possibility of crown-of-thorns outbreaks; highly saline waste water of water-purification stations
Saluga & Ghazal	medium probability	the growth of *Mimosa pigra* near to *Acacia* trees may threaten them
Saluga & Ghazal	high probability	*Phragmites* is widespread, especially at bridges; normally it helps fix the soil but lately it has appeared in many areas in the middle of the island and is difficult to remove
St Katherine		future introduction of exotic species, asphalt roads, effect on Bedouin culture, over-grazing, aridity due to climate change and unsuitable development
Wadi Allaqi		introduction of invasive plants due to beach planting with impure seeds; disappearance of *Najas* sp. and other species due to the lowering of the water level of Lake Nasser

Category 10: *Pollution*

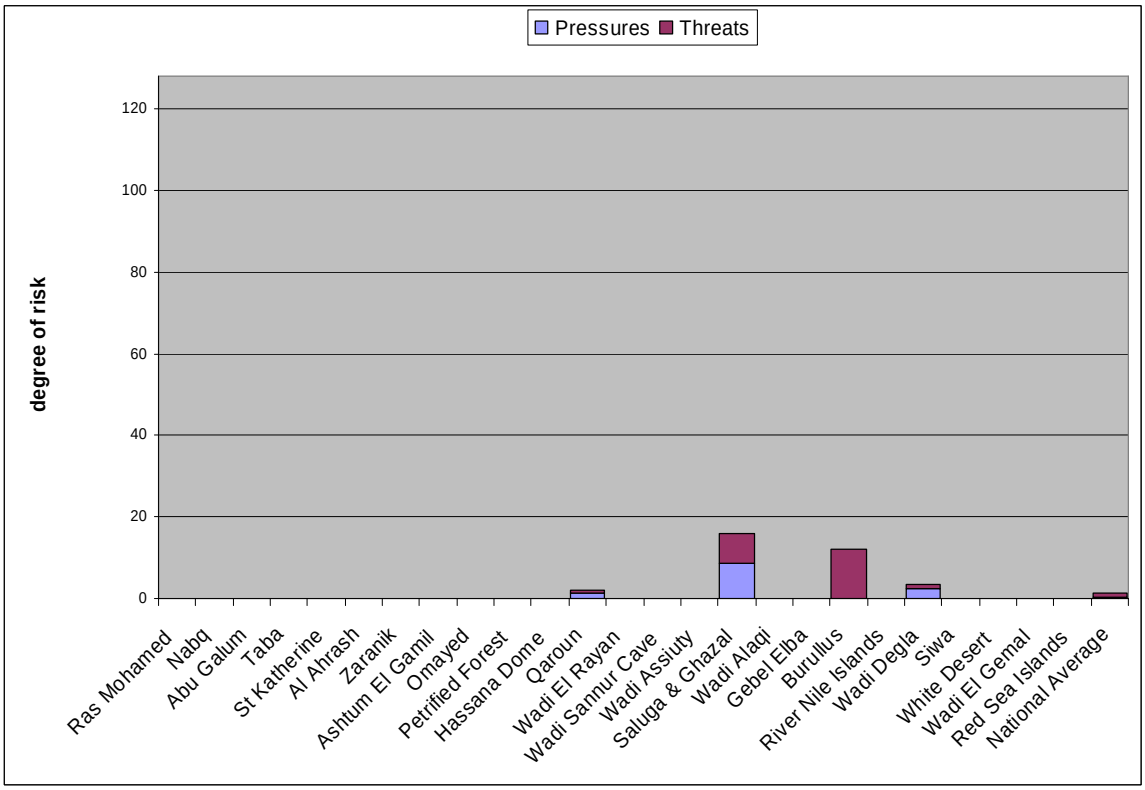


Ras Mohamed	increased slightly	pollution by oil from oil fields and oil tankers near to PA boundaries; oil accumulates in sensitive areas such as mangroves and beaches
Wadi Allaqi	increased slightly	farmers uses insecticides which harm local people and birds, causing problems between farmers and other local people
Wadi Alaqi	localized	insecticides kill animals and reptiles arround the lake

Category 11: *Land ownership*

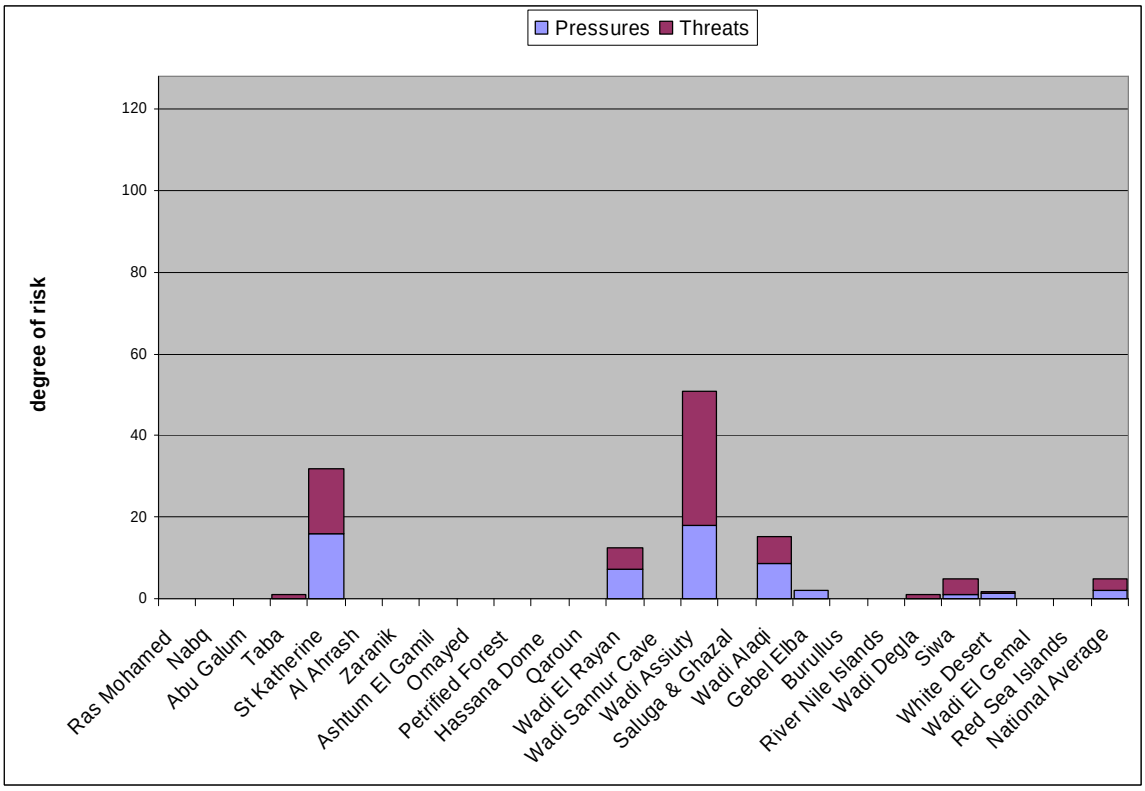
(no staff mentioned this issue)

Category 12: *Cross-boundary issues*

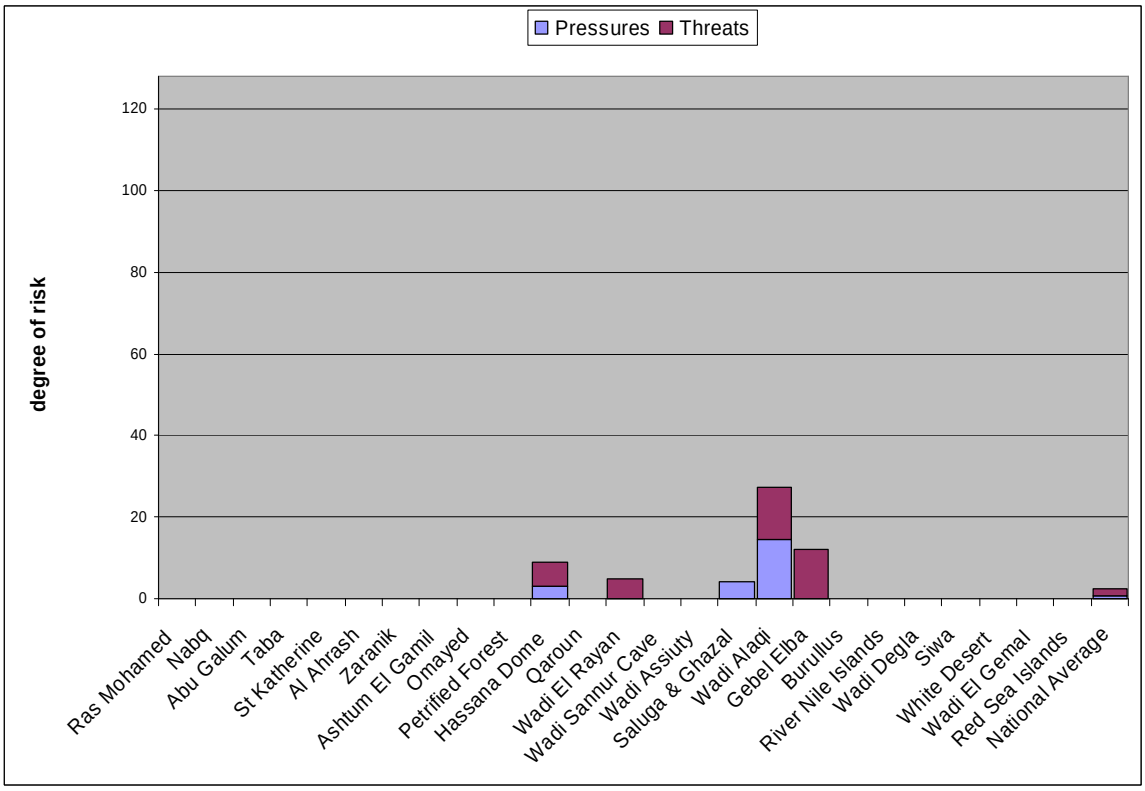


Saluga & Ghazal	increased slightly	fires have twice resulted from nearby hotels and islands
Saluga & Ghazal		pollution from nearby hotels

Category 13: *Agriculture*

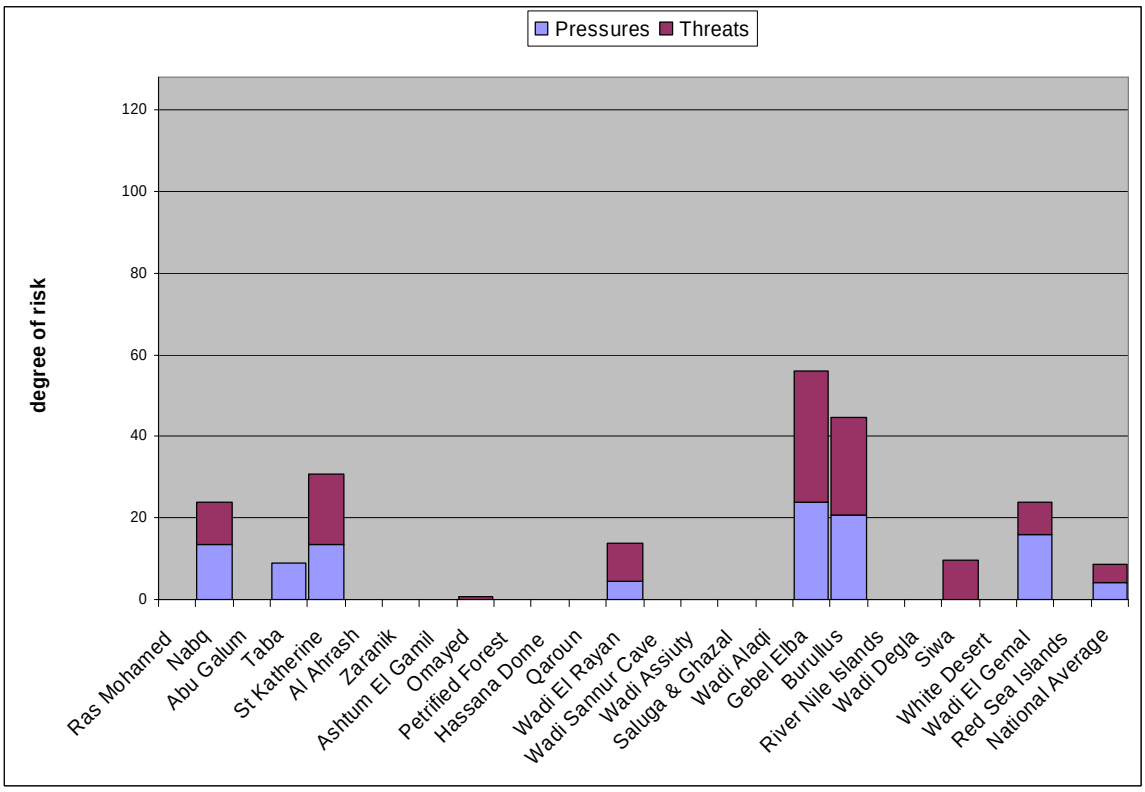


Category 14: *Military*



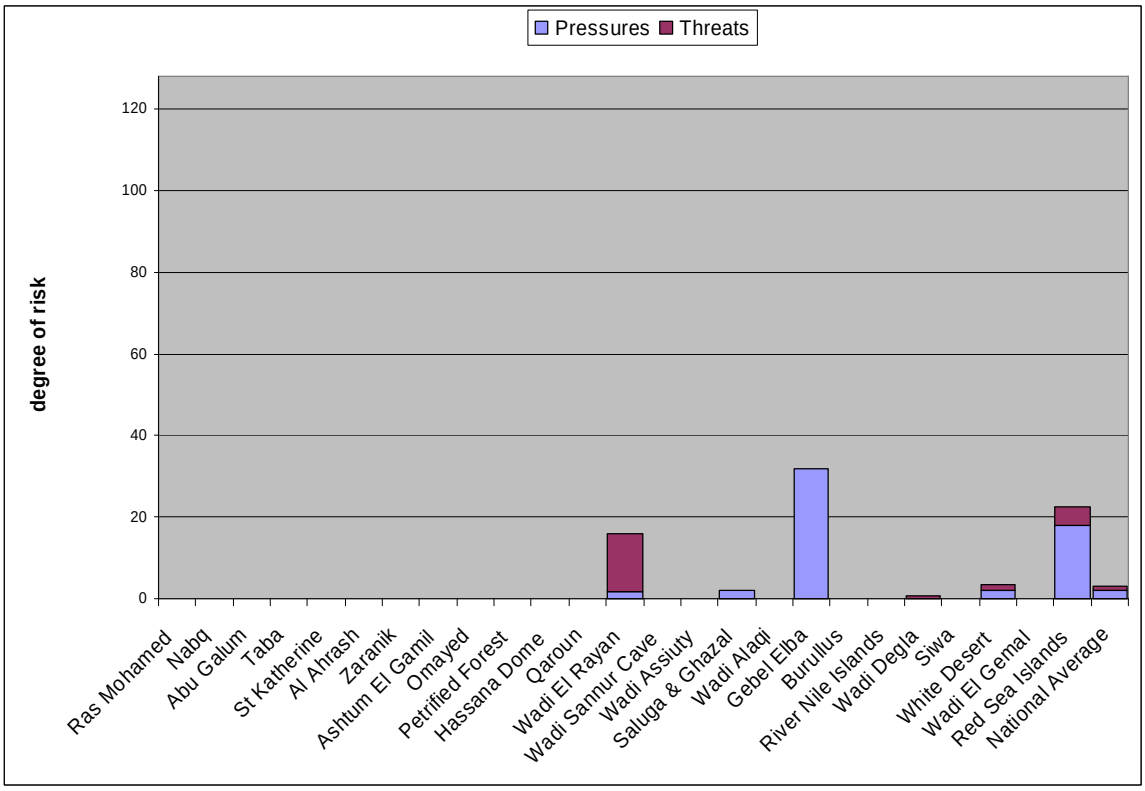
Wadi Alaqi	permanent	the tourists aren't allowed to go through the military areas

Category 15: *Development of local communities*



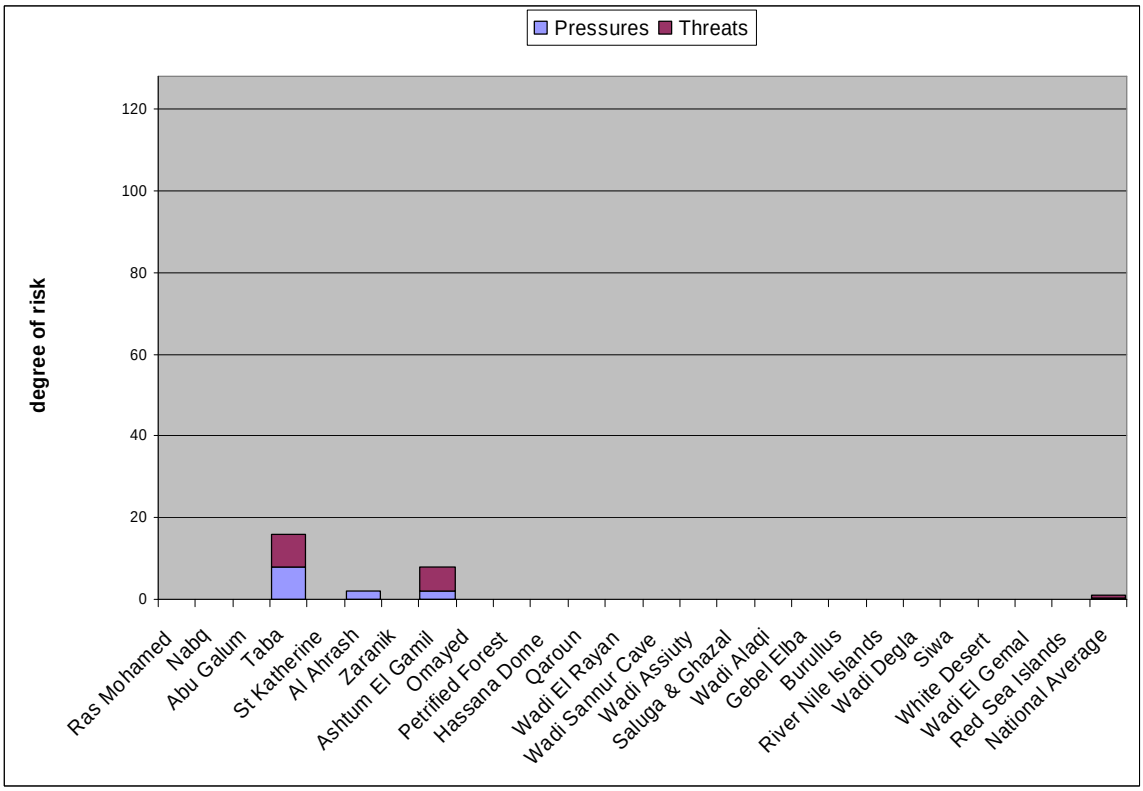
Wadi El Rayan	high probability	local population is beginning to establish new towns near the PA, and plan to establish a power station for further development

Category 16: *Ranger time / facilities*



Saluga & Ghazal	increased slightly	there is not enough time for developing the work since many reports are needed to document the tasks and requirements of the PA
Wadi El Rayan	high probability	causes reduced and less effective monitoring and patrolling, and inability to maintain infrastructure (buildings, vehicles, tracks), loss of Italian investement
Wadi El Rayan	high probability	yearly GoE budget to the PA after the project ends will not be enough for essential activities (management, repairs, means of transport, tools), and this will affect other activities negatively

Category 17: *Water abstraction*

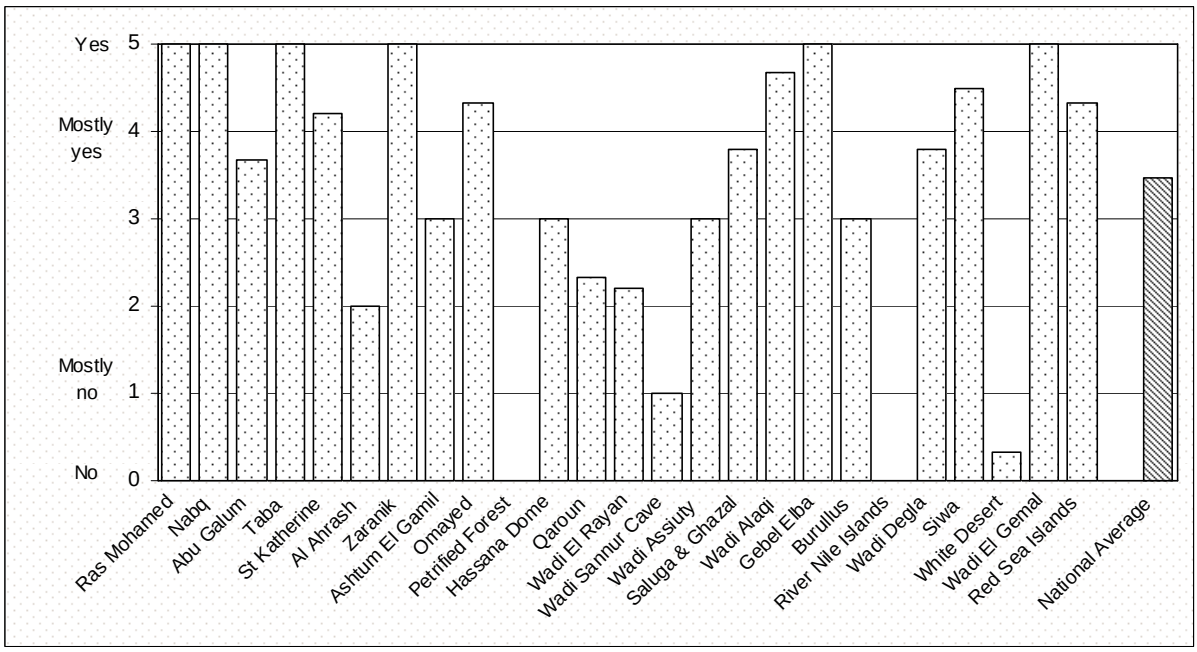


Taba	scattered extent	future increasing water uptake (especially underground water, the main resource after rainfall) will have many dangerous effects

SECTION 3 Biological importance

Question 3a *The PA contains a relatively high number of rare, threatened, or endangered species.*

Results:



Staff Comments:

Seven staff provided examples of rare, threatened or endangered species, including: Egyptian Gazelle (most often cited), Ibex, marine turtle, Nubian Goat, bats, *Balanites aegyptiaca*, and *Zygophyllum decumbens*. Fossils were also noted. This demonstrates a high level of awareness among some staff about particular species of concern.

Notes:

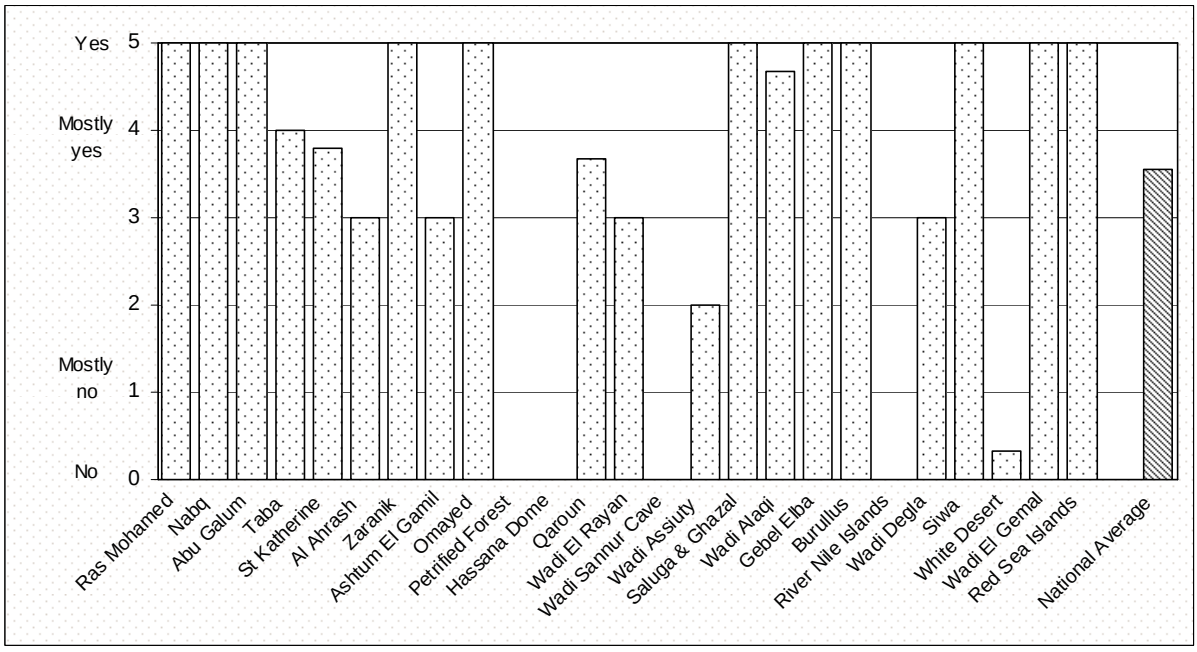
Staff from 18 of 25 protected areas have a high degree of agreement about the presence of rare, threatened or endangered species in their area.

The phrase 'relatively high' implies some knowledge to be able to place information about the PA in the context of the national Egyptian and international situations. The question should be reworded to say

"The PA contains a nationally high number of rare, threatened or endangered species"

Question 3b: *The PA has relatively high levels of biodiversity.*

Results:



Staff Comments:

White Desert has some lizard species

Notes:

The results may be affected by the complexity of the concept and level of staff knowledge to compare their area with others. For example, the definition includes genetic, species, community, and ecosystem variations: however, it is expected that staff mainly considered species in their response. Furthermore, measures of species richness, structural diversity, and ecosystem heterogeneity are rather technical for many staff: accordingly, they must rely on their general impression or advice from others.

The purpose of the question should be reviewed. For example, is the purpose to test staff-level knowledge on the subject, or to present an accurate comparison? If it's the latter, it could be more accurate to ask a few experts. If retained, the description for this question should be simplified.

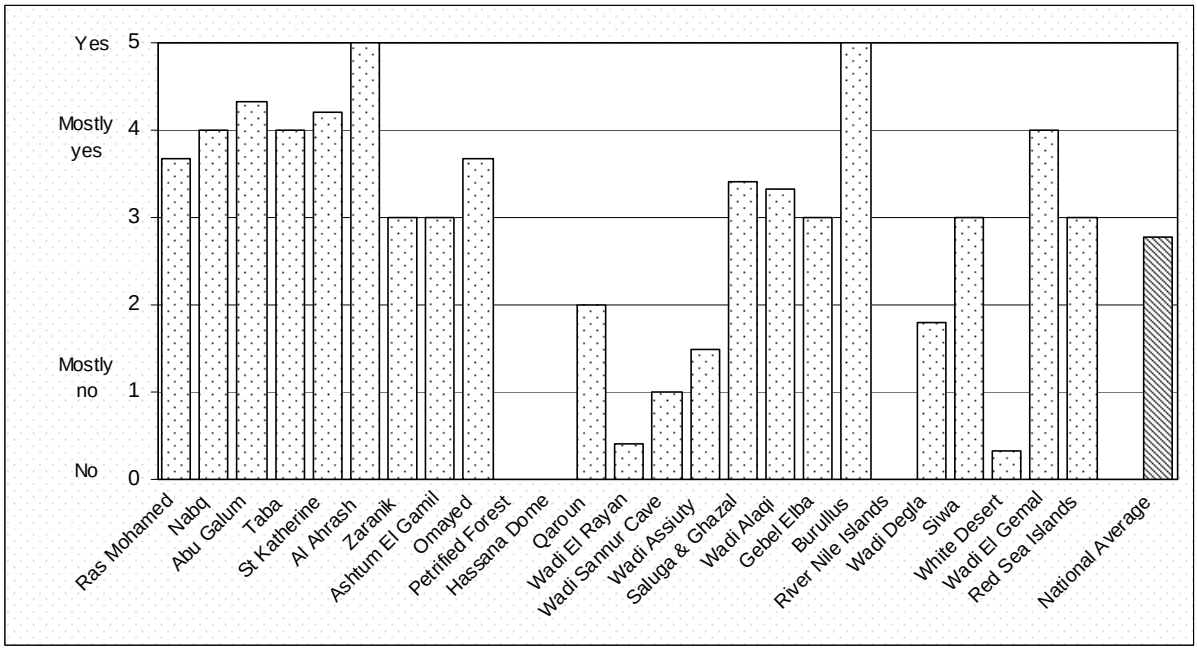
There is a need to prepare PA site-level summaries and conduct training on these topics to help staff learn and understand the importance and role of their PA within the national system.

The phrase 'relatively high' implies some knowledge to be able to place information about the PA in the context of the national Egyptian and international situations. The question should be reworded to say:-

"The PA contains a nationally high level of biodiversity"

Question 3c: The PA has a relatively high degree of endemism.

Results:



Staff Comments:

Types of plants
Especially the plants
Acacia trees
There are a number of resident birds
Large number of plant species, and birds special to the Nile Valley
The protectorate has many patterns of biodiversity
Three endemic plant species, and 121 plants occurring in Egypt only in the PA

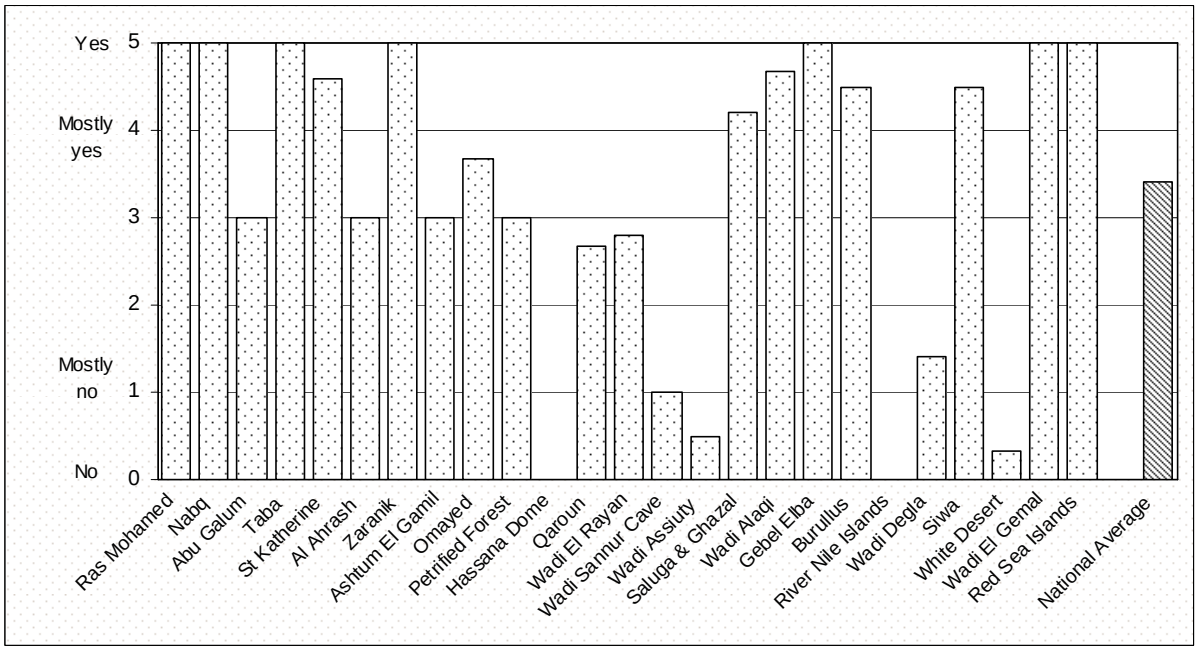
Notes:

The definition tried to be as clear as possible in that 'endemic species' originate from and are wholly or mostly confined to Egypt. This statement can be interpreted in a general way and with limited knowledge, could easily be mis-represented, especially in the light of the general misuse of the term 'endemic' in the Egyptian literature.

There is a need for greater knowledge and hence education and training for staff about conservation biology in general, and national and international comparisons.

Question 3d: *The PA provides a critical ecological function.*

Results:



Staff Comments:

St Katherine	has high altitude environment, rare in Egypt.
Petrified Forest	has a special importance in providing feeding sites for some larger mammals.
Saluga & Ghazal	is an essential habitat for migrating birds, and has Acacia and *Mimosa* species
Burullus	is an important site for migrating birds.

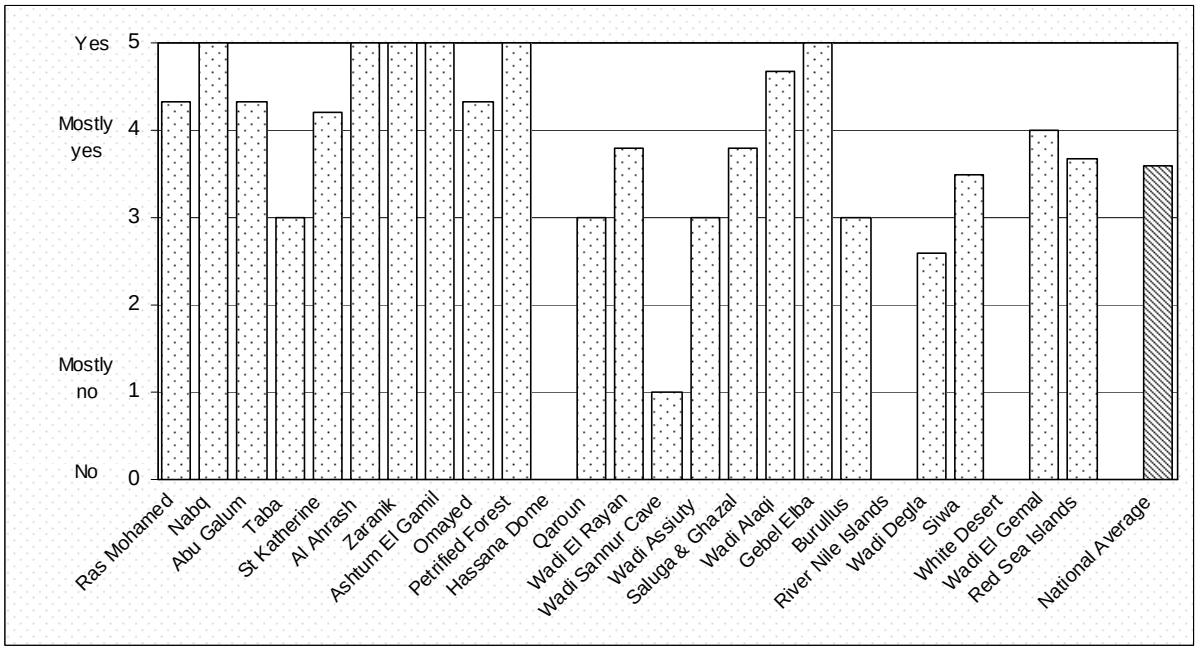
Notes:

The explanatory notes for this question raise questions about interpretation. For example, it states (emphasis added here): Protected areas that perform a *critical* ecological function include areas that have important feeding, breeding, or migration value for *species whose existence would be jeopardized by the alteration of that area.* Examples of *critical* landscape functions include a stopover site for migratory birds, *critical* feeding habitat for *rare or endangered* species, a migratory stepping stone or corridor for terrestrial species, a source population for *key* species, and seasonal areas important for mating and raising young.

Many protected areas provide stopover sites for migratory birds but are not necessarily critical in the sense of this definition (although it is true that relatively little research has been done on whether such sites really are critical - perhaps adopting the precautionary principle is best here). The question contains too many factors and therefore these factors cannot be isolated for comparison.

Question 3e: *The PA contains the full range of plant and animal diversity*

Results:



Staff Comments:

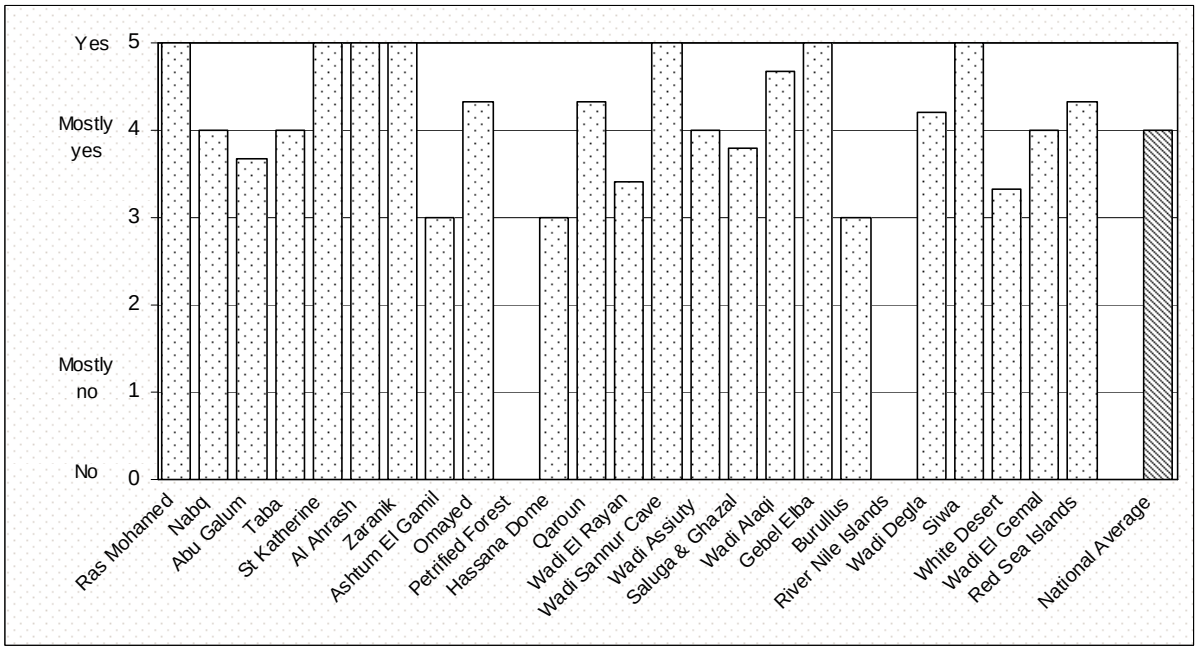
Abu Galum	plants, animal, birds, insects and some corals and fish have been recorded
St Katherine	like Sinai Thyme and the Sinai Baton Blue butterfly
Wadi El Rayan	gazelle, *Nitraria retusa*; some bird species have a refuge in reed beds
Wadi Assiuty	gazelle and *Leptadenia*
Saluga & Ghazal	108 plant species (eg Henna), beetles, and bird species that depend on the maintenance of adequate numbers of *Acacia* trees
Saluga & Ghazal	special relationships such as a beetle on Henna, Night herons (*Nycticorax nycticorax*) on *Acacia nilotica*
Saluga & Ghazal	beetle diversity is related to the presence of Henna trees

Notes:

This question hinges on what "the full range" means, and implies a very high level of knowledge to be able to reply in the negative. The value of this is questionable.

Question 3f: ***The PA significantly contributes to the representativeness of the PA system.***

Results:



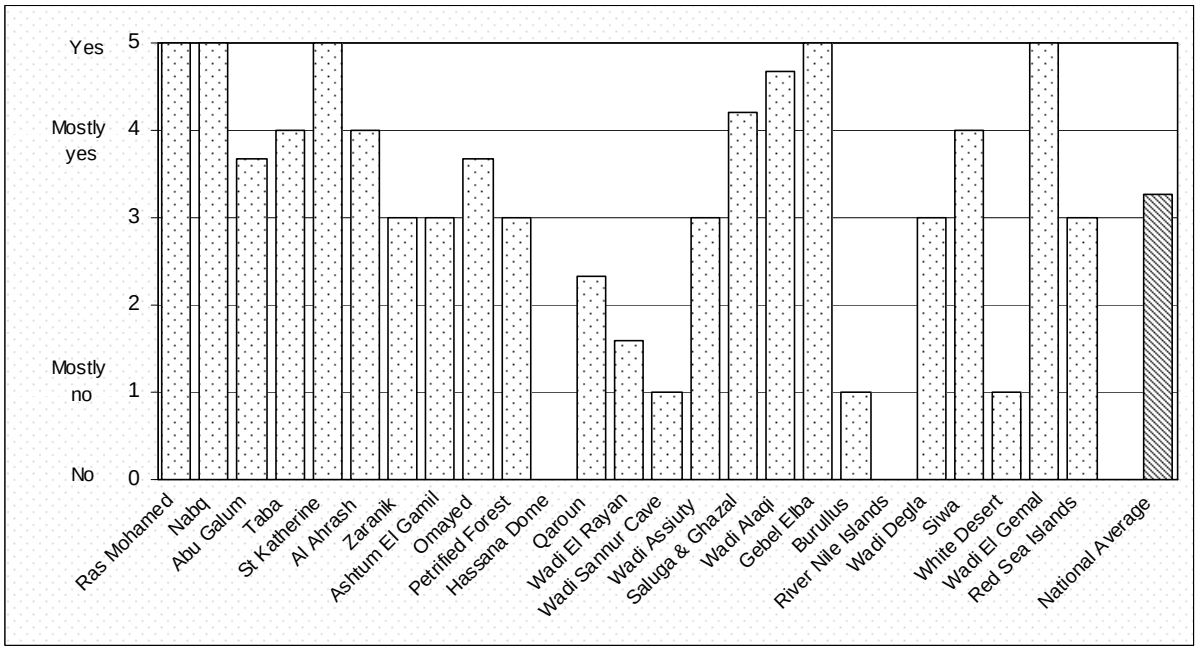
Staff Comments:

St Katherine	is a high-altitude environment, unusual in Egypt
Al Ahrash	has the Rigla plant.
Wadi Assiuty	is a station to increase plant and animal origin.
Wadi Allaqi	represents wetlands, hill areas and desert.
Wadi Allaqi	has mountains and wetland landscapes
White Desert	has a unique geological composition.

Notes:

Question 3g: *The PA sustains significant populations of key species.*

Results:



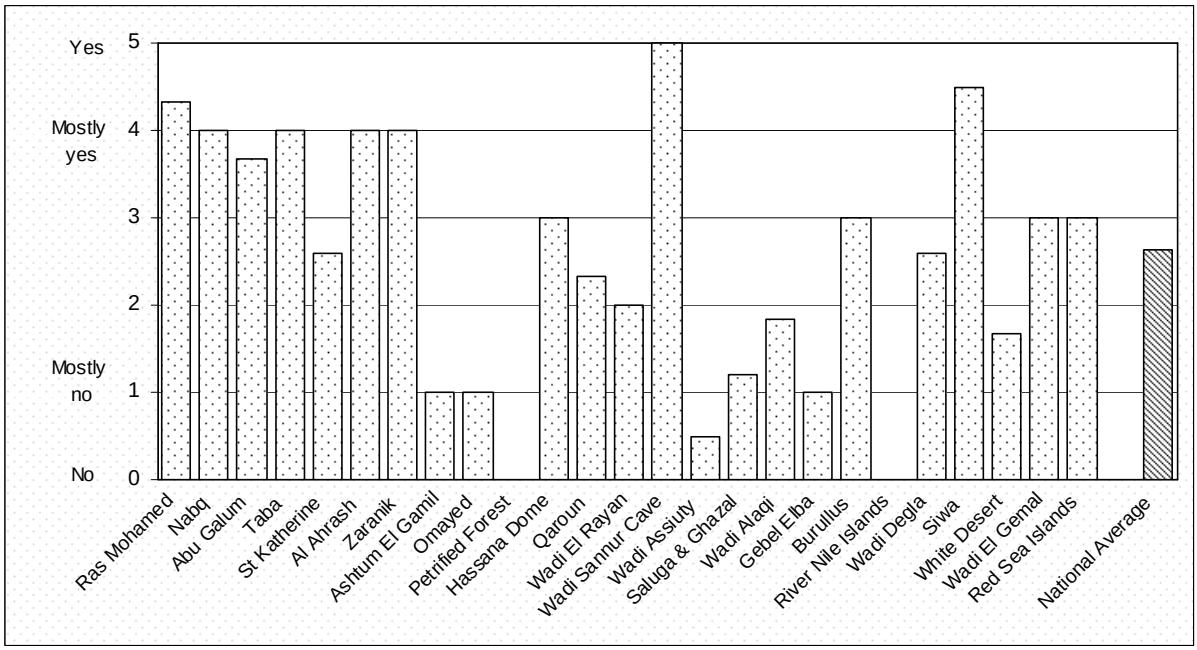
Staff Comments:

Abu Galum	contains some important species, but rather few of unknown population sizes.
St Katherine	has *Acacia*, and jackal
Al Ahrash	has Acacia trees.
Zaranik	has tortoises.
Wadi Assiuty	has a number of Egyptian gazelles and Lanner falcons
Wadi Assiuty	has Egyptian gazelles.
Wadi Allaqi	has widely dispersed Acacia trees that form an essential part of the food web in the protectorate.
Wadi Allaqi	*Acacia* is important for animals.
Wadi Degla	Egyptian gazelle.
Wadi Degla	Egyptian gazelle.
White Desert	only has the Egyptian gazelle.

Notes:

Question 3h: *The structural diversity of the PA is largely intact, undamaged and unchanged.*

Results:



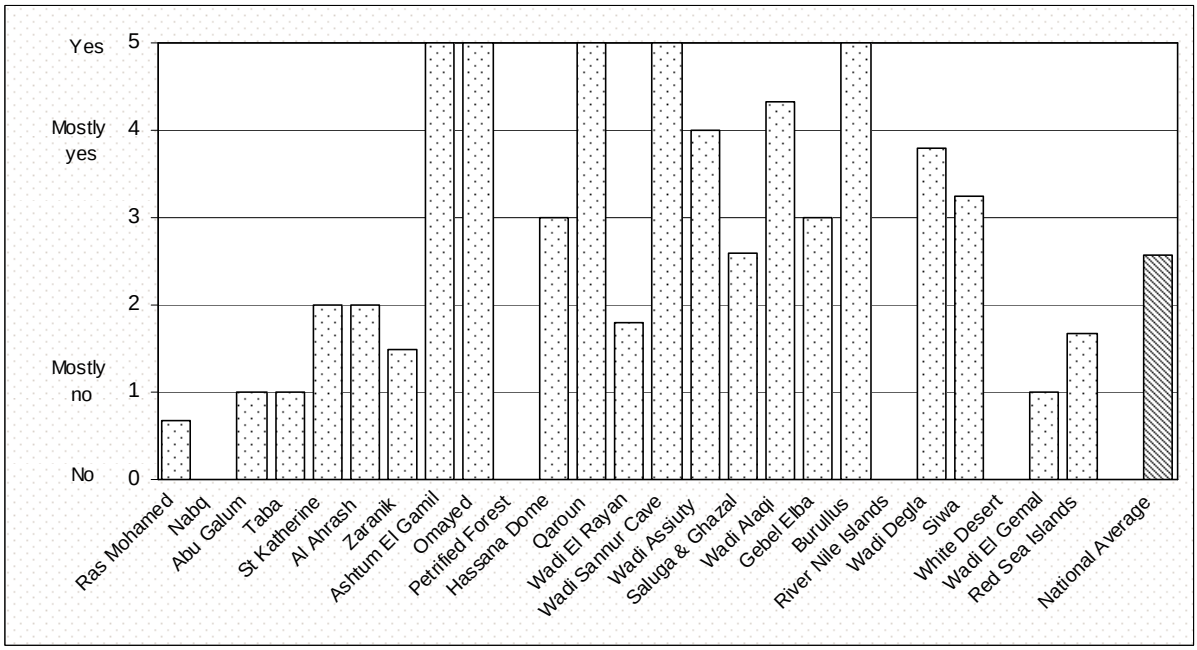
Staff Comments:

Abu Galum:	*Mostly No* due to overhunting of sea cucumbers and the response of the environment to flash floods (2 replies).
St Katherine:	low because of the negative impact of city population around PA, and their low socioeconomic status.
Petrified Forest:	deterioration of two valley areas, one because of establishing a marble factory, and the other for turning over rubbish.
Qaroun:	has changed due to lack of adequate numbers of rangers
Saluga & Ghazal:	damaged by a fire from nearby hotel.
Wadi Allaqi:	many things are changing in the PA, including disappearance of species (e.g. *Tamarix aphylla*) and loss of trees
Wadi Allaqi:	ostriches were lost as they moved from the protectorate to northern Sudan
Gebel Elba:	there are changes and threats that have affected the environment of the protectorate and its refuges
Burullus:	city and industrial freshwater discharged into the lake has led to an decrease in salinity, with a consequent decrease of some fish species
Burullus:	the aquatic medium has changed
White Desert:	there are no plants

Notes:

Question 3i: ***The PA includes ecosystems whose historic range has been greatly diminished.***

Results:



Staff Comments:

St Katherine:	great variation of weather, low ran and underground water, recently severe consumption of water, effect of quarries.
Qaroun:	due to vital factors which represent the plants.
Wadi Assiuty:	due to quarries and human activities.
Saluga & Ghazal:	extinction of plants formerly present in the protectorate.
Burullus:	a part of the lake has been transformed for fish farming.
Wadi Degla:	climate change has led to dryness of the valley.

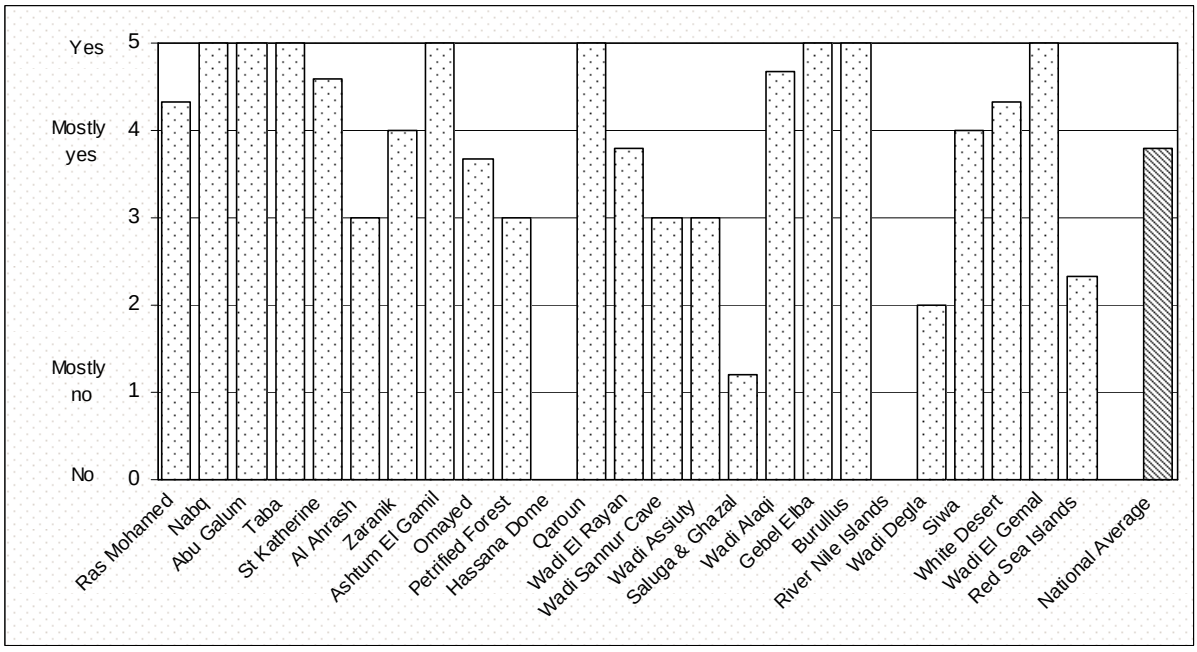
Notes:

Some staff clearly misinterpreted the term 'ecosystems'.

SECTION 4. Socio-economic importance

Question 4a: ***The PA is an important source of employment for local communities***

Results:



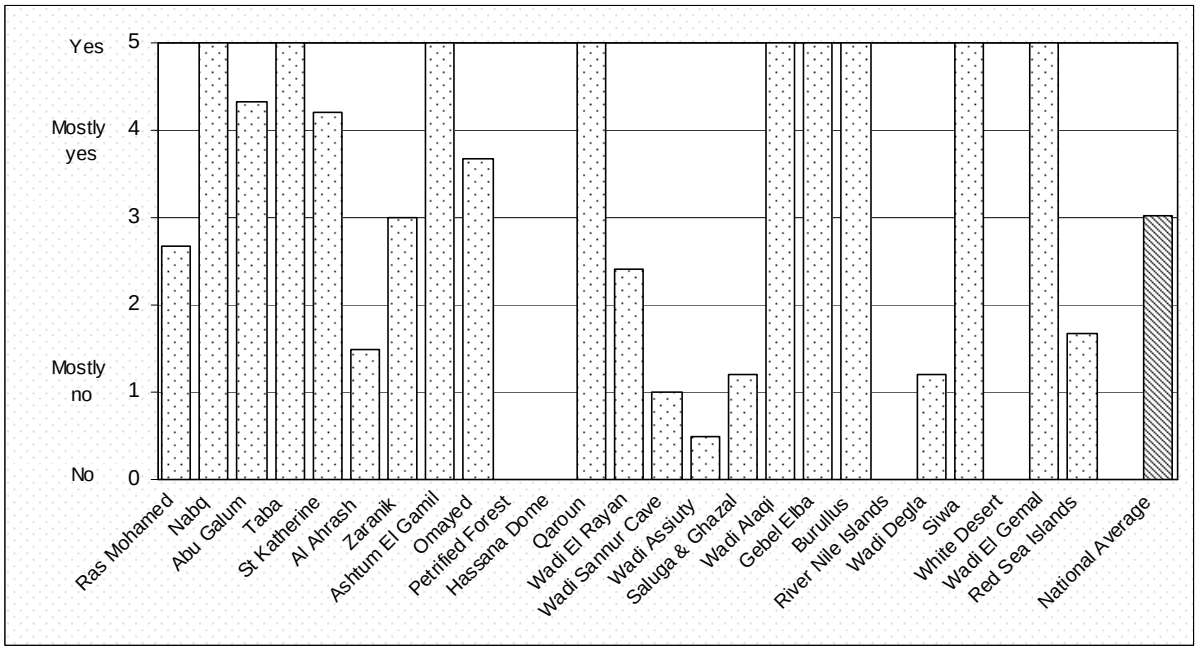
Staff Comments:

St Katherine	ecotourism is the main income source, before and after the PA establishment
St Katherine	ecological work
Ashtum El Gamil	legal fishing
Ashtum El Gamil	legal fishing
Omayed	archaeological sites of the harbour and the El Alamein museum are the main employers
Qaroun	fishing
Wadi Sannur Cave	has to be used
Wadi Assiuty	presence of quarries, plantations and land reclamation
Saluga & Ghazal	employs a small number of people
Wadi Allaqi	there are no religious areas, but lot of gold mines
Burullus	fishing in the lake
Wadi Degla	quarries and marble factories
White Desert	a large number work in tourism in the oasis, and a small number in El Farafra
White Desert	safari tourism
Red Sea Islands	working in tourism (diving and boats)

Notes:

Question 4b: ***Local communities depend upon the PA resources for their subsistence.***

Results:



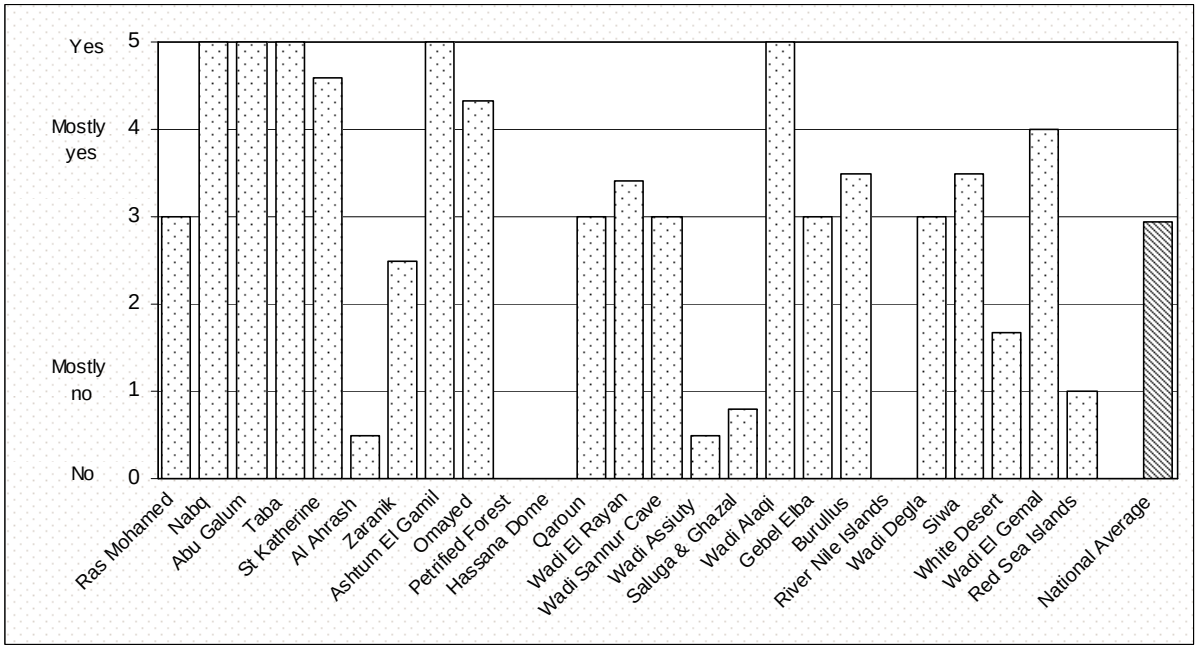
Staff Comments:

St Katherine	handicrafts are a big source of income, but do not extend outside the city of St. Katherine
St Katherine	nature protection, botanical knowledge, etc.
Wadi Degla	exploitation of calcareous rocks outside the protectorate
Wadi Degla	like the materials they use from the quarries
White Desert	the protectorate's only source of income is tourism

Notes:

Question 4c: ***The PA provides community development opportunities through legalized sustainable resource use.***

Results:



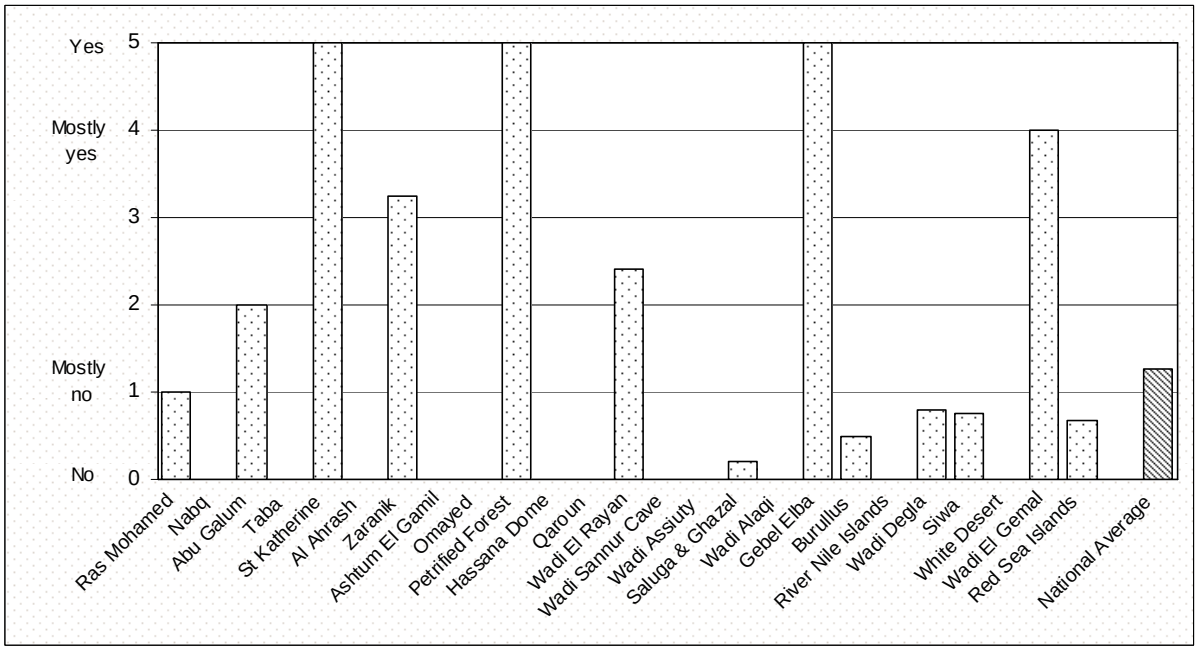
Staff Comments:

St Katherine	such activities are not distributed further from St Katherine than the sheikh awad ecolodge
Petrified Forest	mostly if there are clear rights to the profits
Qaroun	fishing
Wadi El Rayan	a Category vi area for sustainable uses
Wadi El Rayan	there is a population in the reclaimed villages; the protectorate gives them temporary job opportunities, such as sharing in cleaning or making roads
Wadi Sannur Cave	has to be used
Burullus	only illegal hunting of birds and fish
Wadi Degla	ecological tourism
White Desert	ecological tourism

Notes:

Question 4d: *The PA has religious or spiritual significance*

Results:



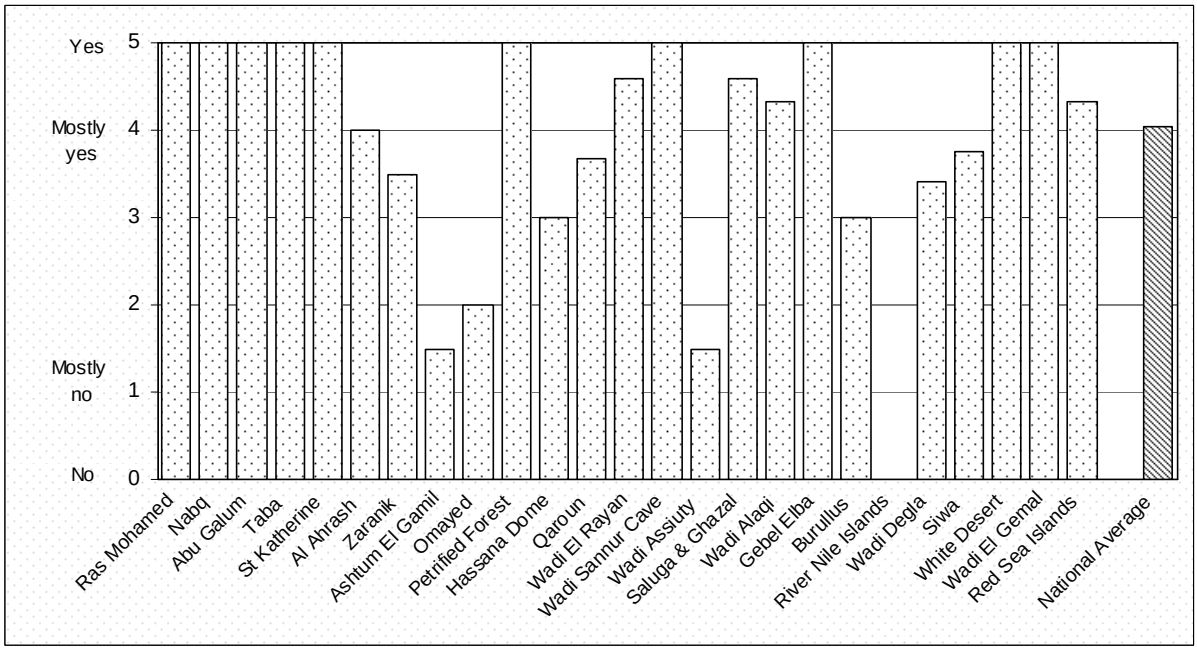
Staff Comments:

Taba	not religious or spiritual, but historical places such as the Nawamis and the inscriptions on rocks
Taba	there are archaeological sites, such as the Nawamis
St Katherine	the monastery, Wadi El Arbaein, etc
Zaranik	there are Roman and Islamic archaeological sites
Zaranik	there are archaeological sites represented by mosque remains
Zaranik	there are historical places like El Qalousiyat (Roman) and El Khawneyat (Islamic)
Ashtum El Gamil	contains archaeological sites from the Ayyubid period
Omayed	there are archaeological sites, represented by a harbour and the El Alamein museum
Qaroun	there are archaeological sites like Qasr El Sagha and Domia El Sebaa
Qaroun	no religious/spiritual sites, but there are some archaeological sites, such as the city of Domia El Sebaa
Wadi Allaqi	Pharaonic sites represent an important heritage
Wadi Allaqi	no religious/spiritual sites, but there are some archaeological sites, like rock inscriptions
Wadi Allaqi	there are gold mines and ancient inscriptions
Burullus	some archaeological sites within the protectorate
Siwa	important archaeological sites, represented by Romano-Greek temples and tombs
Siwa	there are important archaeological sites from the Greek and Roman periods
Siwa	archaeological importance
Siwa	there are no islamic sites, but there are many archaeological sites
White Desert	there are some archaeological sites of the Roman period (tombs and wells)
White Desert	there are archaeological sites within the protectorate
Wadi El Gemal	memorials of important people, museum of Roman road
Wadi El Gemal	there are archaeological sites: the old Roman road and its museum, and other Roman sites.

Notes:

Question 4e: *The PA has unusual features of aesthetic importance.*

Results:



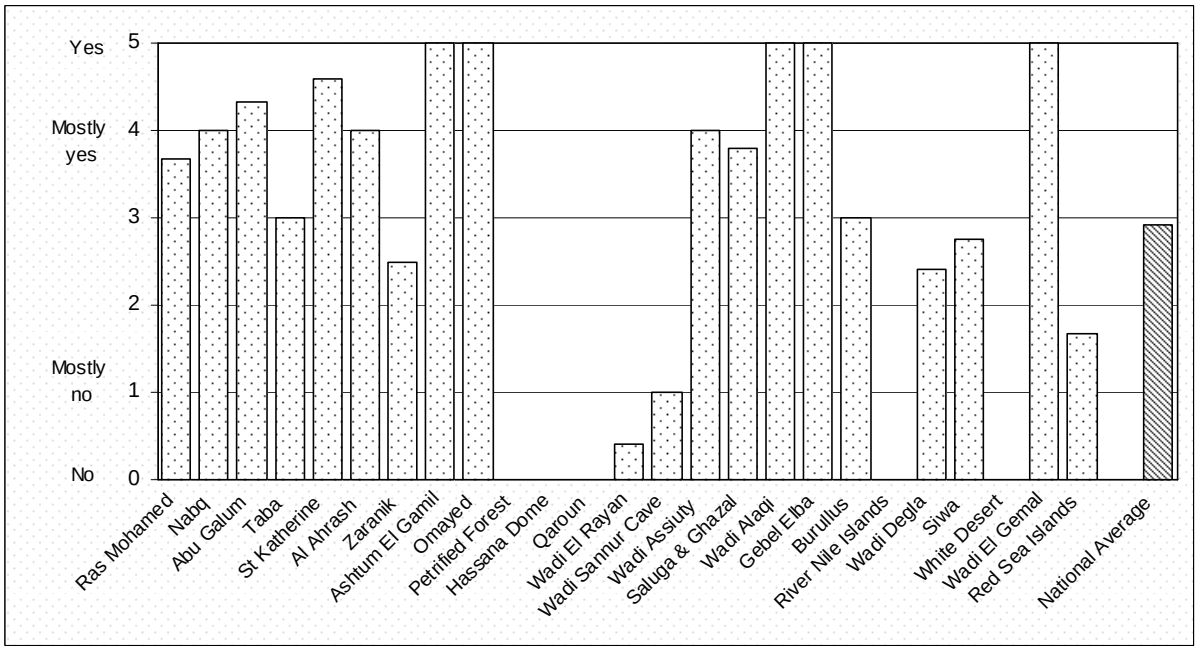
Staff Comments:

Taba	the Colored Canyon
Ashtum El Gamil	bird watching
Qaroun	diversity of resident and migrating birds
Wadi Sannur Cave	rare geological phenomena
Saluga & Ghazal	the 1st Cataract in the Nile Valley is in the protectorate
Saluga & Ghazal	there is the old quarry area in the south of the protectorate
Wadi Degla	geological phenomena

Notes:

Question 4f: *The PA contains plant species of high social, cultural, or economic importance.*

Results:



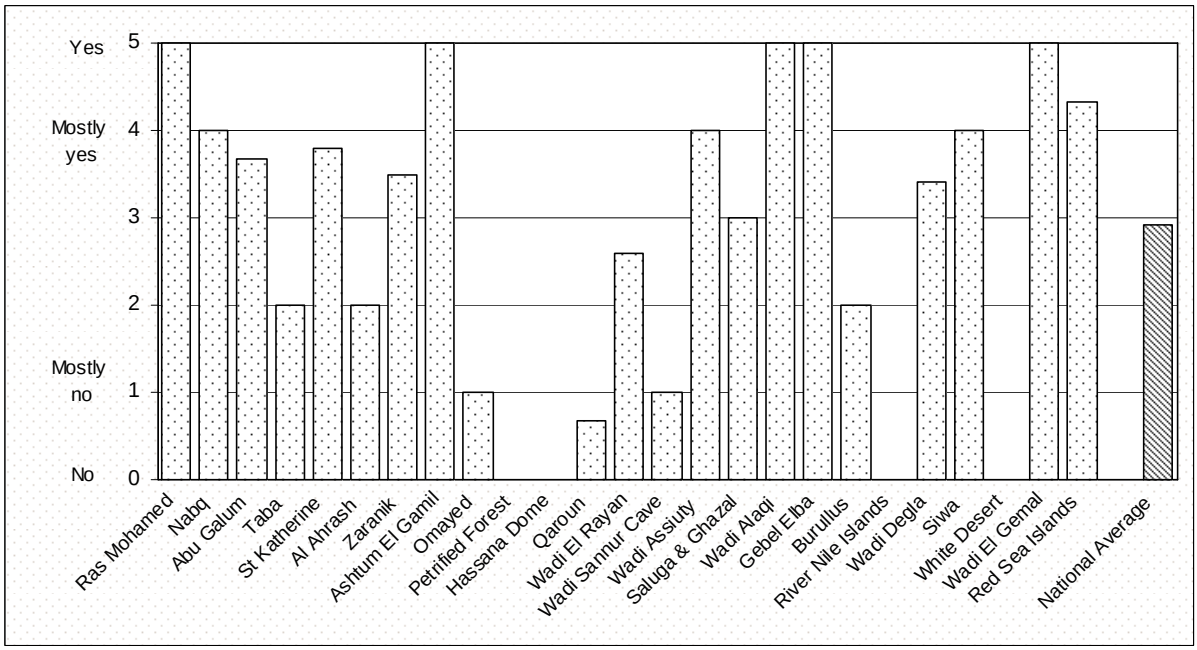
Staff Comments:

St Katherine	medicinal plants
Al Ahrash	medicinal herbs
Zaranik	remains from the enviromnent from the Roman period
Ashtum El Gamil	like *Chenopodium*
Saluga & Ghazal	Henna
Saluga & Ghazal	Henna, *Zizyphus*, *Prunus*
Wadi Allaqi	like *Balanites* which has a local and national economic importance
Burullus	there are some plants of natural importance
Wadi Degla	*Scrophularia*

Notes:

Question 4g: *The PA contains animal species of high social, cultural, or economic importance.*

Results:



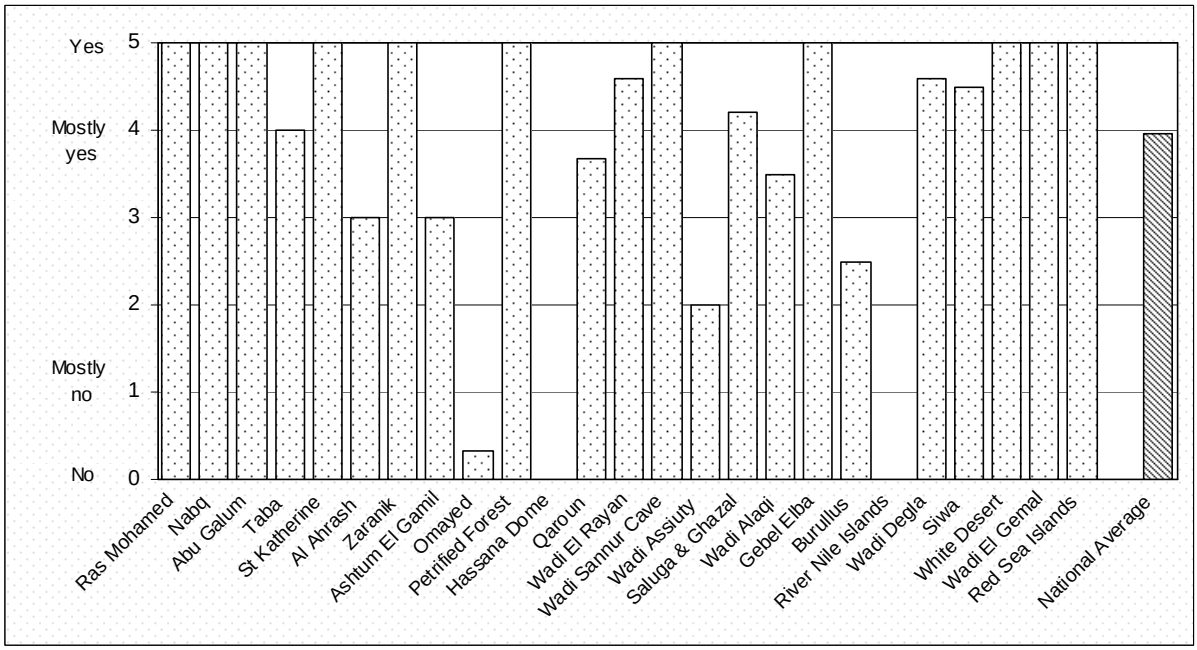
Staff Comments:

Wadi El Rayan	falcons are poached, commerical fishing
Wadi El Rayan	unless we consider passing migrating falcons
Saluga & Ghazal	Nile Crocodile and Glossy Ibis
Wadi Alaqi	fishing
Wadi Alaqi	fish in Lake Nasser, representing an essential source of fish
Wadi Degla	Egyptian Gazelle
Wadi Degla	Egyptian Gazelle

Notes:

Question 4h: *The PA has a high recreational value.*

Results:



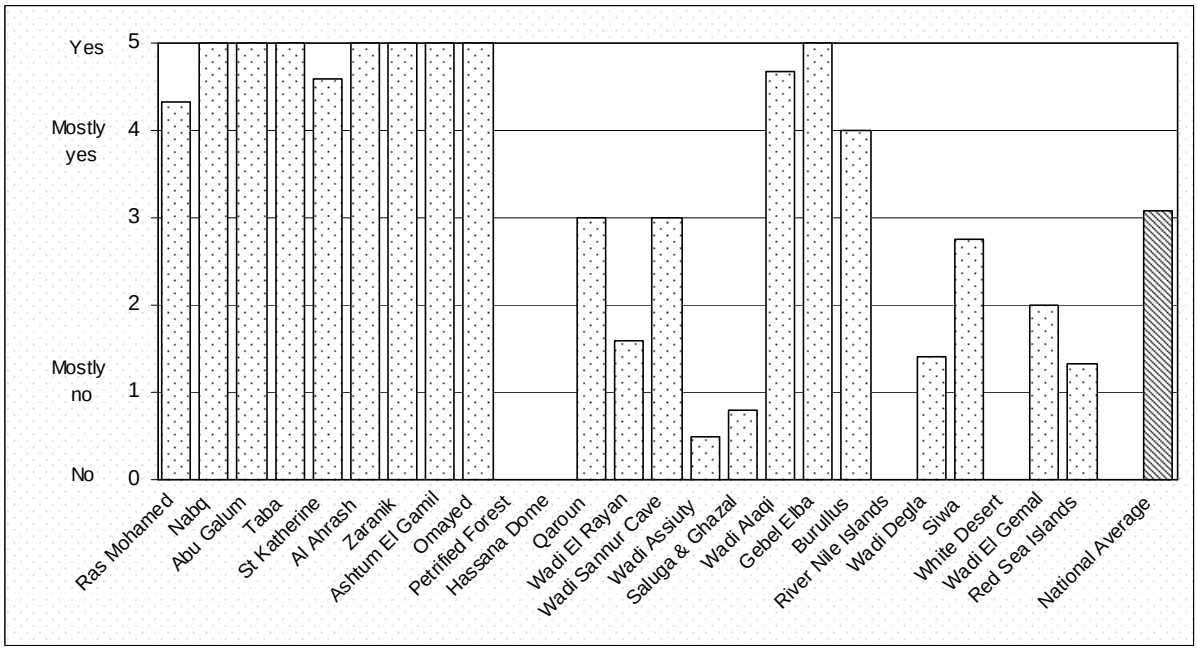
Staff Comments:

Taba	camping and safari for more than one day(week)
St Katherine	hiking, safari, tourism, nature appreciation, climbing
Zaranik	camping, bird watching and recreation
Ashtum El Gamil	like making an annual hunting festival
Petrified Forest	camping, bicycling and running
Qaroun	camping
Saluga & Ghazal	Cataracts, rocks, sand, plants and water
Saluga & Ghazal	relatively underused; bird watching, Nile landscapes for recreation
Saluga & Ghazal	relatively underused; recreation, enjoying natural landscapes
Saluga & Ghazal	surfing
Wadi Allaqi	not be used yet, but trips, safaris, walking, climbing, etc., are all available
Wadi Alaqi	safari trips, amateur fishing are available, but not able to be used
Burullus	bird watching, yachting among 28 islands in the lake
Burullus	the lake should be used in national tourism
Wadi Degla	climbing ,walking, barbecues and running
Wadi Degla	especially by foreigners living in Egypt
Wadi Degla	enjoy calmness and comfort, running and climbing mountains
Siwa	simple enjoyment of oases landscapes, sand, mountains, fossils and petrified forests
Siwa	much available, but unused due to unsufficient support or specialized budget
White Desert	safari tourism
White Desert	an important place for safari tourism

Notes:

Question 4i: ***The PA contributes significant ecosystem services and benefits to communities.***

Results:



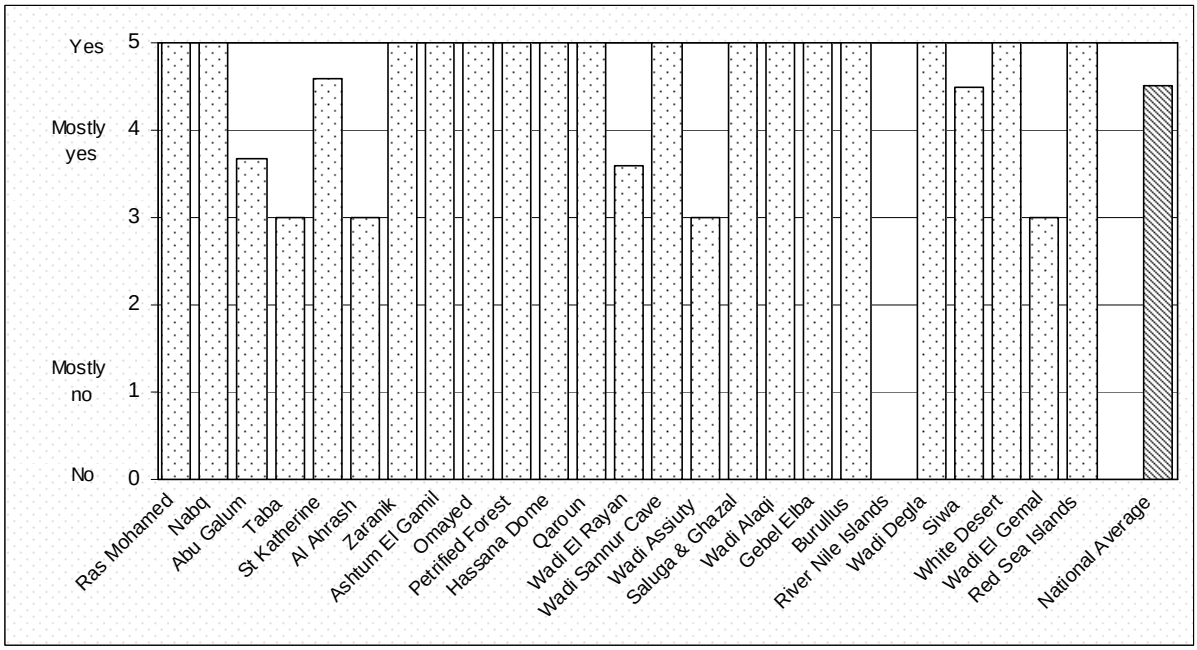
Staff Comments:

Taba	dams, wells, Wadi Ghazal and Ain Hodra
Taba	bulldozing roads and digging wells
St Katherine	dam building, medical and veterinary care
St Katherine	sanitary and veterinary care, and maintaining and developing environmental traditions
St Katherine	six dams in various places
Al Ahrash	fixing sand dunes with trees
Zaranik	supporting replacement projects for associations to decrease pressure on families
Qaroun	avoid pollution of qaroun lake to increase the fishery for population
Wadi El Rayan	irrigration,fishing
Wadi Sannur Cave	must be used
Saluga & Ghazal	there are no local people
Wadi Alaqi	wiping illetracy
Wadi Alaqi	illetracy waping and small agricultures
Wadi Alaqi	wiping illiteracy and increase the number of trees
Burullus	offer aids to hunters
Wadi El Gemal	there is a training plan for divers and guides

Notes:

Question 4j: *The PA has a high educational and/or scientific value.*

Results:



Staff Comments:

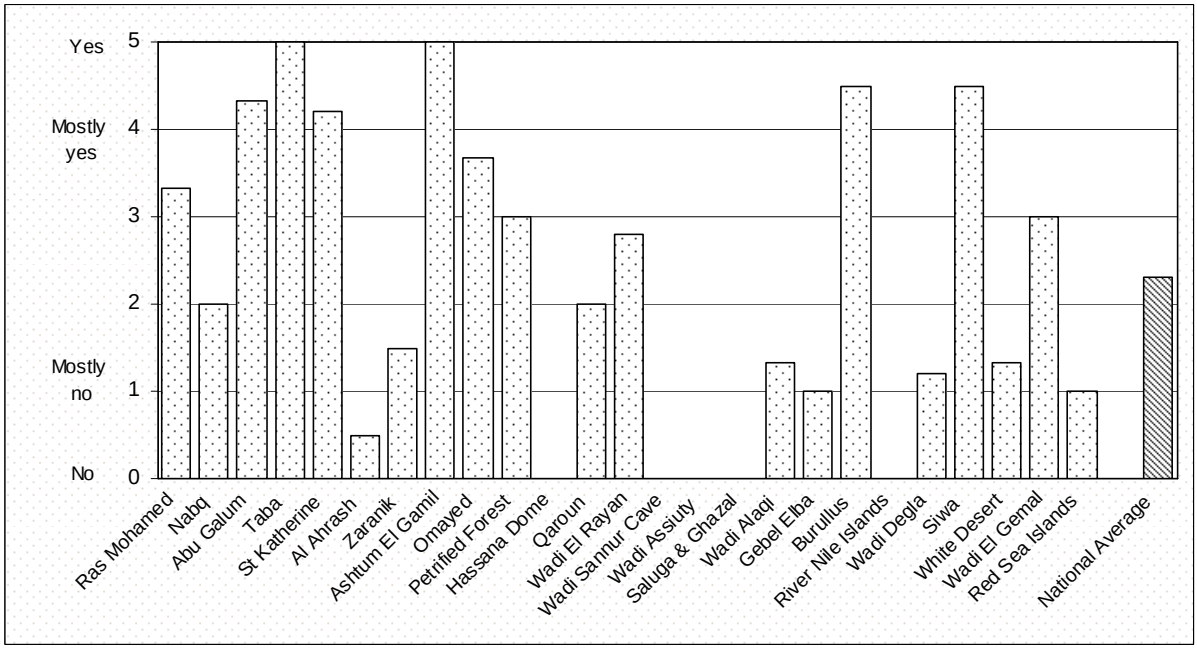
Taba	Coloured Canyons, natural wells
Taba	many university trips visit the protectorate
St Katherine	the diversity of medicinal plants and presence of many animals
Al Ahrash	developing the ecological awareness of citizens
Qaroun	geological studies for university students and researchers
Saluga & Ghazal	ecological trips for school students
Saluga & Ghazal	scientific researches and ecological awareness for university and school students
Wadi Allaqi	reducing illiteracy; university-student visits; research center important for researchers
Wadi Allaqi	university science students from geology and botany
Burullus	students from universities such as Tanta, Dumyatta, Kafr El Sheikh; scientific research
Burullus	scientific value
Wadi Degla	a place close to schools and universities
Red Sea Islands	programs of environmental awareness and scientific visits

Notes:

SECTION 5. Vulnerability

Question 5a: *Illegal activities within the PA are difficult to monitor.*

Results:



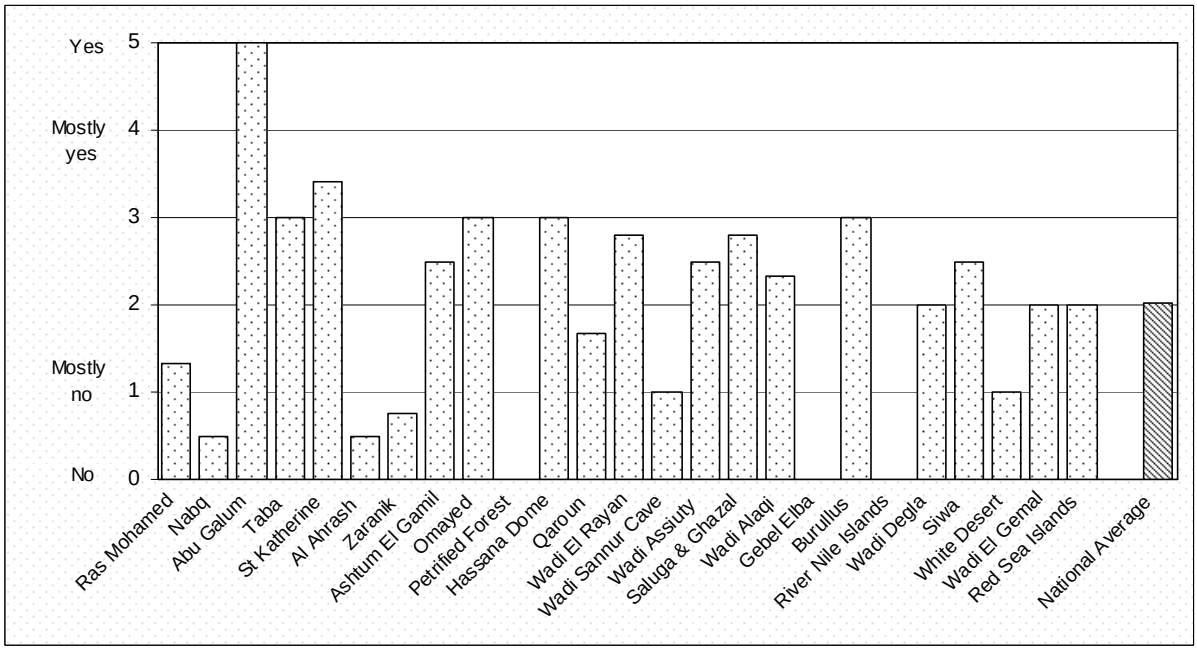
Staff Comments:

Ras Mohamed	coastal area is long
Abu Galum	growing of drugs, not enough rangers for the large protectorate
Taba	growing of drugs, hunting of hawks, low number of rangers for the large area
St Katherine	hunting, cutting trees for fuel, unorganized tourism, widespread illegal cultivation of drugs
St Katherine	large area, not enough facilities, hunting
Zaranik	large area; illegal activities occur in distant uncontrolled areas and after working hours
Ashtum El Gamil	hunting, large area of the protectorate
Qaroun	no known illegal activities
Wadi Assiuty	illegal planting and reclamation activities
Wadi Allaqi	violations occur at night, shortage of facilities, low number of workers; pesticide use
Burullus	illegal fishing without licence
Wadi Degla	no known illegal activities
Siwa	not enough monitoring tools
Siwa	gazelle over-hunting, not enough facilities (rangers, cars), large area with various entrances
White Desert	no known illegal activities
White Desert	hunting of hawks, damaging geological structures, large area 3010 km^2
Red Sea Islands	because the protoctorate area is 23,000 km^2

Notes:

Question 5b: *Law enforcement is low in the region.*

Results:



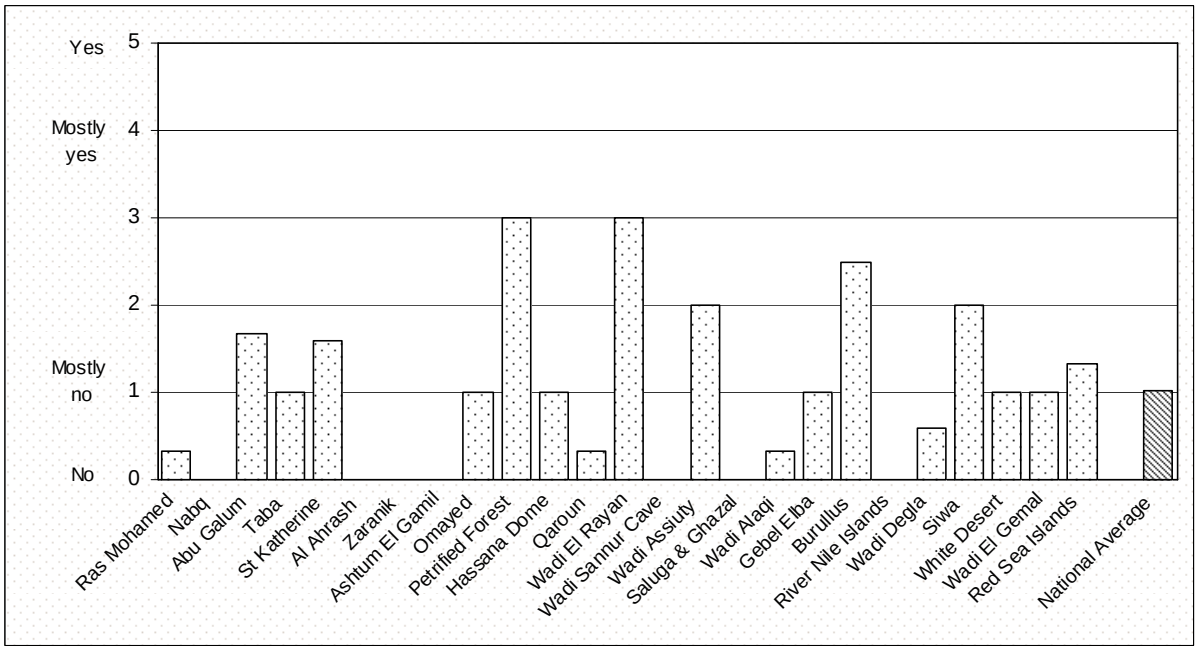
Staff Comments:

Taba	there are many outlaws whom the police cannot control
St Katherine	large area, not enough facilities
St Katherine	low number of rangers for inspections
Wadi Assiuty	the PA management apply the law, but the police do not

Notes:

Question 5c: ***Bribery and corruption is common throughout the region.***

Results:



Staff Comments:

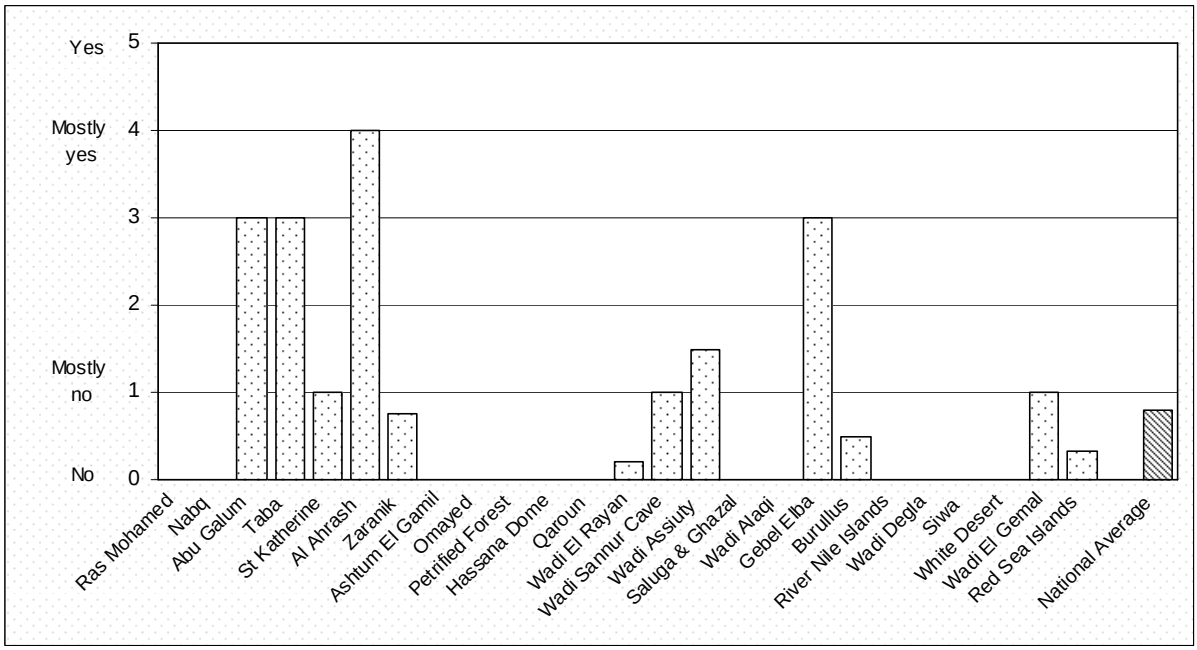
St Katherine	endemic in egypt
St Katherine	interference of local council and governorate
Wadi Assiuty	law is not being applied on those with connections
Wadi Allaqi	yes, in some matters concerned with some authorities (without mentioning names)
Wadi Allaqi	because the hunters are the military soldiers, and the police pay no attention

Notes:

This is an interesting response, since contrary to the assumed view of many, it suggests that bribery and corruption are **not** a real issue in the PAs, except for isolated instances.

Question 5d: ***The area is experiencing civil unrest and/or political instability.***

Results:



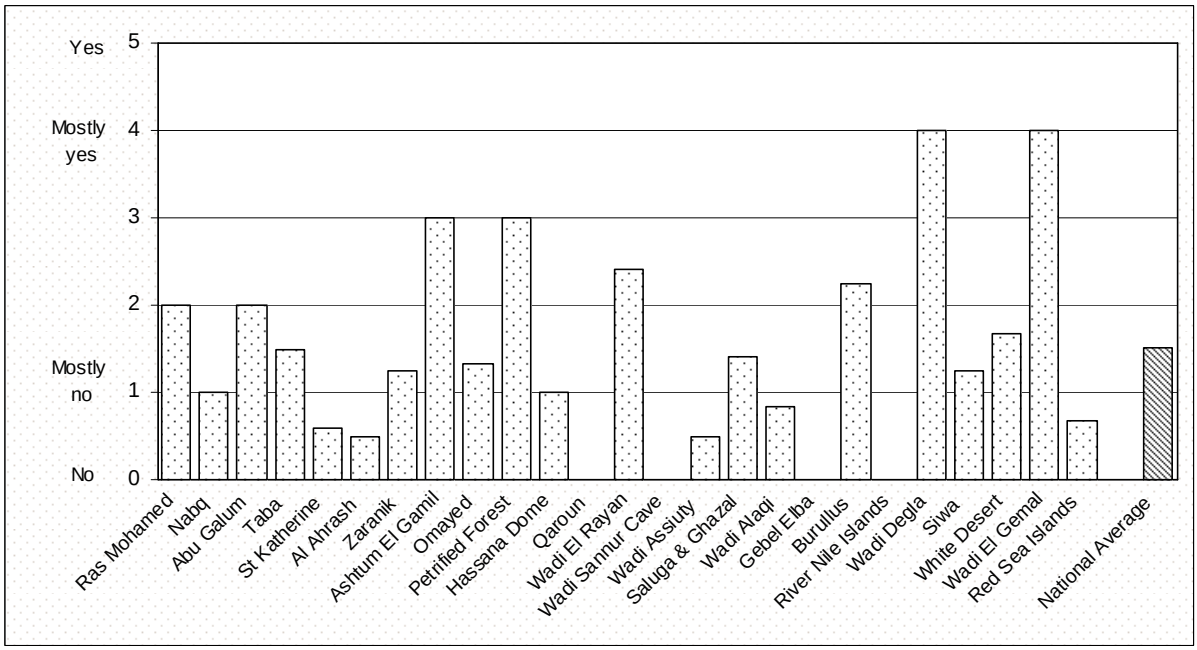
Staff Comments:

Taba	because it is near to the Israeli border
Wadi El Rayan	not obviously, but security police maintain high vigilance with tourists, thereby affecting the benefits of ecotourism

Notes:

Question 5e: ***Cultural practices, beliefs, and traditional uses conflict with the PA objectives.***

Results:



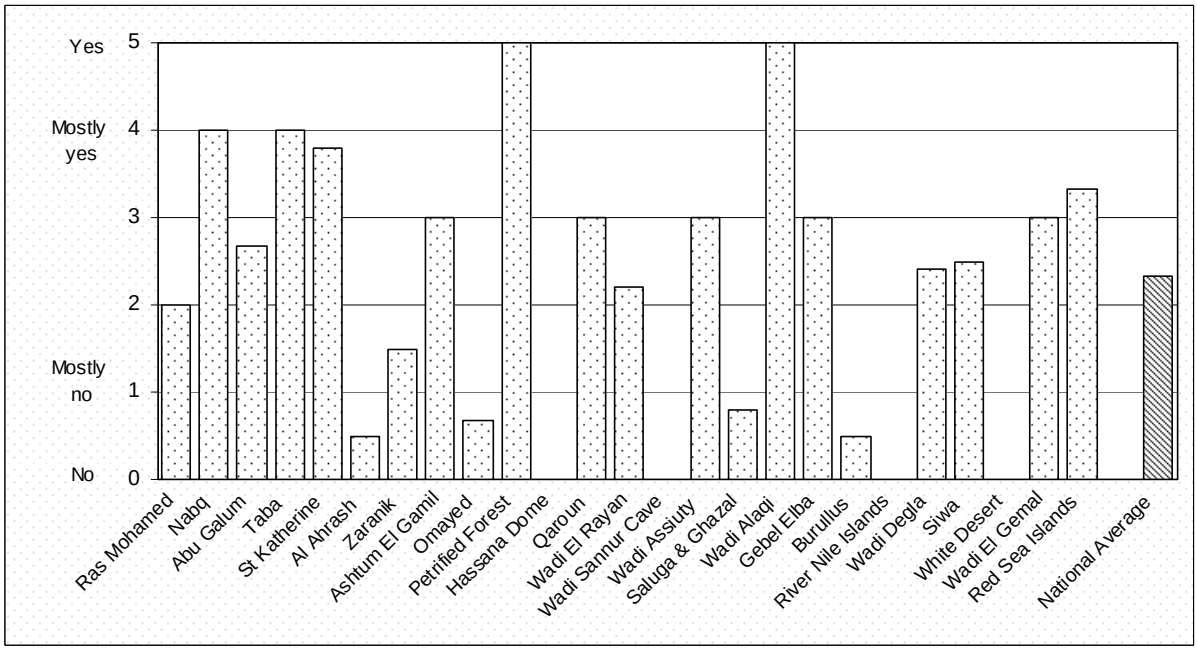
Staff Comments:

Ras Mohamed	fishing
Taba	eating some animals
Wadi Assiuty	the local people do not care about wild and medicinal plants
Saluga & Ghazal	violations by secondary schools and university

Notes:

Question 5f: *The market value of the PA resources is high.*

Results:



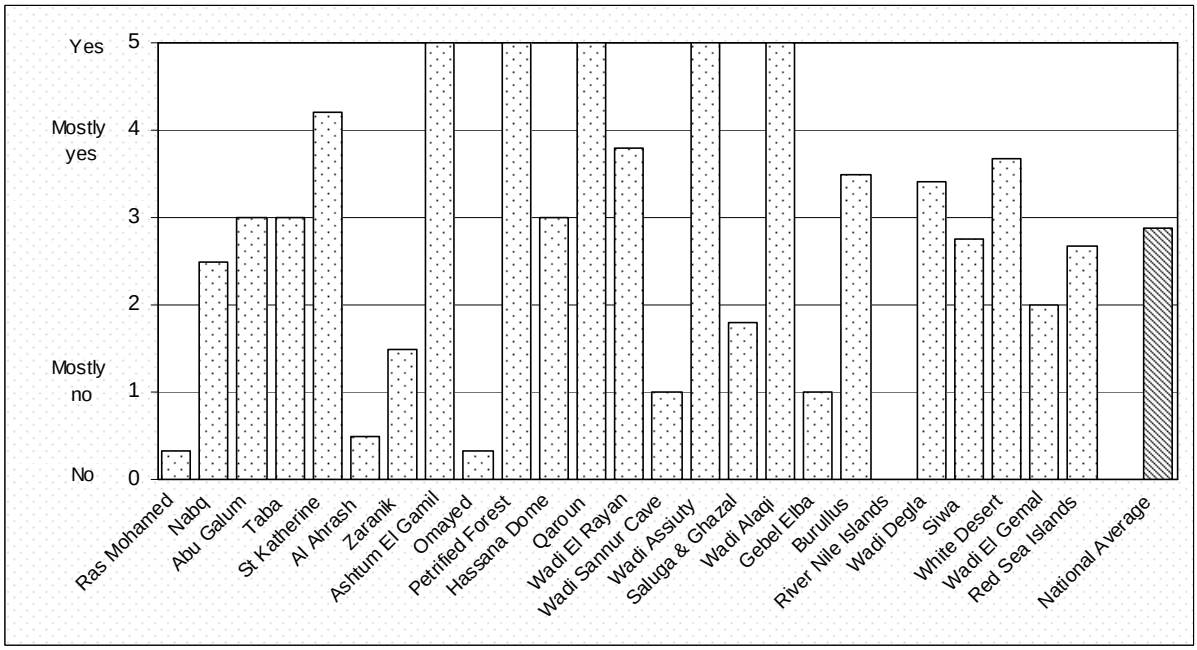
Staff Comments:

Taba	mineral water factory, glass sand, except in some places as wadi el morra
St Katherine	medicinal plants, ornamental stones
Wadi El Rayan	falcon poaching is driven by market demand
Wadi Alaqi	sea cucumber, lobster
Wadi Degla	no resources

Notes:

Question 5g: *The area is easily accessible for illegal activities.*

Results:



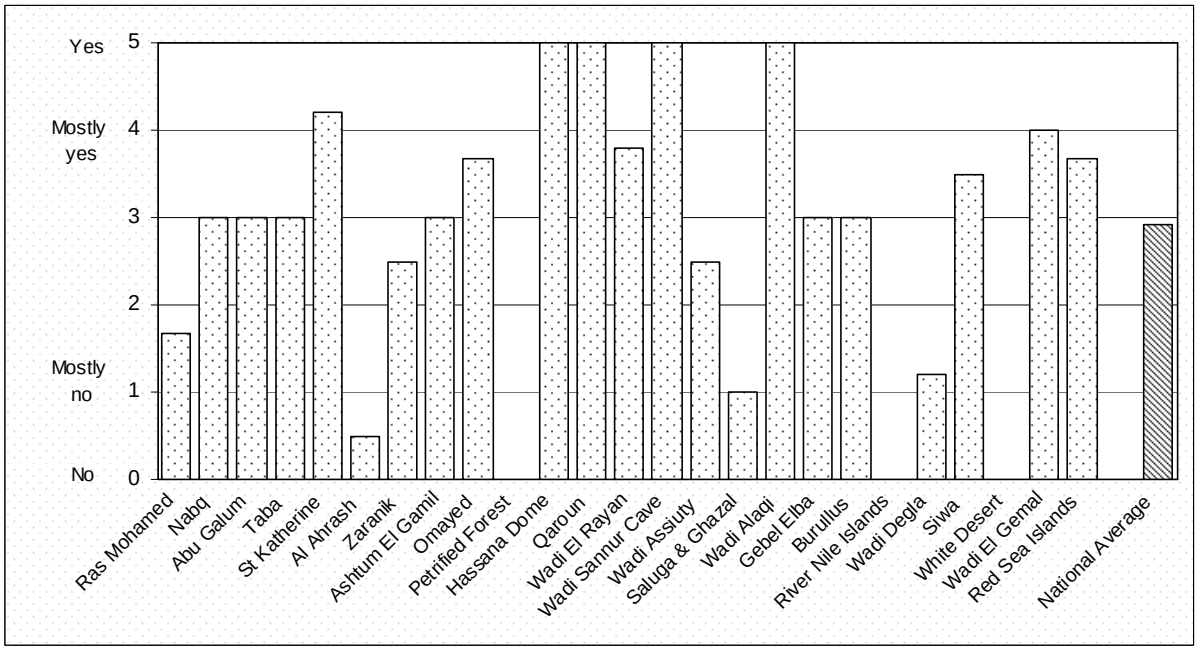
Staff Comments:

Wadi El Rayan	the asphalt road bisects several tracks; falcon hunters use motorcycles and can go anywhere
Saluga & Ghazal	fishing
Wadi Alaqi	fish smuggling (3)
White Desert	wide desert area
White Desert	stealing some monuments

Notes:

Question 5h: *There is a strong demand for vulnerable PA resources.*

Results:



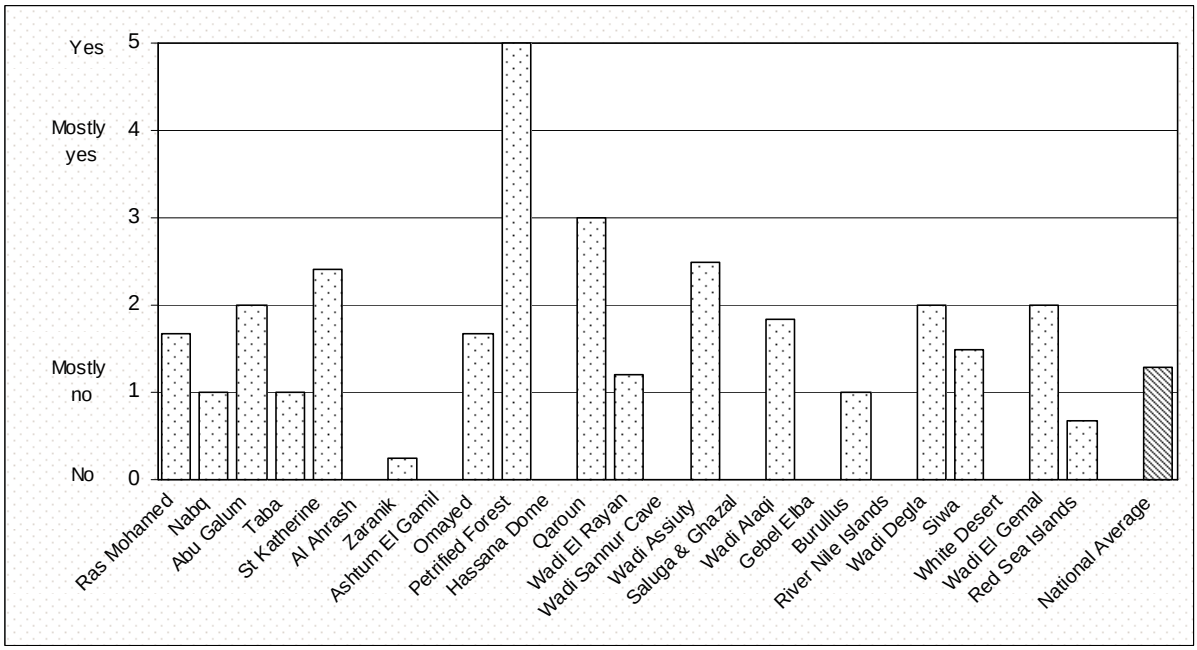
Staff Comments:

Taba	medicinal plants
Wadi El Rayan	international demand for falcons, sold in Cairo markets
Wadi Alaqi	economical, educational
Burullus	endangered fish
Burullus	hunting migrating birds

Notes:

Question 5i: ***The PA manager is under pressure to unduly exploit the PA resources.***

Results:



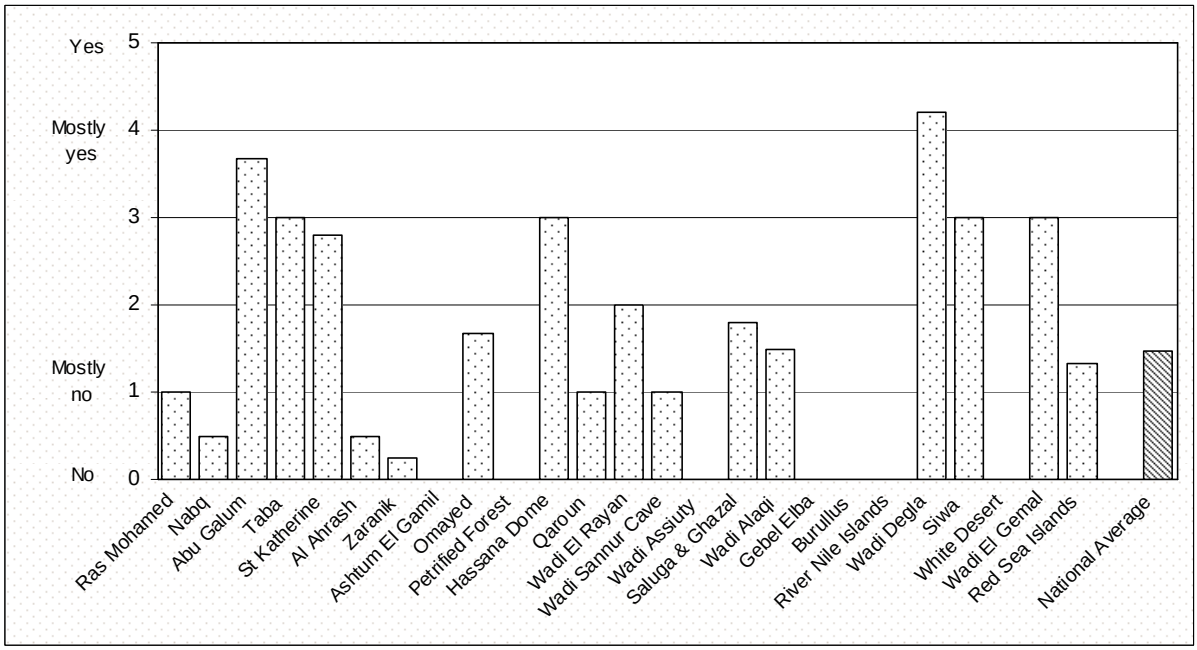
Staff Comments:

St Katherine not enough rangers or cars; community guards don't tell about violations by their relatives

Notes:

Question 5j: *Recruitment and retention of employees is difficult.*

Results:



Staff Comments:

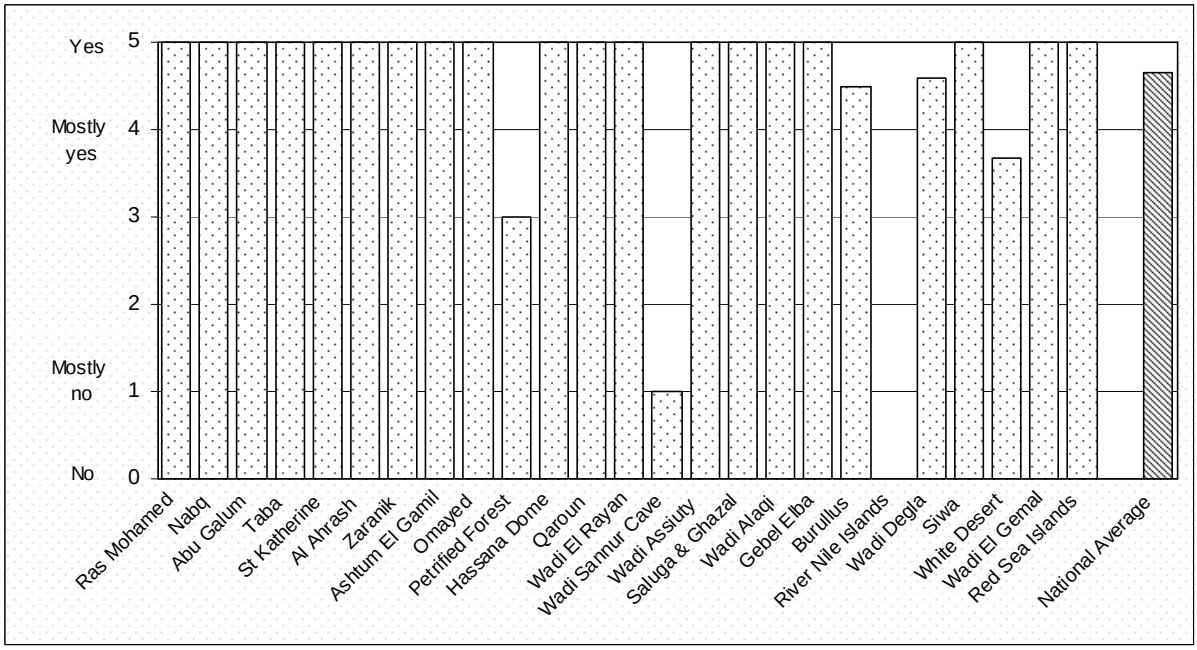
Abu Galum	due to the nature of the area
Abu Galum	low salaries, no enough living facilities
Taba	low salaries (2), working tools shortage, living places so far from the town
St Katherine	no chances to work
St Katherine	low salaries for local staff
St Katherine	low salaries (3), better jobs other than these, no suitable place for living
Zaranik	low salaries
Saluga & Ghazal	hard work, employing daily workers and delaying their salaries (2)
Wadi Allaqi	the protectorate is about 180 km away from the town, there are better jobs other than working there
Wadi Allaqi	we have the same salaries as everyone else, despite our buildings being dangerous because they are poorly built, without foundations
Wadi Allaqi	low salaries, no stable management system, no chance of promotion
Burullus	good management, good salaries
Wadi Degla	there are better jobs other than working in the protectorate
Wadi Degla	low salaries, no training programmes
Wadi Degla	not enough training programmes for rangers
Siwa	low salaries
White Desert	there are no workers to keep

Notes:

SECTION 6. Objectives

Question 6a: *PA objectives provide for the protection and maintenance of biodiversity.*

Results:



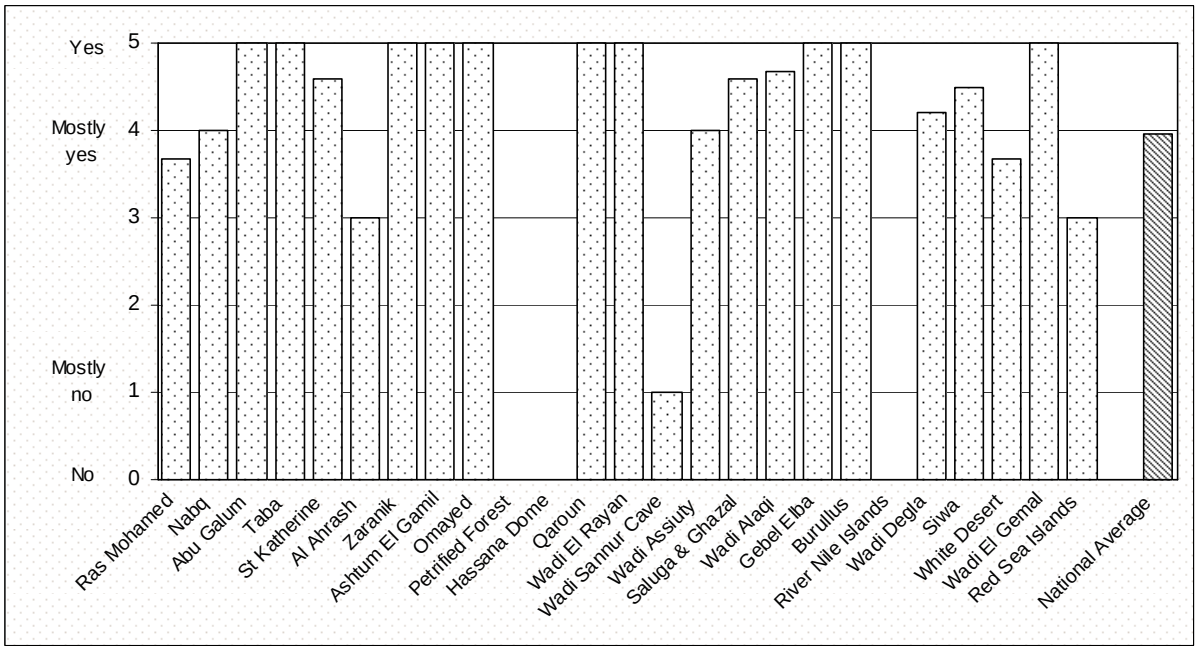
Staff Comments:

St Katherine	because no direct use for the beduin
St Katherine	there's a good Management Plan (2)
Zaranik	there's a Management Plan
Hassana Dome	no Management Plan
Wadi Alaqi	but no Management Plan
Wadi Alaqi	no Management Plan
Wadi Degla	there's a Management Plan, but this hasn't been discussed yet
Siwa	no Management Plan
White Desert	no Management Plan (2) - it's being prepared
Wadi El Gemal	there's a Management Plan

Notes:

Question 6b: ***Specific biodiversity-related objectives are clearly stated in the management plan.***

Results:

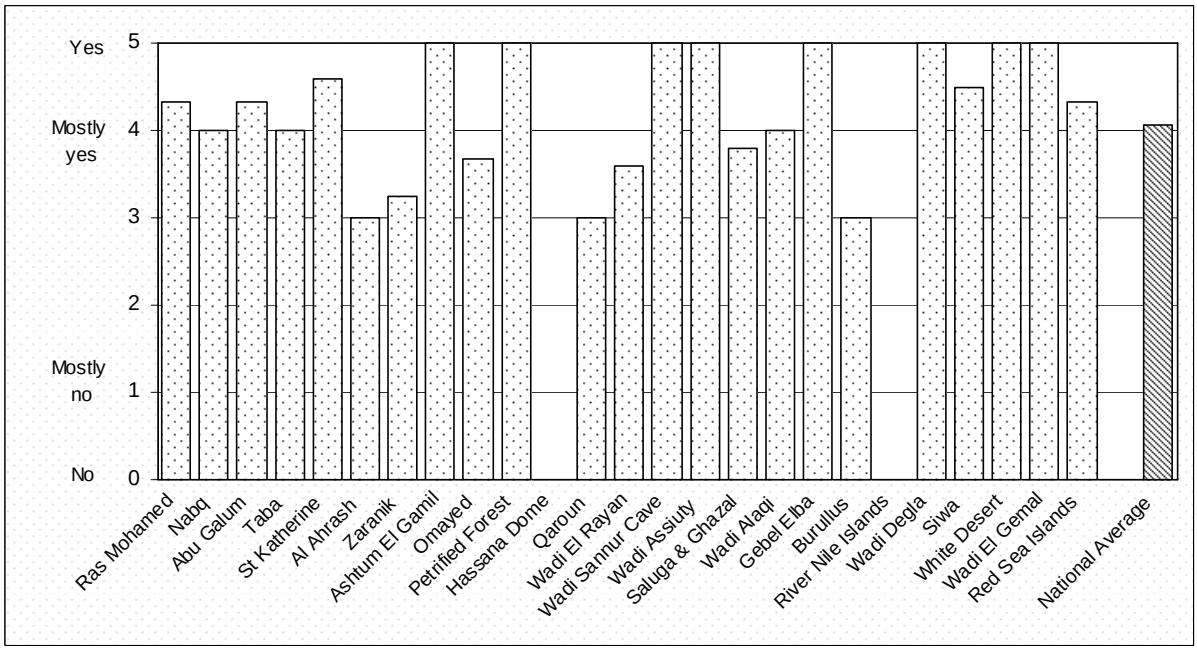


Staff Comments:
No comments

Notes:

Question 6c: ***Management policies and plans are consistent with the PA objectives.***

Results:

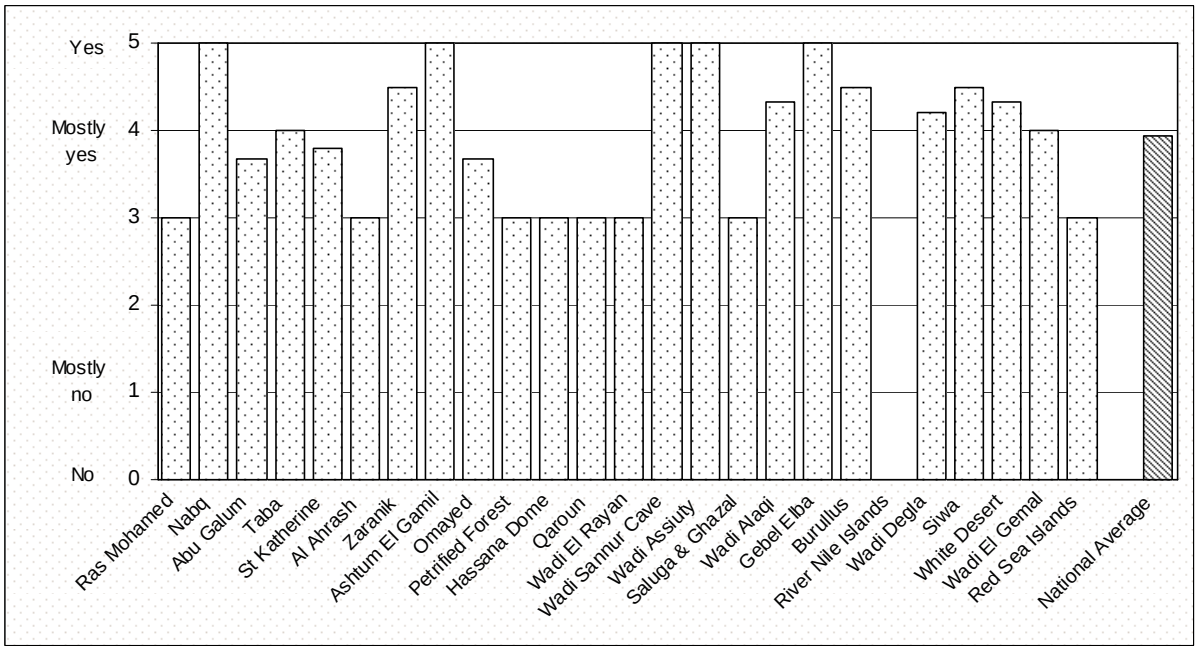


Staff Comments:
No comments.

Notes:

Question 6d: ***PA employees and administrators understand the PA objectives and policies.***

Results:

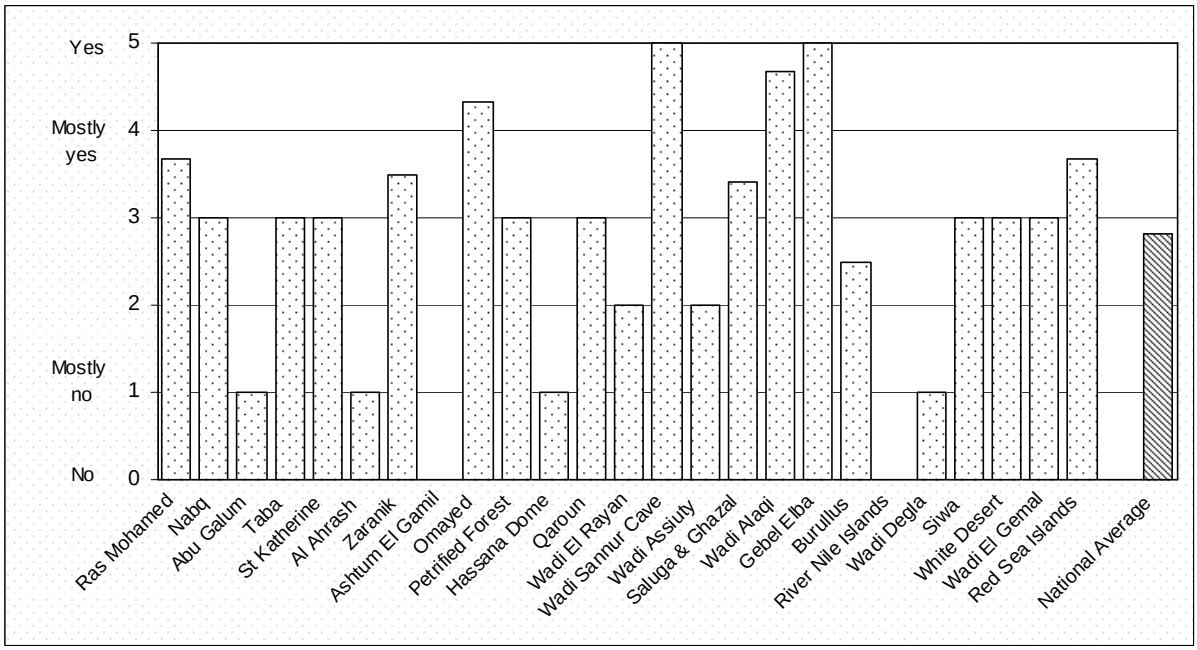


Staff Comments:
No comments.

Notes:

Question 6e: ***Local communities support the overall objectives of the PA.***

Results:



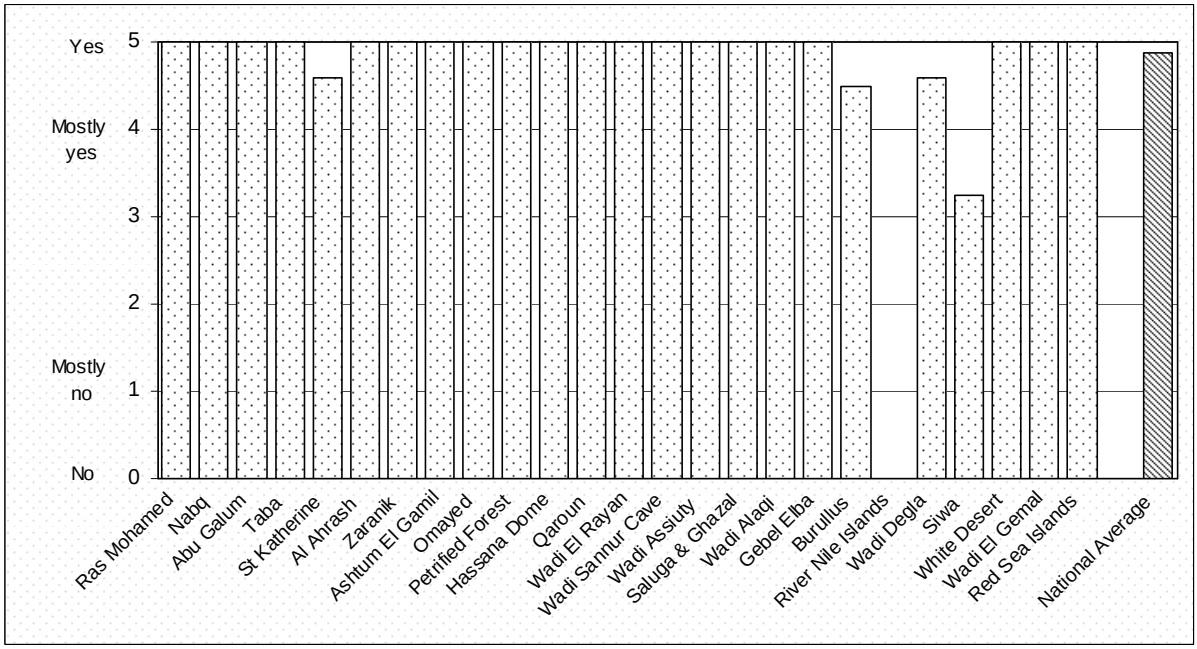
Staff Comments:
No comments.

Notes:

SECTION 7. Legal Security

Question 7a: *The PA has long-term legally binding protection.*

Results:



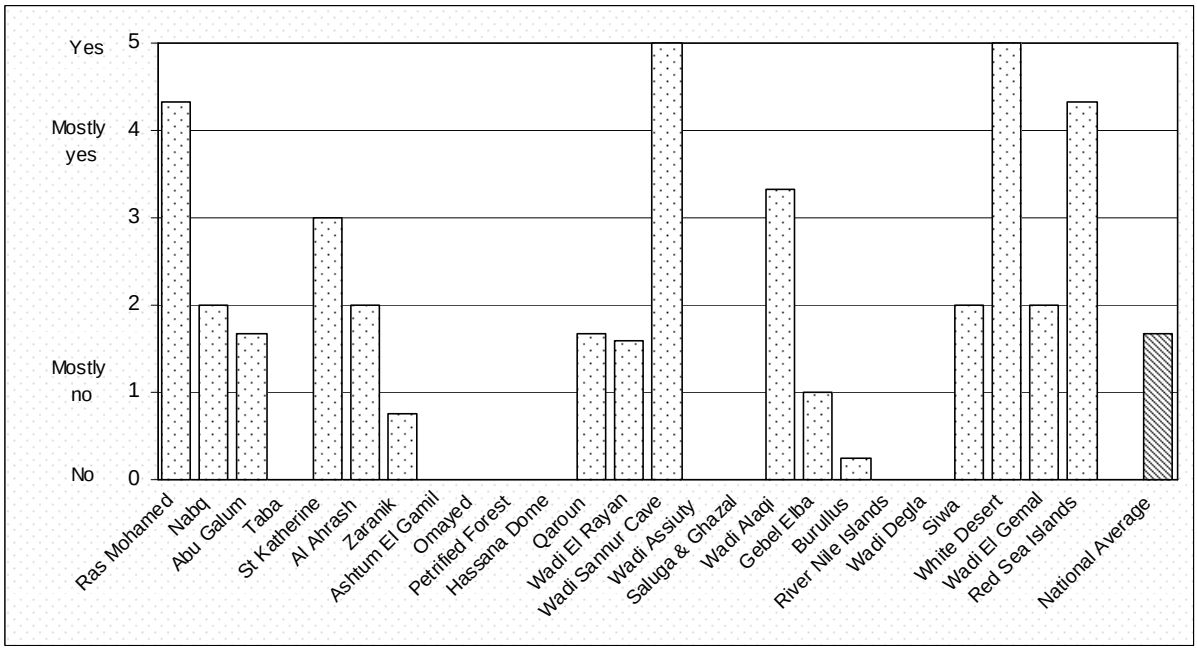
Staff Comments:

St Katherine	Law 102 and UNESCO status, but violated
Petrified Forest	there is legal protection according to Law 102 from 1993
Wadi El Rayan	there is legal protection, but inefficient, i.e. not applied
Wadi Assiuty	there are severe conflicts
Siwa	annulment of the rule announcing protectorate (No. 1147 for 2002)

Notes:

Question 7b: *There are no unsettled disputes regarding land tenure or use rights.*

Results:



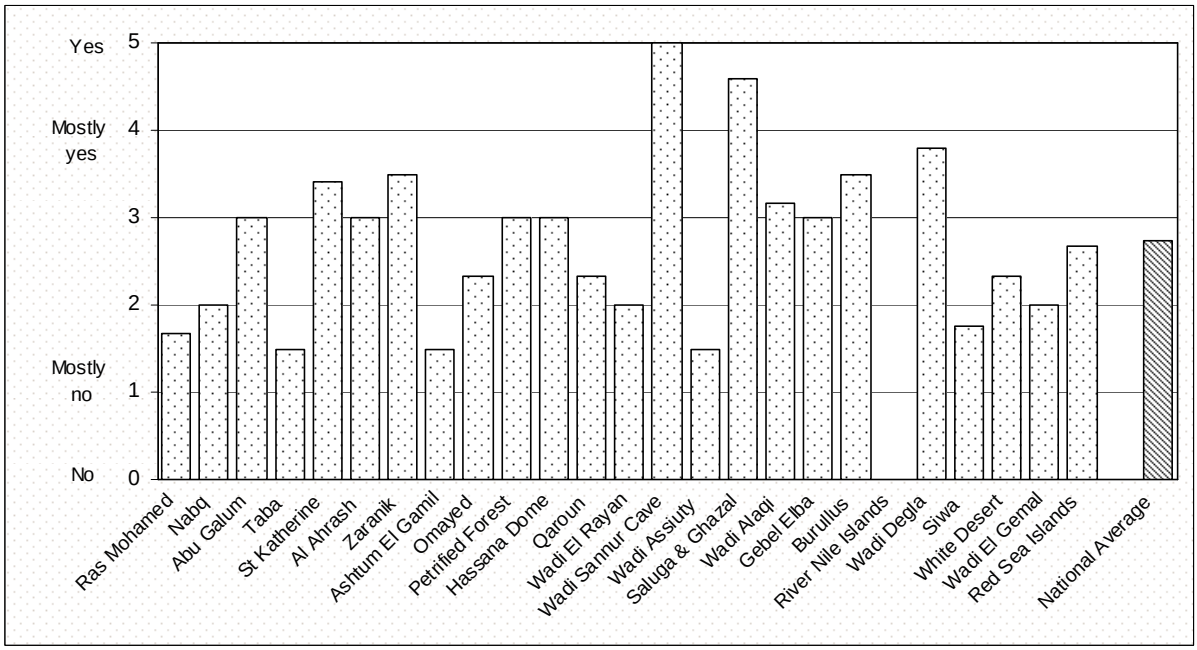
Staff Comments:

Taba	with the bedouins, South Sinai governorate and the geological survey
Taba	conflicts with the army about quarries for extracting kaolin
St Katherine	no recognition of ORFI land rights, position of historical sites uncertain in terms of ownership
St Katherine	very few conflicts about legal rights, especially at the city council
St Katherine	there is a conflict between the PA and the Governorate on the land for residential and administrative buildings
Al Ahrash	there are some conflicts
Zaranik	conflicts over land property rights (2) , especially the ownership rules in North Sinai
Ashtum El Gamil	conflicts with the authority and proprietor families of the fish farms (2)
Omayed	there are conflicts from various directions
Petrified Forest	conflict between Ministry of Housing & Utilities and NCS to surrender a part for housing
Petrified Forest	conflict between the Governorate and the EEAA on various grounds
Hassana Dome	present
Qaroun	there are some conflicts on agricultural land
Saluga & Ghazal	the south-west part of the protectorate is owned by some families; they must have their property taken away for the common good (5)
Wadi Allaqi	there are some conflicts with rights-of-use in the mines and quarries, and agriculture on the banks of Lake Nasser, but no property is owned
Burullus	between archaeological sites, the protectorate and fish farming
Burullus	there are some conflicts especially between the proprietors of fish farms and cattle herders who depend on grazing around the lake (2)
Wadi Degla	involvement of the governorate in the quarries
Wadi Degla	conflicts between the PA and the governorate over boundary limits (2)
Siwa	there are some conflicts between using the land and touristic areas at one well

Notes:

Question 7c: ***Boundary demarcation is adequate to meet the PA objectives.***

Results:



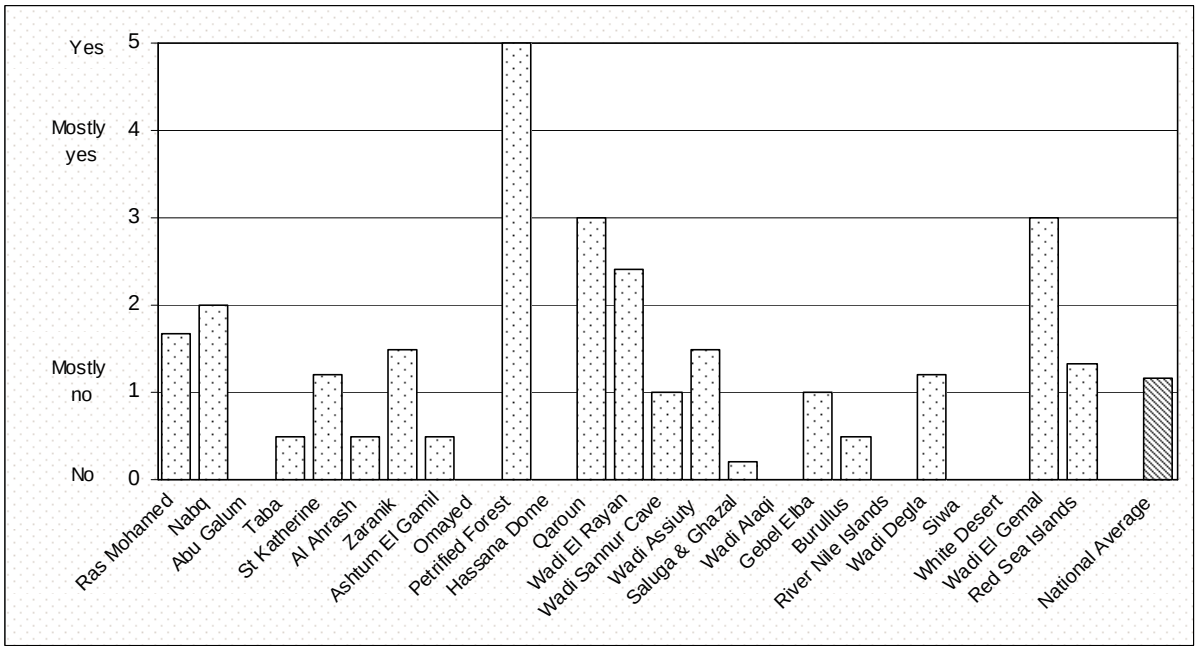
Staff Comments:

Taba	except the western border which hasn't been defined
St Katherine	borders with cities
St Katherine	no recognition of ORFI land rights, position of historical sites uncertain in terms of ownership
Zaranik	not everybody (neither visitors nor the local population) knows the PA limits
Ashtum El Gamil	due to absence of signs to define the PA boundaries (2)
Wadi Assiuty	the PA is only a small part of Wadi Assiuty: it doesn't represent the whole of it, but we are just using the name
Saluga & Ghazal	there are a number of extra islands that should be included within the PA
Wadi Allaqi	the protectorate boundaries are unknown even to local people; the PA is large (23,000 km^2) and it is difficult to realize the target for all parts
Burullus	the protectorate has obvious and constant boundaries
Wadi Degla	the boundaries are illogical, running through army camps and industrial areas very harmful to the protectorate
Red Sea Islands	the nearby areas have a direct effect on the protectorate core

Notes:

Question 7d: ***Staff and financial resources are adequate to conduct critical law enforcement activities.***

Results:



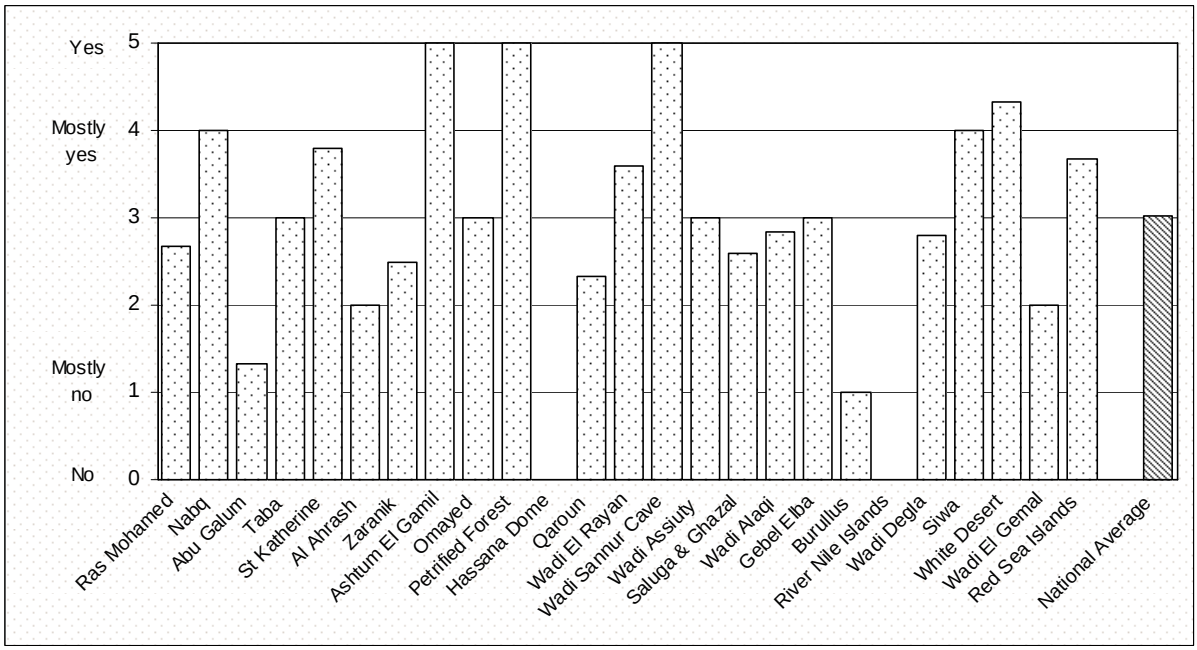
Staff Comments:

Taba	not sufficient at all
Taba	number of workers is small, in addition to the low financial support
St Katherine	inadequate, but potentially adequate if admission fees are recycled
Ashtum El Gamil	we need a number of workers, practical equipment and means of transport
Wadi El Rayan	there are no tools specialized for activities for application of the law
Wadi El Rayan	OK while the project is running, but after it we don't know
Wadi El Rayan	monks from the monastery in El Eyoun area are a problem
Wadi Assiuty	where the protectorate is desert and there are no 4X4 cars
Saluga & Ghazal	the protectorate in Aswan needs double the number of workers (3) and more finances (for better guarding, budget and equipment, for the removal of the property of the 12 fedans and to compensate the farmers and their families)
Wadi Allaqi	the protectorate is lacking resources for protection, cars, tools, binoculars, and cameras; this lack represents an obstacle to developing the PA
Wadi Alaqi	presence of only one researcher to apply the law
Burullus	there are no means of transport (2)
Burullus	lack of workers and lack of cars and absence of establishments
Wadi Degla	lack of workers, low salary for new contracts, delayed budget
Red Sea Islands	insufficient despite the small land surface area, because of its dispersion over a huge area

Notes:

Question 7e: *Conflicts with the local community are resolved fairly and effectively.*

Results:



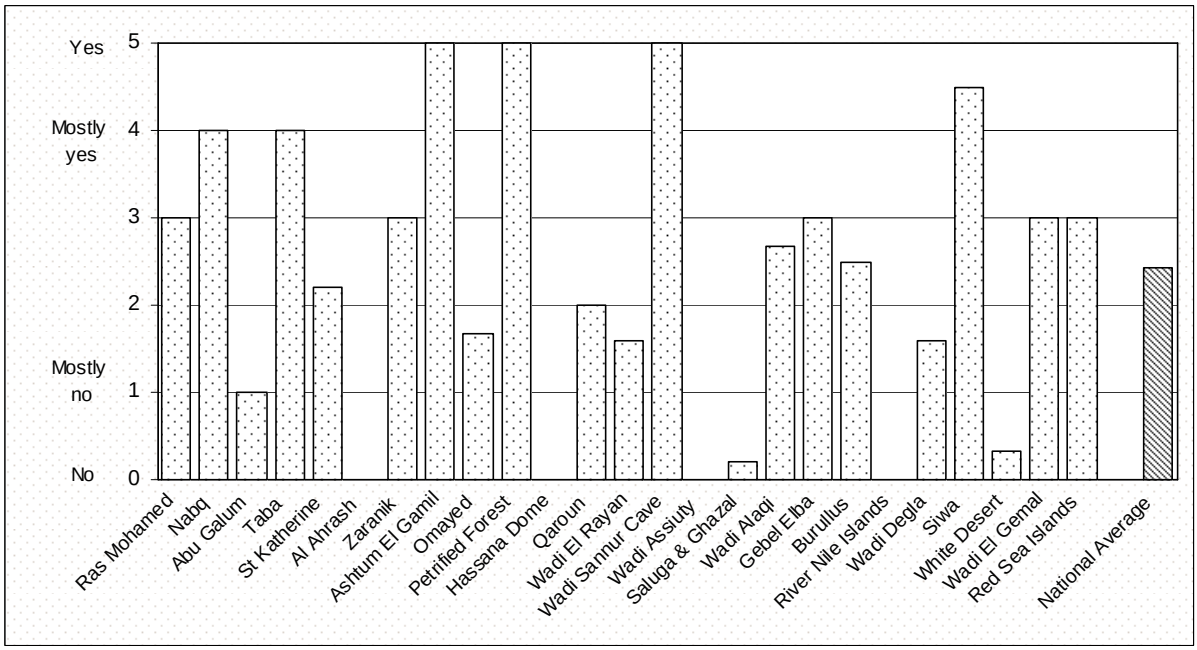
Staff Comments:

Taba	by means of traditional councils
St Katherine	use of traditional law with local communities (2)
St Katherine	arbitration through the Community Guard system
St Katherine	like grazing and protection
Al Ahrash	because it didn't happen before
Zaranik	there is no compensation activities that are now against PA rules, and there are no replacements
Petrified Forest	amically with them
Hassana Dome	absence of conflicts of this kind
Qaroun	there are no conflicts with the population
Saluga & Ghazal	a part of Saluga is farmed; it would be better to include this within the PA to avoid its bad effect on the long term
Wadi Alaqi	there are no conflicts with the original population (4)
Burullus	laxity in the application of the law increases the size of the problem
Burullus	lack of replacements
Wadi Degla	there is no local population
Wadi Degla	this occurs by activating some Bedouin statutes like El Helf and El Dakhla, and going to the tribe elder
Siwa	it may be fair, but it is not efficient
White Desert	absence
Red Sea Islands	there is no population on the islands

Notes:

Question 7f: *EIA arrangements to regulate development activities are adequate and enforced.*

Results:



Staff Comments:

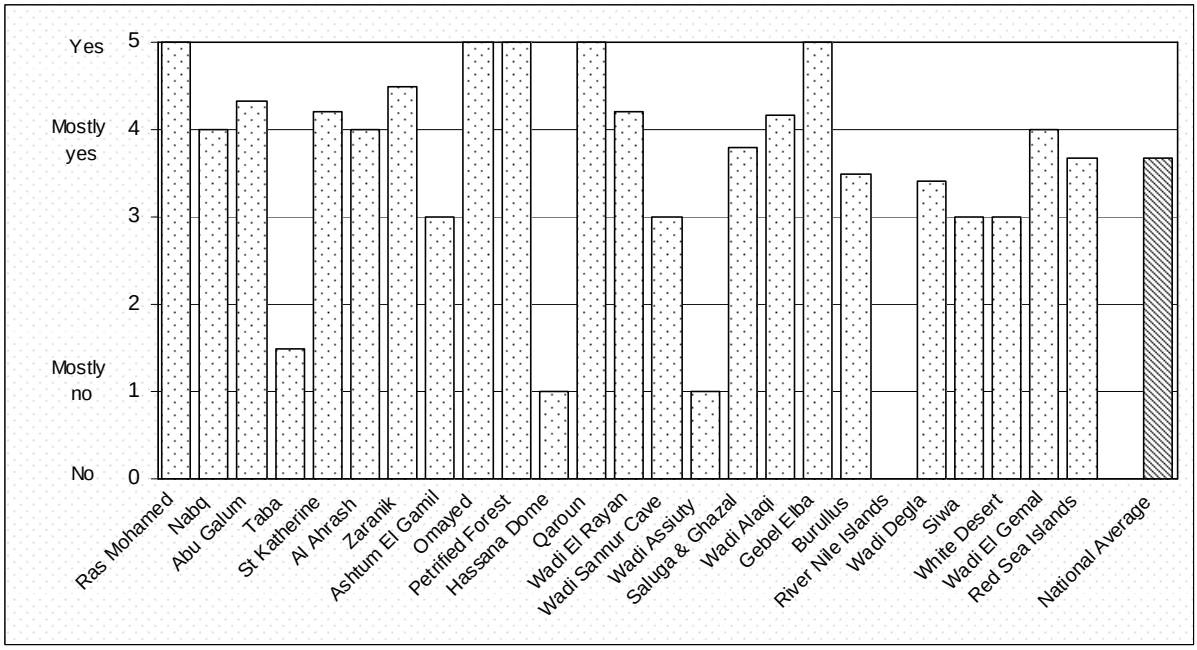
St Katherine	some violations for agreed arrangements
St Katherine	procedures in place, but not enforced or monitored
St Katherine	especially with the governmental actions which reject doing EIA studies at all
Al Ahrash	absence of population in the protectorate
Hassana Dome	no actions to evaluate EIA due to absence of activities demanding it
Qaroun	there are no development activities in the protectorate
Wadi El Rayan	currently putting in place a systematic procedure for monitoring compliance
Wadi El Rayan	some economic activities within the protectorate have no or only a poor EIA, but there is still activation of funding and action
Saluga & Ghazal	absence of projects and establishments requiring EIAs
Saluga & Ghazal	there are some tourist developments close to and affecting the PA with no EIAs
Saluga & Ghazal	there are no activities (2)
Wadi Allaqi	there may be no EIAs yet carried out in the protectorate
Wadi Alaqi	the shore agriculture lacks an EIA
Wadi Alaqi	absence of activities in the protectorate
Wadi Alaqi	there is an evaluation for the ecological effect for quarries by means of the administration
Burullus	there is an EIA study for projects that occur or are suggested to be established in the PA
White Desert	absence of activities
White Desert	development activities are around the PA, not within it

Notes:

SECTION 8. Site Design & Planning

Question 8a: *The siting of the PA is consistent with the PA objectives.*

Results:



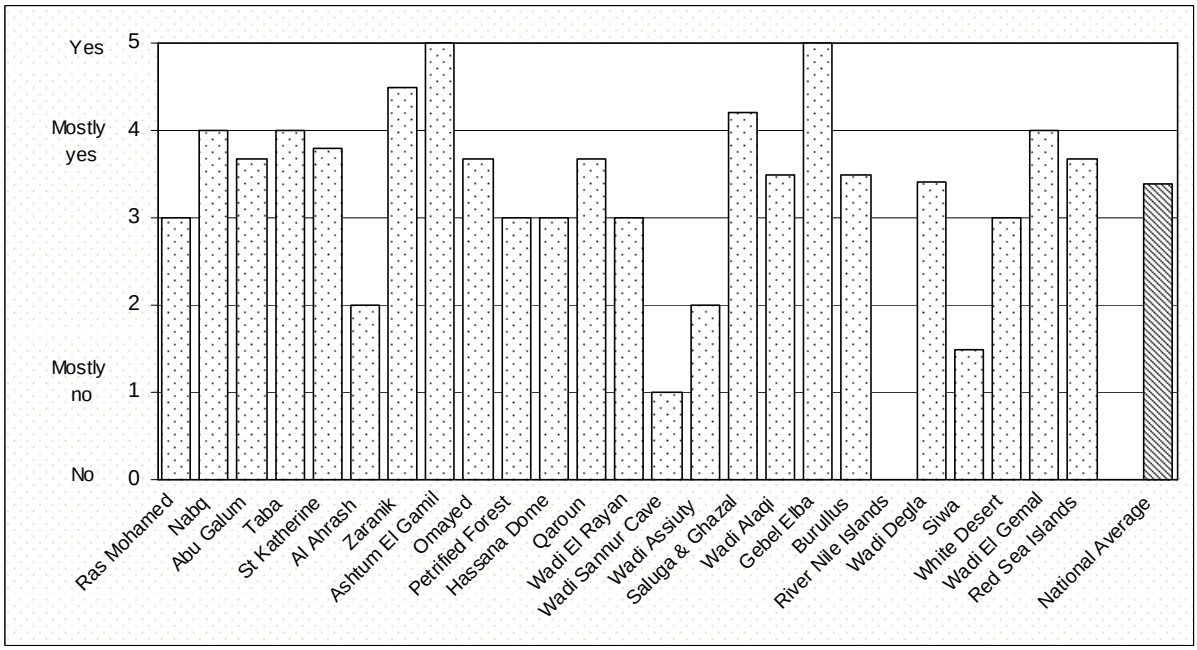
Staff Comments:

St Katherine	it starts from the Ring Dyke & extends to include the mountains in south Sinai.
St Katherine	does not include habitats from the Plain of El Qaa
Al Ahrash	it includes *Acacia* trees which need to be protected .
Qaroun	to maintain the biodiversity in the protecterate.
Wadi Assiuty	actually it does not represent Wadi El Assiuty.
Wadi Assiuty	the PA is far from Wadi El Assiuty.
Saluga & Ghazal	many surrounding islands should be included within the PA to maintain biodiversity; we need to link all the protecterate sections together.
Wadi Allaqi	Since the PA is divided into many sections, this will achieve the aim of protection.
Burullus	it includes the lake and sand dunes which are important to migrating birds.
Wadi Degla	interference between locations occurs.
Wadi Degla	generally true
Siwa	it is divided into three separate sections far away from each other.
White Desert	some huge areas are included within the PA boundaries and must be protected, like Gebel El Krystal, which gives no beautiful or geological views.
White Desert	there are many important locations outside the PA.
Red Sea Islands	many important locations and buildings are outside the PA boundaries.

Notes:

Question 8b: ***The layout and configuration of the PA optimizes the conservation of biodiversity.***

Results:



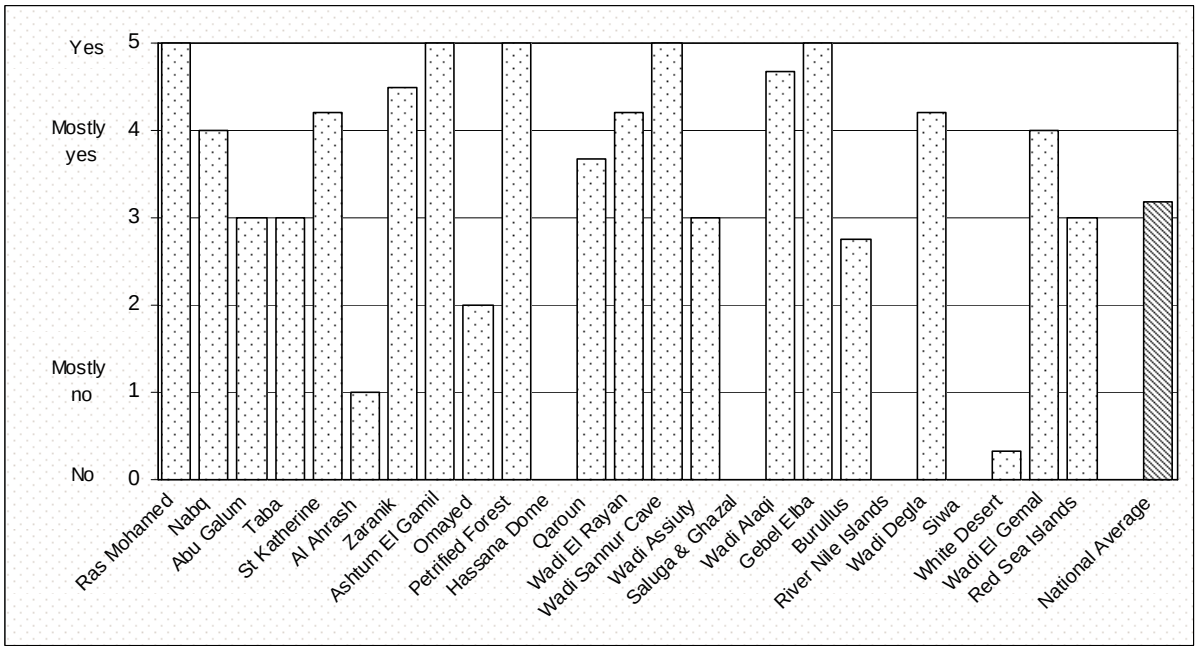
Staff Comments:

St Katherine	the protectorate has been divided into northern and southern regions
Al Ahrash	the protectorate is only one feddan
Wadi El Rayan	gazelle is the most sensitive, important animal species in the Egyptian PAs, which can be saved by *in situ* protection.
Wadi Assiuty	no, since it is near to a desert road and areas of population.
Wadi Allaqi	no: the protecterate area is large and difficult to control (2).
Wadi Allaqi	the area should be larger to retain wild species like gazelle.
Burullus	over-population, increasing the number of hunters, will affect the biodiversity in the area.
White Desert	some areas are huge and difficult to control
Red Sea Islands	sea anemones are present throughout the Red Sea, not just the islands; some islands are outside the PA.

Notes:

Question 8c: ***The PA zoning system is adequate to achieve the PA objectives.***

Results:



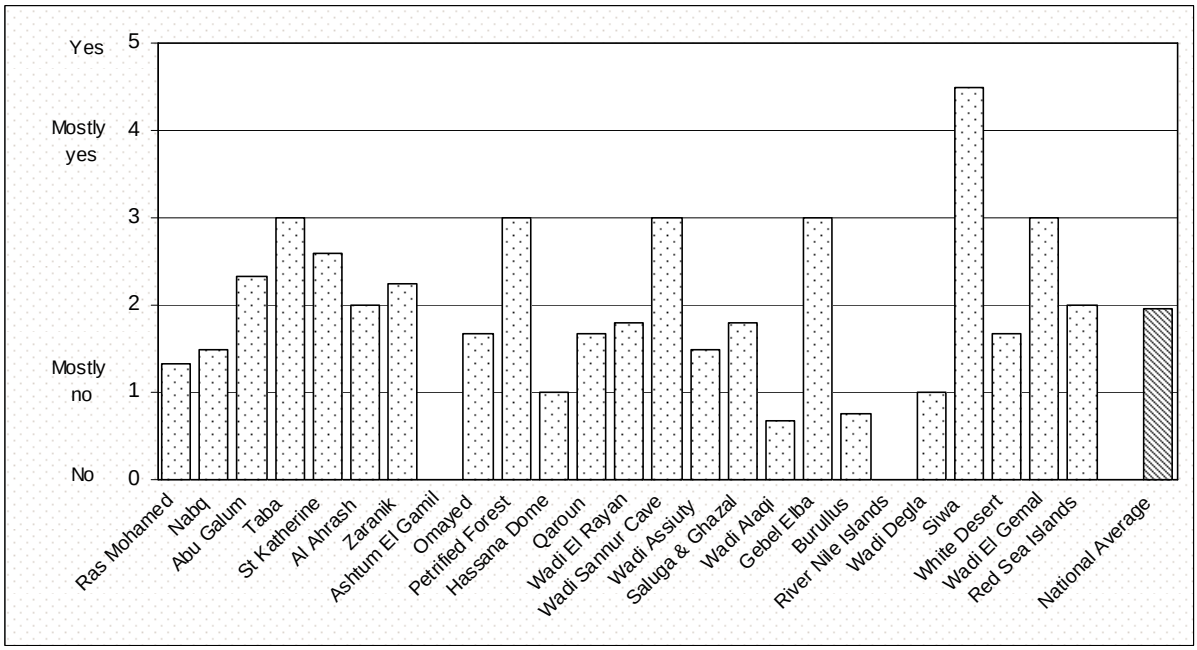
Staff Comments:

St Katherine	it is done based on studies.
Al Ahrash	no zoning system is present.
Hassana Dome	no zoning system is present.
Wadi Assiuty	no zoning system is present (2)
Saluga & Ghazal	no zoning system is present (4).
Wadi Allaqi	Lake Nasser should be included within the protecterate.
Wadi Allaqi	the PA has 3 important zones: core, protection, and permanent development zones.
Burullus	that is because the interference of different authorities like local administration, Ministery of Population, Monuments.
Burullus	no zoning system is present.
Siwa	no zoning system is present (3).
White Desert	no zoning system is present (2).
White Desert	planning for a zoning system being considered.
Red Sea Islands	no zoning system is present.
Red Sea Islands	a zoning system needs to be implemented.

Notes:

Question 8d: *The land use in the surrounding area enables effective PA management.*

Results:



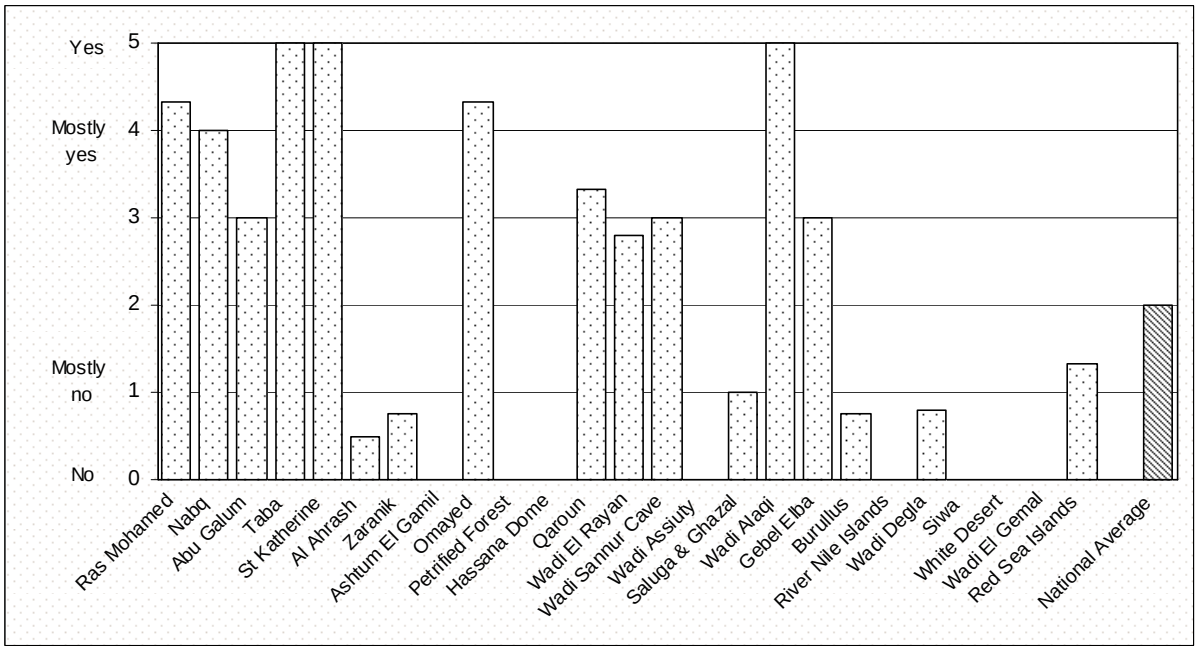
Staff Comments:

Ras Mohamed	presence of the Marina Travel Co. at the PA borders; probability of establishing a new electric power station.
St Katherine	specially areas of connection like Wadi El Ayyat; linked to Nabq, Abu Gallum
St Katherine	tourism development activities and their encroachment.
St Katherine	the neighbouring areas are areas of tourism development.
Hassana Dome	some neighbouring activities may be harmful to the nature of the PA.
Qaroun	there are not enough workers to work inside the PA's huge area.
Wadi El Rayan	communities outside and inside the PA are expanding.
Wadi Assiuty	there is no use of the surrounding land
Saluga & Ghazal	many surrounding islands should be included.
Saluga & Ghazal	hotels and tourism companies use the islands badly
Saluga & Ghazal	neighbouring uses are harmful for the PA.
Wadi Allaqi	lots of activities done outside the PA cannot be controlled.
Wadi Alaqi	toxic insecticides and shoreline cultivation may affect biodiversity.
Gebel Elba	the PA continues activities inside the buffer zone.
Burullus	the surrounding landuse involves organic matter and heavy metals, which go into the drains.
Burullus	lands may be farmed or reclaimed and that affects the PA.
Wadi Degla	industrial areas, fast roads.
White Desert	no land usage is present.
Red Sea Islands	islands are not specified for development, hence the effect is reduced.
Red Sea Islands	more islands need to be included and declared.

Notes:

Question 8e: ***The PA is linked to another area of conserved or protected land.***

Results:



Staff Comments:

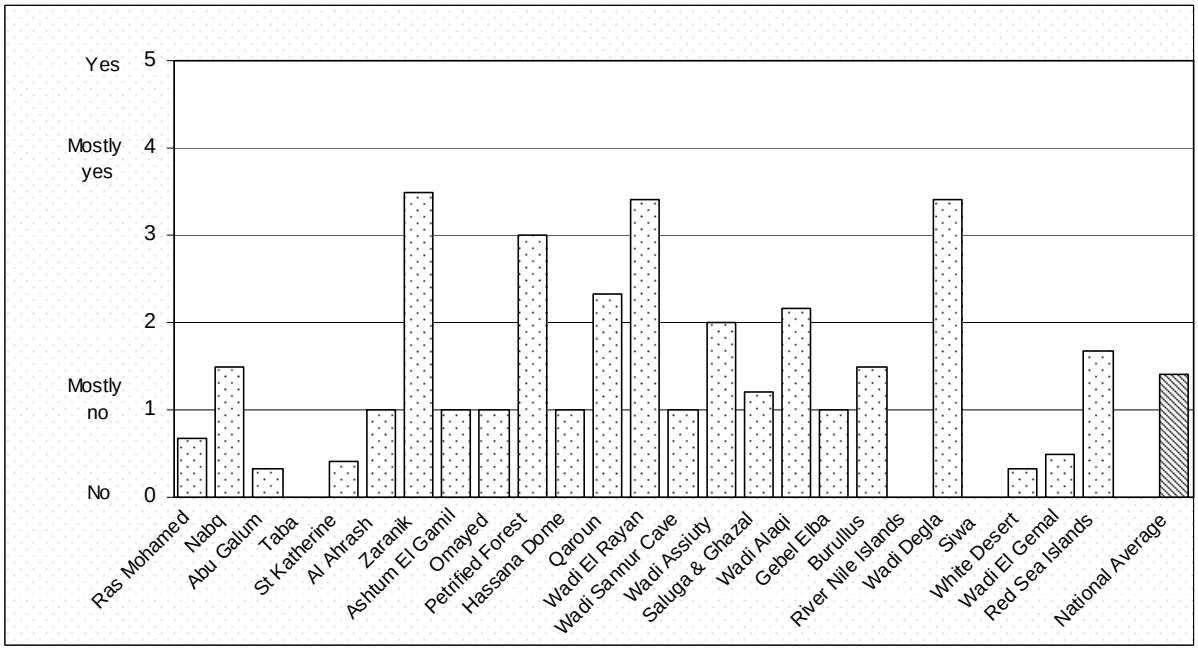
Taba	the PA is near to South Sinai protectorates.
St Katherine	the PA is extensively attached to the Aqaba PAs (2).
Zaranik	Lake Bardaweel.
Hassana Dome	not present.
Wadi El Rayan	this should be done with Gebel Quatrani and Lake Qarun.
Saluga & Ghazal	no surrounding areas are present (3)
Saluga & Ghazal	the PA is connected to the island of the Isis Hotel, whose biodiversity is linked
Wadi Alaqi	connected to Elba PA (3) and a part inside Sudan.
Gebel Elba	linked to Wadi Allaqi, and may be linked with Sudan soon.
Burullus	not present.
Wadi Degla	Eastern desert.
Siwa	not present.
Red Sea Islands	islands may link with Elba and Wadi El Gemal PAs.
Red Sea Islands	network approach need to be pushed.

Notes:

SECTION 9. Staffing

Question 9a: *The level of staffing is sufficient to manage the area effectively*

Results:



Staff Comments:

Abu Galum	Staff numbers should increase.
Taba	we are in need of more employees.
Taba	the number of staff members are small, although the protectorate is a large area.
St Katherine	number of staff members is enough, but their qualifications are not adequate
St Katherine	recent staff losses have compromised management activities
St Katherine	12 researchers for a protectorate area of 4350 km^2
Wadi El Rayan	many specific skills and needs are lacking
Wadi Assiuty	only 2 researchers and 2 guards are present
Saluga & Ghazal	the protectorate is in need of 2 managers, 2 researchers, 4 guards
Saluga & Ghazal	we are in need of 4 workers, 2 researchers, manager.
Saluga & Ghazal	we are in need of 2 researchers, 2 managers, 2 guards.
Wadi Alaqi	staff need more training, and their numbers are not enough
Wadi Alaqi	researchers and specialized workers are lacking
Gebel Elba	no, because each person in Elba must cover about 800 km^2
Gebel Elba	staffing in the protectorate does not depend only on its area, but also on the activities carried out, especially if these activities need cooperation
Burullus	researchers are 4 only
Siwa	the protectorate area is large & difficult to control
White Desert	the protectorate area is large & difficult to control
White Desert	employees are not enough, and particular skills are lacking
Red Sea Islands	although a small total area, islands are scattered over a very large area; in addition we need more staff to be responsible for biodiversity protection in the area
Red Sea Islands	we are in need of workers having particular skills

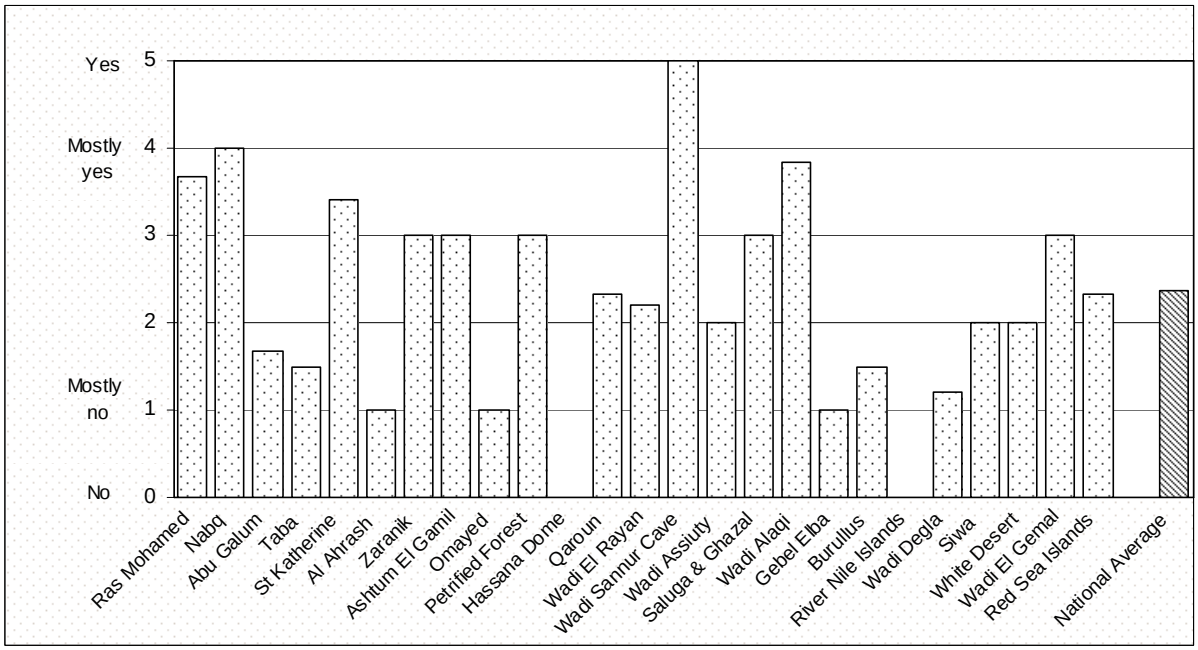
Notes:

Most protected areas have an insufficient number of staff. When compared to the actual number of staff, as reported in Table 1, even where protected areas have higher levels of staffing (e.g., St Katherine, South Sinai PAs), these levels are considered by staff to be insufficient.

There is a need to undertake a national level analysis of needs vs. capacity, and to develop a national staffing plan. The plan should set forth the recommended number of staff needed for each PA, and establish a mechanism for identifying surpluses in certain skills or professions and gaps in staffing needs to facilitate re-assignment of staff. It should also identify strategies for retaining high-performing staff (cf. ***9e***). To be effective in identifying the number of staff needed at PAs, the NCS should develop "minimum operating standards" as a benchmark to measure staffing needs.

Question 9b: *Staff members have adequate skills to conduct critical management activities.*

Results:



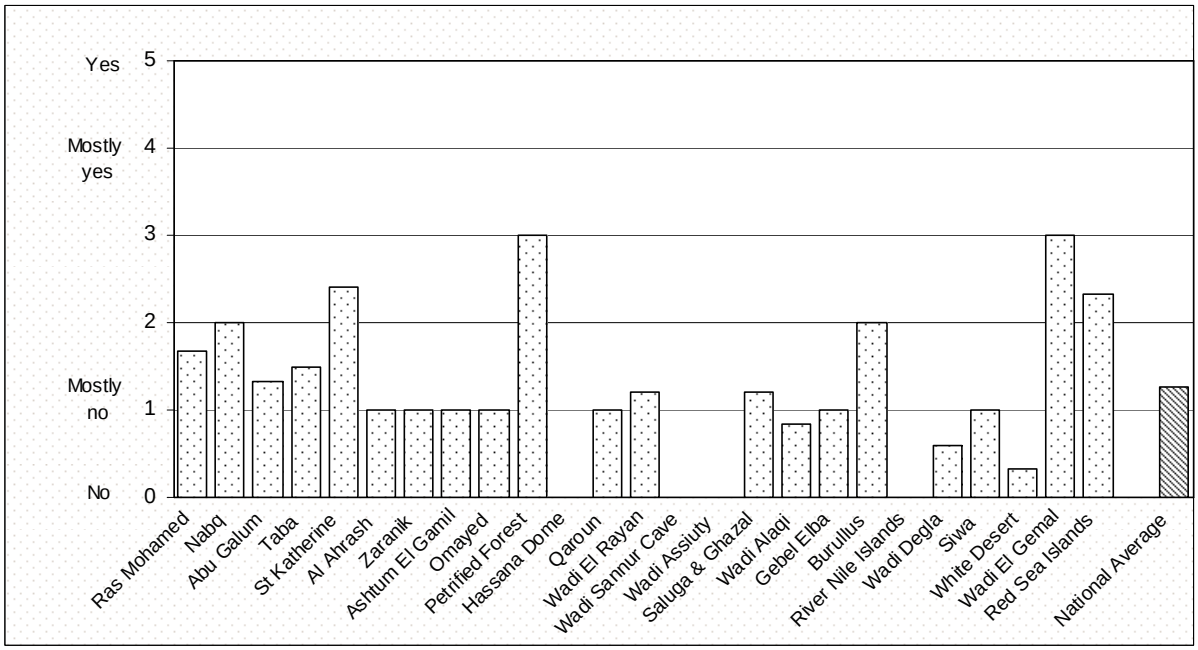
Staff Comments:

Petrified Forest	we are in need of more equipment and facilities
Hassana Dome	we are in need of training
Wadi El Rayan	Many of the employees have inadequate skills
Gebel Elba	About 25% of rangers and community guards have good skills, but the rest need training to raise their skills.
Burullus	Many skills are present but need to be more advanced.
Red Sea Islands	not all the workers have adequate skills

See under ***9c***.

Question 9c: *Training and development opportunities are appropriate to the needs of the staff.*

Results:



Staff Comments:

Ras Mohamed	training chances are provided but too little since the EU project support ended
Taba	we are in need of more training
Taba	the protectorate manager should be more qualified, more trained
St Katherine	training chances are rare
St Katherine	after the EU project ended there are no more chances for training (3)
Zaranik	chances for training are too little & not enough (2)
Ashtum El Gamil	we are in need of more training
Qaroun	no enough chances for training are available
Wadi Assiuty	no more chances for training are available
Saluga & Ghazal	there is no chances for training at all
Saluga & Ghazal	we are in need of training to accept many important skills, the available chances are too little.
Saluga & Ghazal	training chances are provided but too little; the southern PAs do not have these chances at all
Wadi Alaqi	chances for training are too little & not enough (3)
Burullus	we are in need of more chances for training
Wadi Degla	chances for training are too little & not enough (3)
Siwa	training is not available
White Desert	no chances for training are available (3)
Red Sea Islands	chances for training are done randomly, not based on the real needs; training is done through foreign projects or through personal efforts

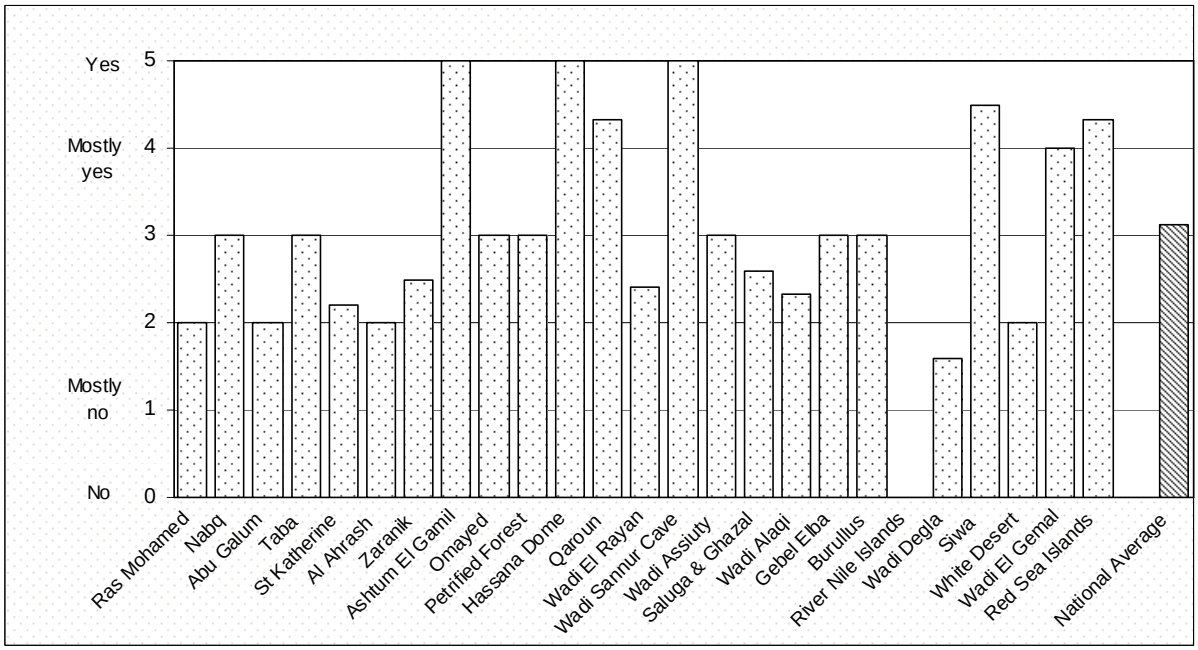
Notes:

A national training programme should be developed, particularly for training on PA management principles and approaches common to all PAs. Site-level training-needs analysis is also recommended. Specific skills training, for example related to project management or language skills, could be carried out through local institutions.

The current needs analysis being conducted by NCSCBP is expected to identify the focus of such needs.

Question 9d: *Staff performance and progress on targets is periodically reviewed.*

Results:



Staff Comments:

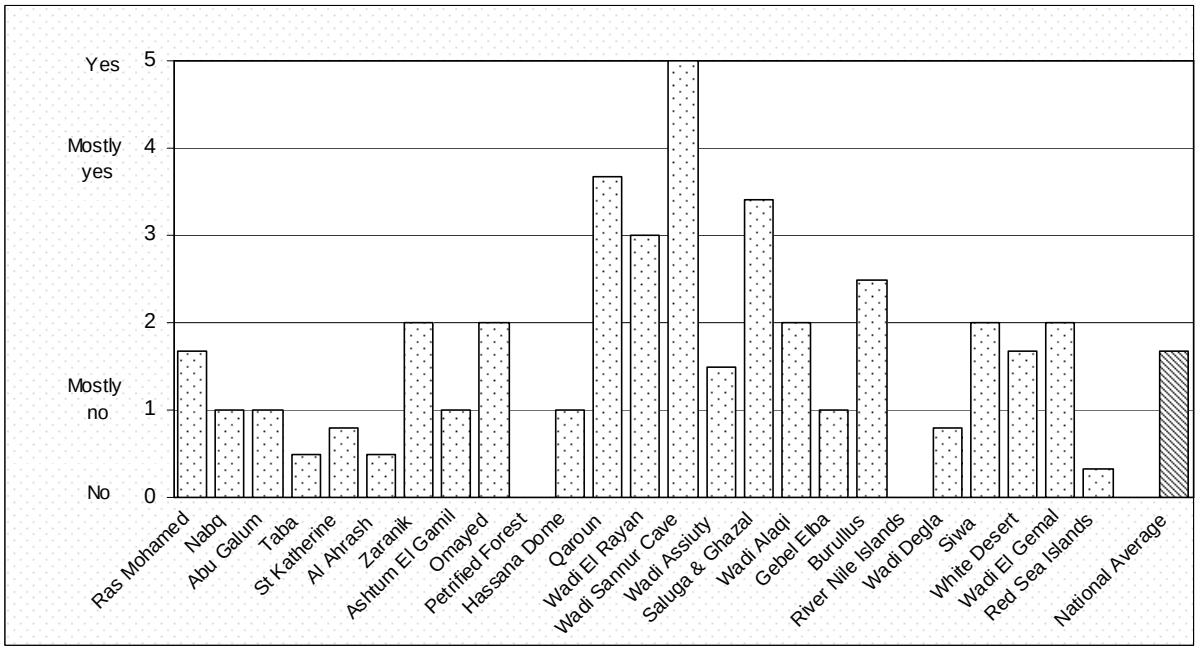
St Katherine	there is little chance of promotion; staff salaries for locals are too low
Saluga & Ghazal	the manager notes us, but does not report us
Wadi Alaqi	yearly evaluation is done already, but self evaluation is not
Gebel Elba	yes, because we agree rangers progress at the end of each month
White Desert	employee work is not reported, or even followed up
Red Sea Islands	choice is not appropriate, salaries are low, rewarding efficient people happens rarely

Notes:

While the results demonstrate some capacity and action in this area, there is a need to foster more evaluation across the NCS, at national office and at all PAs.

Question 9e: *Staff employment conditions are sufficient to retain high-quality staff.*

Results:



Staff Comments:

Taba	new employees are not reported or even followed up
Taba	salaries are low, tasks are onerous, no promotions are provided
St Katherine	salaries are low, no promotions are provided
Zaranik	salaries are low
Petrified Forest	salaries are ranged between workers
Wadi Assiuty	most employees come without our interference
Saluga & Ghazal	salaries are low
Wadi Alaqi	the protectorate has not enough facilities i.e., cars, sets
Wadi Degla	salaries are ranged between workers
Red Sea Islands	salaries are low, no promotions are provided

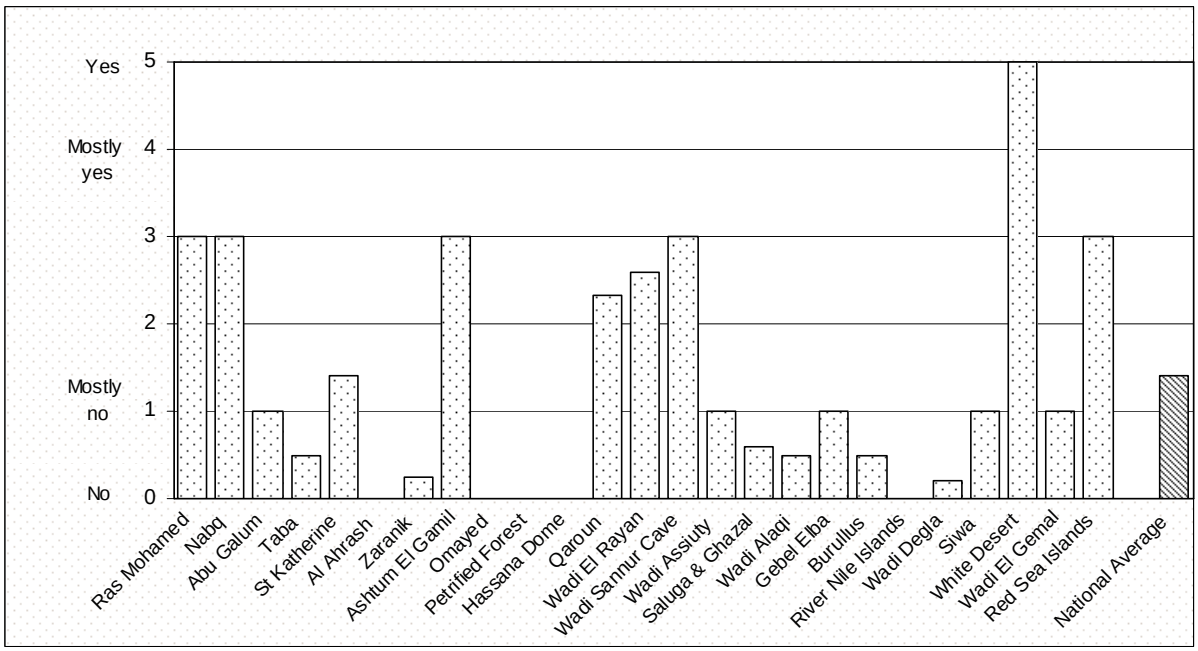
Notes:

The impact of low salaries won't affect the majority, given current levels of employment. Rather, the best staff who have opportunities to move on to higher paying jobs will move. This is an important impact. The recommended staffing plan (cf. ***9a***) should include opportunities for staff assignments, re-assignments and other incentives to retain high-performing staff. Movement of people among PAs, and a clear promotion structure should be the norm.

SECTION 10. Communication and Information

Question 10a: *There are adequate means of communication within the PA*

Results:



Staff Comments:

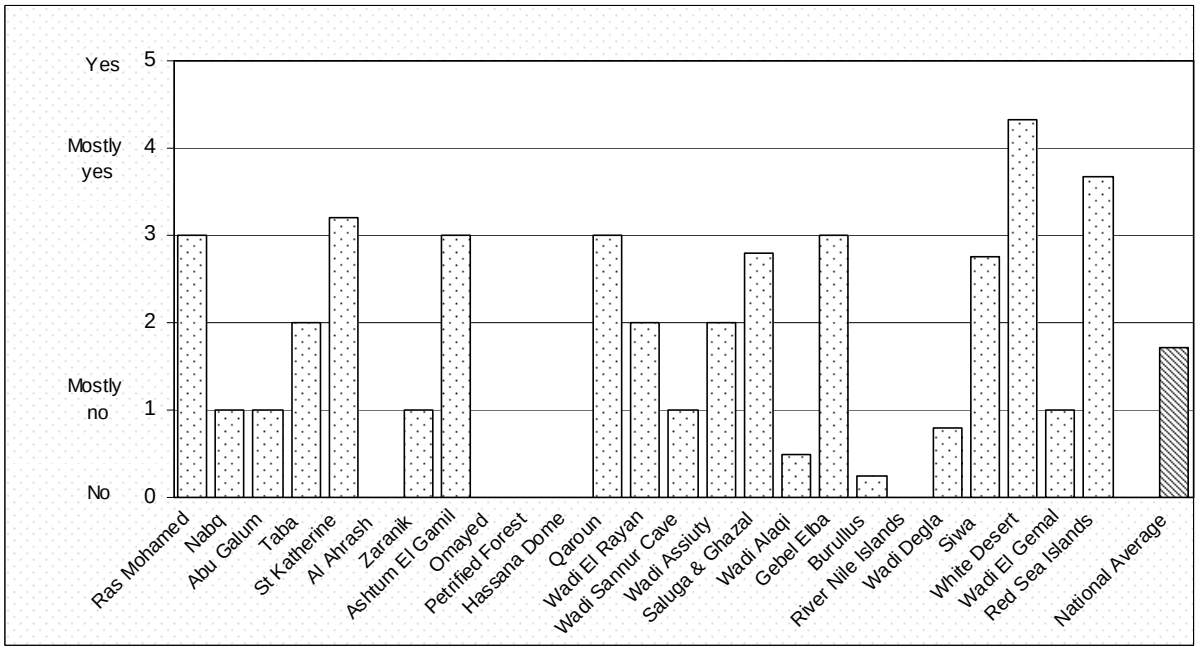
Abu Galum	two-way radios do not work; there are no telephones so we have to use personal telephones
St Katherine	no two-way radios are available (3), no network , no internet are available
Zaranik	no means of communication are available
Ashtum El Gamil	we are in need of two-way radios
Hassana Dome	no means of communication are available
Qaroun	no means of communication are available
Wadi Assiuty	only 1 computer, 1 fax set is present, no two-way radios are available
Saluga & Ghazal	no means of communication are available (3)
Saluga & Ghazal	no telephones, no electricity, no two-way radios are provided
Wadi Alaqi	means of communication are not adequate
Wadi Alaqi	no means of communication are available, no internet
Gebel Elba	telephone, satellite are provided, but we need a two-way radio system to cover the PA
Burullus	no fax, internet, telephones are present
Wadi Degla	no telephone is provided
Siwa	some of these means of communication are present
White Desert	means of communication are enough now, but it is new and not yet working
Red Sea Islands	there is no network for mobiles or two-way radios
Red Sea Islands	communications are available, but needs support & it should be continous

Notes:

Communications infrastructure and financial support is currently low. To a degree, some of the barriers will be solved in coming years as technology improves (e.g., improved mobile coverage, wireless computing). However, there is still a need for financial investment for operations.

Question 10b: *There are adequate means of communication with the outside world.*

Results:



Staff Comments:

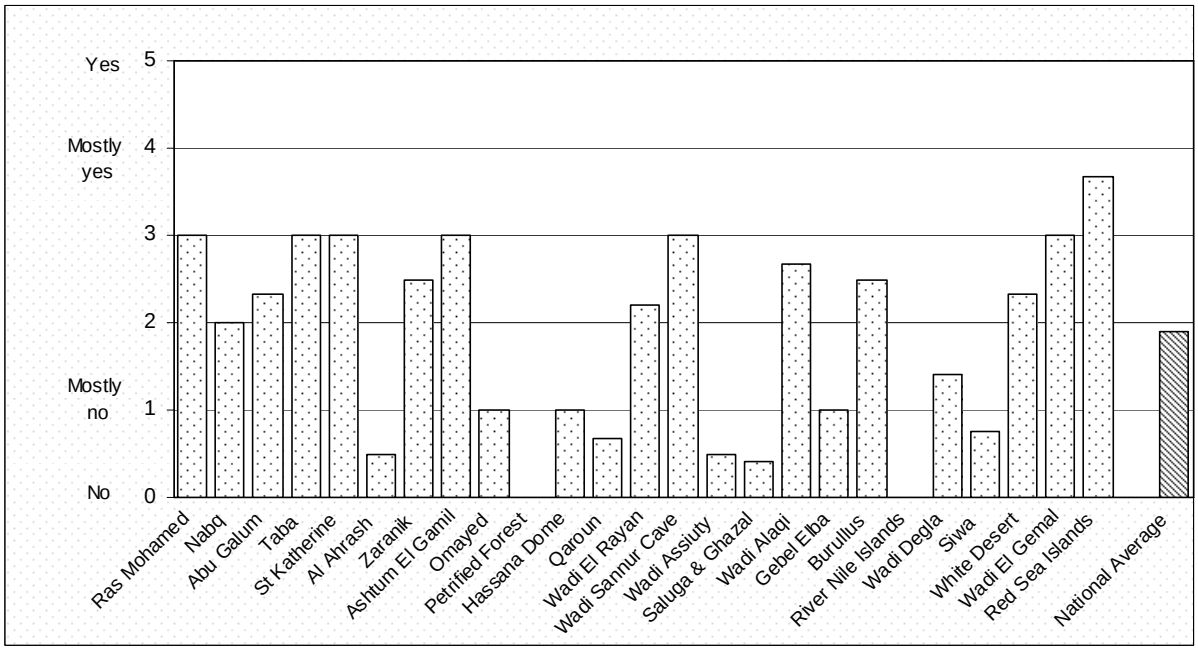
Petrified Forest	no telephones, computers, electricity
Wadi El Rayan	no phone lines in protectorate, no internet; we rely on mobile phones
Wadi Assiuty	there is a telephone and a computer, but no internet or two-way radios
Saluga & Ghazal	all the provided sets not working (2)
Wadi Degla	computers are provided, but no Internet present
Red Sea Islands	means of communication are present, but should be improved

Notes:

There is often a high expectation from NCS Central Office that PAs can respond immediately to problems and requests for information. However, in practice, this is very challenging and can be very disruptive, changing staff plans for a whole day or more. Protocols are needed to inform staff of visits and requests in advance.

Question 10c: *Existing ecological and socio-economic data are adequate for management planning.*

Results:



Staff Comments:

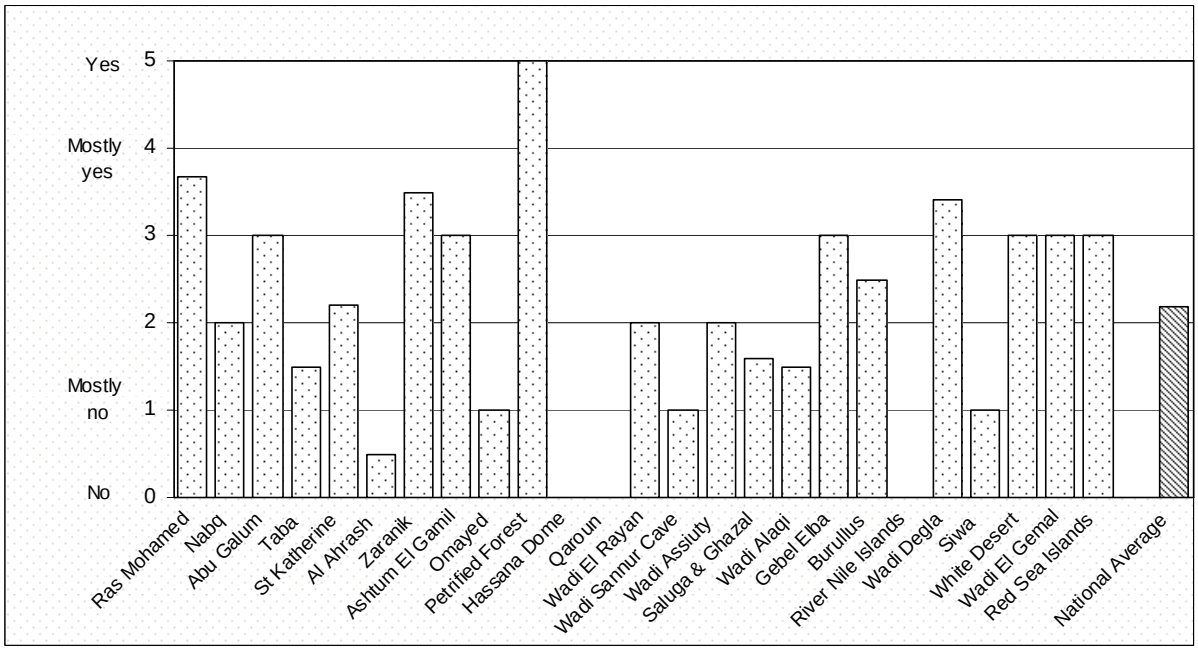
Taba	some data about historical monuments should be completed
St Katherine	no adequate data are present
Saluga & Ghazal	no enough topographic maps, no biological or geological data are provided
Wadi Alaqi	the available data is not enough
Wadi Degla	not all types of maps are present
White Desert	some topographic maps, camera, GPS set are present, a digital map now has been made
Red Sea Islands	lots of data have to be added in a suitable way to be helpful

Notes:

This is a critical issue given that management plans and decisions are based upon available information. A coordinated programme to identify gaps and schedule studies is needed, and must be coordinated with management planning priorities so that the studies are completed in advance of preparing the plans. This investment should be coupled with an information management strategy to ensure that the data are available to staff, stakeholders and citizens. The lack of good resource information is supported by the response to Q ***13c*** concerning inventories.

Question 10d: *There are adequate means of collecting new data.*

Results:



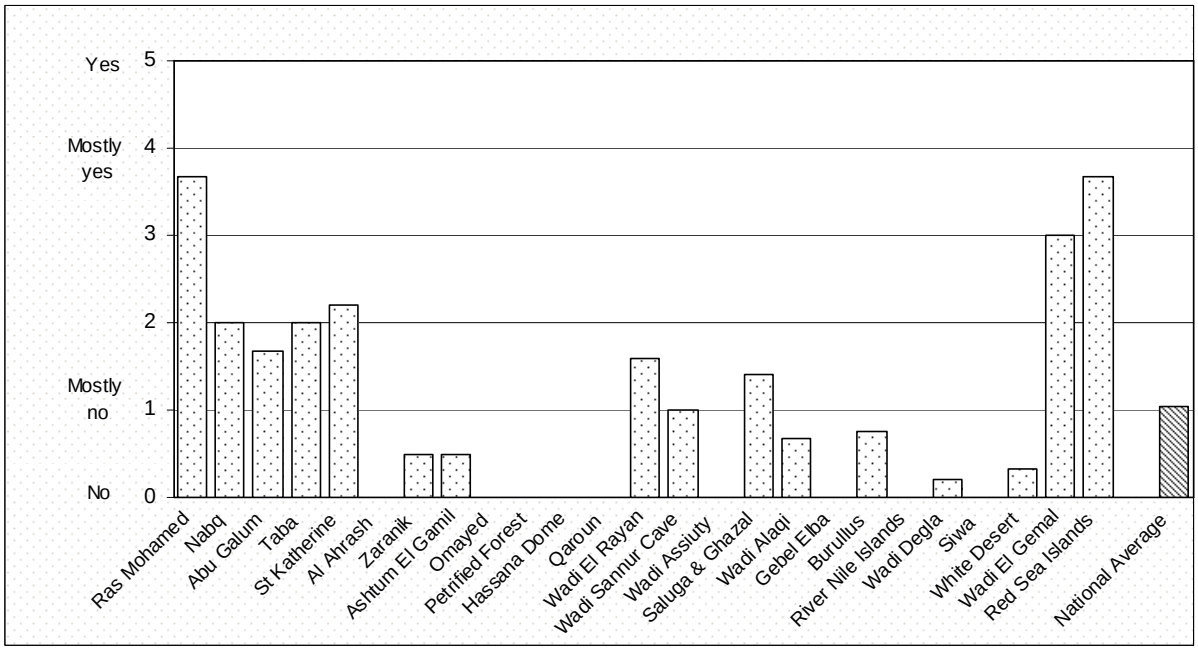
Staff Comments:

Nabq	most ways for data analysis and data collection are present outside the protectorate itself
St Katherine	previously adequate, but little new data are collected now
Wadi Assiuty	only 1 camera and a GPS set is present
Wadi Assiuty	cameras, GPS set were present, but no means of transport
Saluga & Ghazal	no digital camera is present (2)
Saluga & Ghazal	available programs are poor; we have tried hard to improve this, but in vain.
Wadi Alaqi	no telescopes or cameras are available.
Gebel Elba	not enough tools are provided; only one trap camera or digital camera, which is not suitable for the number of rangers
Red Sea Islands	means of transport are not adequate

See conclusions for ***10c***.

Question 10e: ***There are adequate systems for processing and analysing data.***

Results:



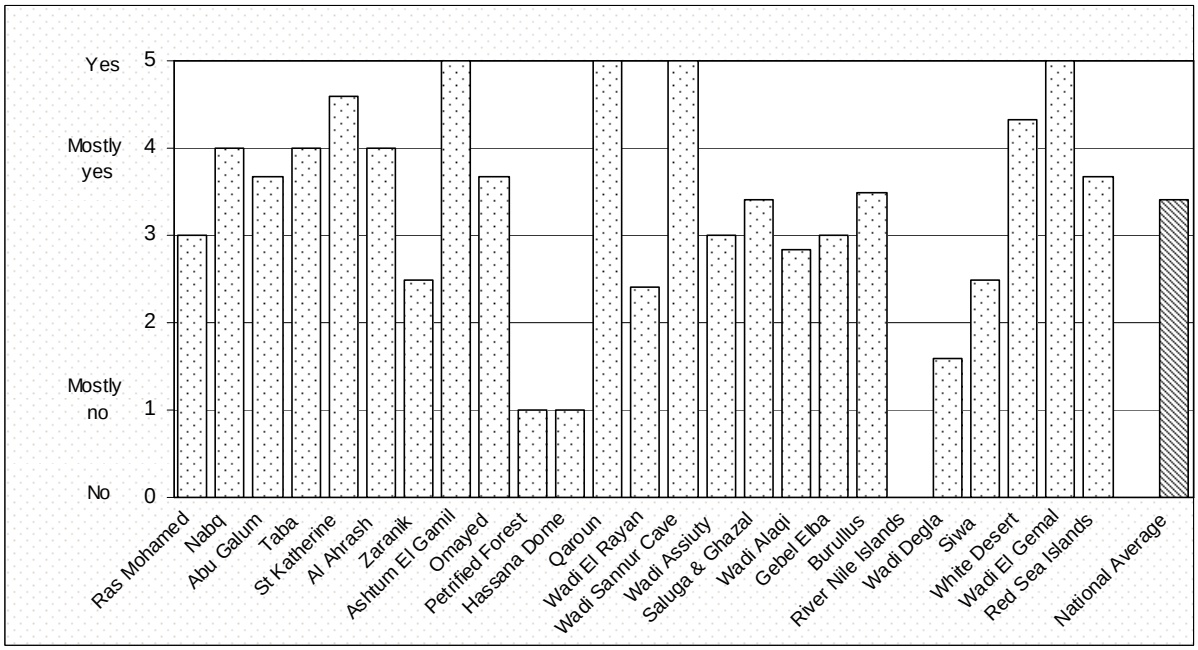
Staff Comments:

Wadi Assiuty	no effective connection among local people is present.
Saluga & Ghazal	only Erdas Imagine (GIS) is provided.
Wadi Alaqi	some programs are available, but no statistics programs
Burullus	there are no programs to analyse data
White Desert	the employees are in need of more training
Red Sea Islands	Systems for analysing data needs to be modern & advanced

See ***10c*** for conclusions.

Question 10f: ***There is effective communication with local communities.***

Results:



Staff Comments:

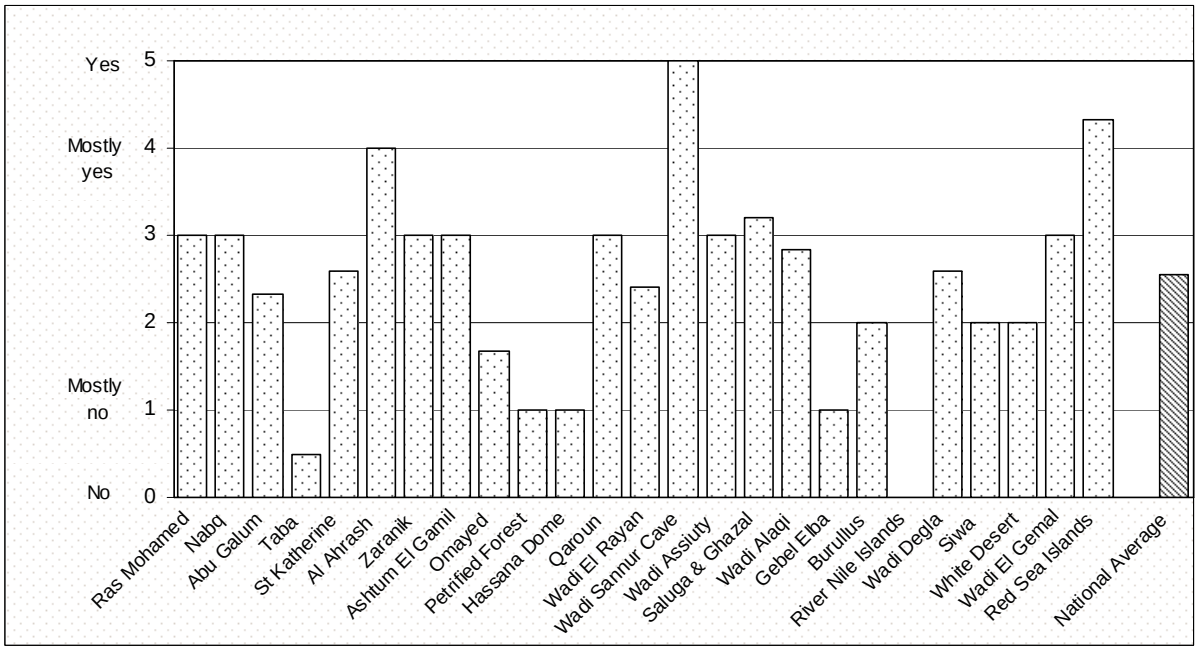
Abu Galum means of communication will ease connection between the PA administration and local people

Notes:

In future assessments, evaluators should visit some communities and stakeholders to get their response to this question. It is suspected (and likely) that PA staff have a more optimistic view of this than is actually the case.

Question 10g: *There are effective educational and interpretative programmes in place.*

Results:



Staff Comments:

Ras Mohamed	tools are few, not adequate
St Katherine	previously good, but recently declined
Ashtum El Gamil	we are in need of helpful signs and maps
Qaroun	no warning signs are present, but only programs of enviromental care present
Wadi El Rayan	is a visitor center, but no scheduled programmes
Wadi Assiuty	there are no published materials to show the protectorate
Wadi Assiuty	enviromental care programs are present, and shows & brochures as well
Saluga & Ghazal	only by direct conservation; nothing published about biodiversity is provided (3)
Saluga & Ghazal	no enough brochures or helpful signs are provided
Wadi Alaqi	no enough brochures exist
Burullus	there are many plans that will be carried out
Wadi Degla	through warning signs
White Desert	through enviromental care programs made to schools
Red Sea Islands	it needs too much money to continue

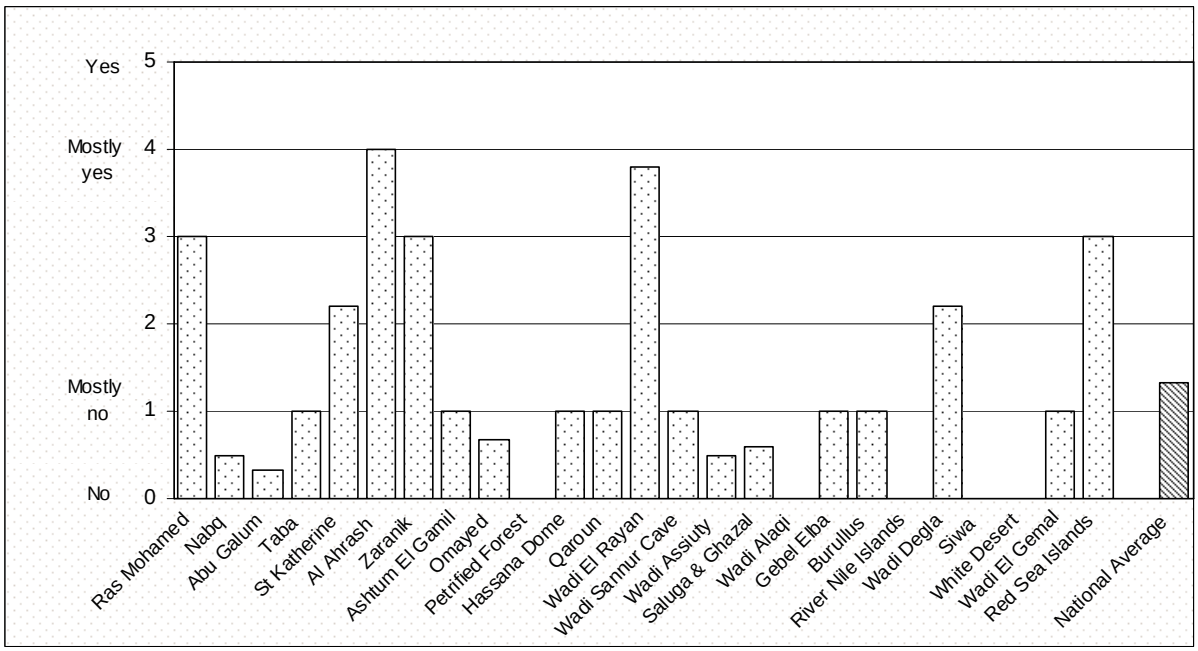
Notes:

A few high scores have skewed the national average to be higher than reality. There is a strong need for a national policy and strategy on interpretation and education.

SECTION 11. Infrastructure

Question 11a: *Transportation infrastructure is adequate to perform critical management activities.*

Results:



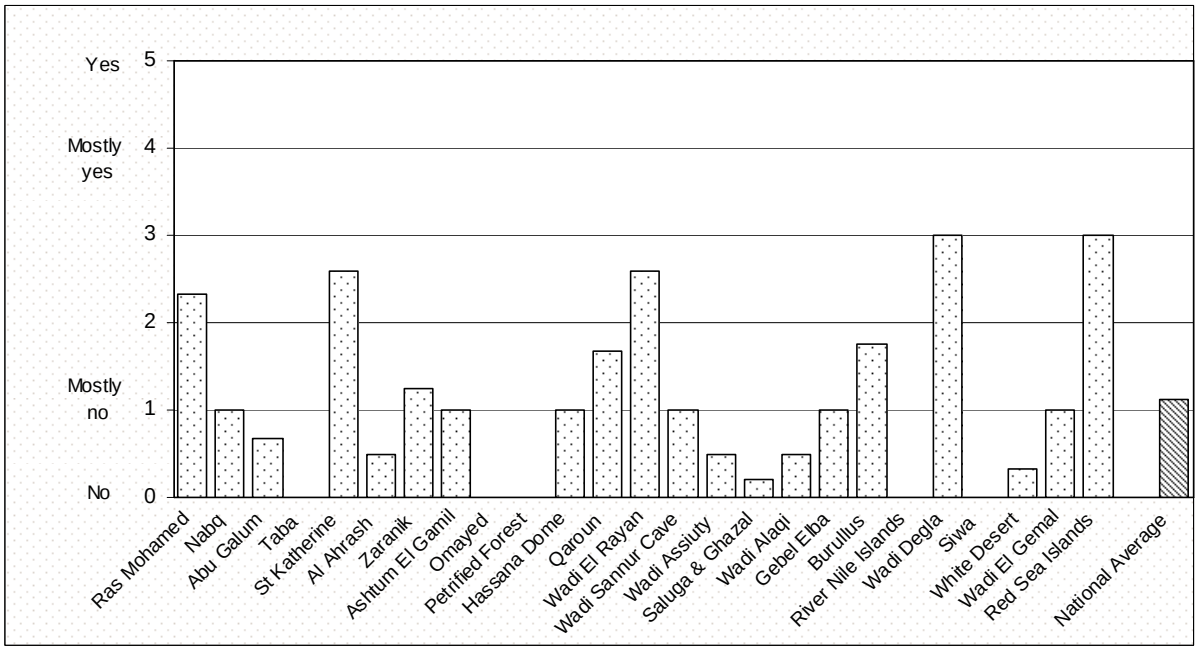
Staff Comments:

Ras Mohamed	the protectorate needs a 4X4 car and maintenance
Abu Galum	no cars in the PA since 2002; we share one with Taba PA
Taba	the Taba car works in Abu Galum PA since 2002; there are no bicycles, motocycles,…
St Katherine	previously adequate, but current equipment is ageing (2)
Ashtum El Gamil	one car present, which can't manage difficult routes, so we need a 4X4 car
Petrified Forest	no cars nor motocycles
Hassana Dome	absent
Qaroun	there are no cars in the protectorate
Qaroun	there only one car and it is always disabled; it is poor on difficult routes (2)
Wadi Assiuty	no transport means within the protectorate
Saluga & Ghazal	need a car for work and to transport researchers; routes need maintenance; boat needs a quiet motor to record birds (2); need 2 boats
Wadi Alaqi	transport means insufficient; only one car for 23,000 km²; no boats for the lake
Gebel Elba	for the area and number of rangers/community guards, equipment and infrastructure not enough
Burullus	no enough cars nor speed boats to watch the lake
Wadi Degla	there are cars, but need motocycles or beach buggy in certain places
Wadi Degla	there is only one van
White Desert	there is only one car: insufficient for patrols and doesn't cover the surface of the protectorate and no proper roads yet although they have been demanded more than once
White Desert	there is only one van for the protectorate and there are no proper roads
Red Sea Islands	due to fuelling for mounting and preserving by the project

Notes:

Question 11b: *Field equipment is adequate to perform critical management activities.*

Results:



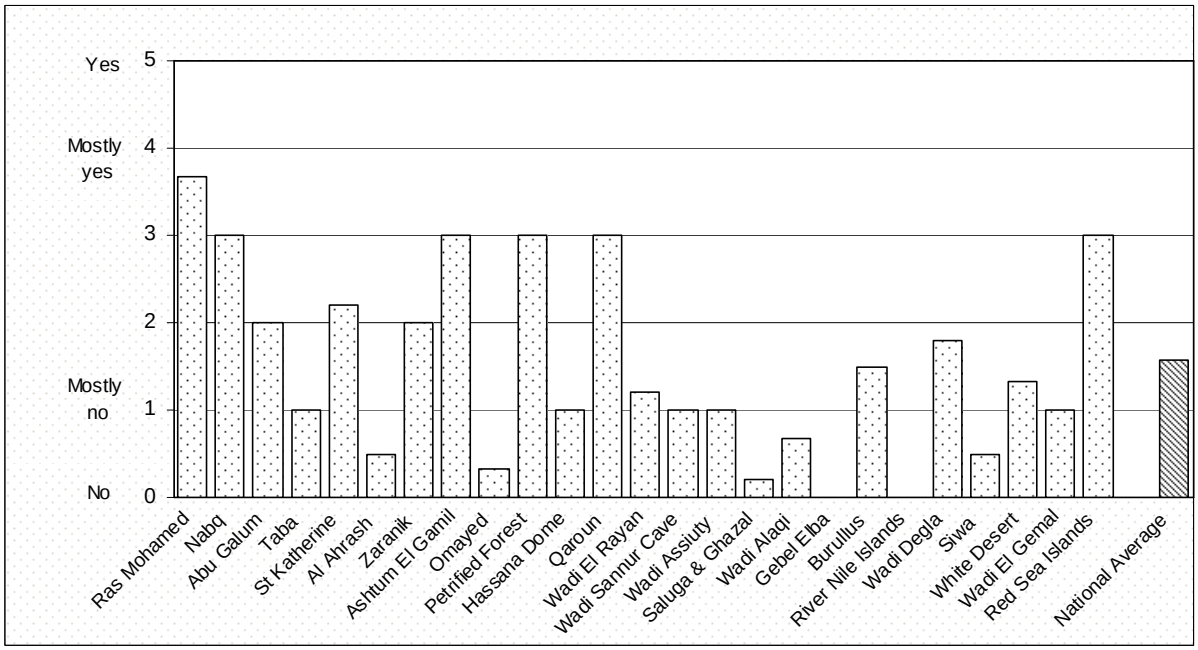
Staff Comments:

Abu Galum	there are no tents or sleeping bags
Taba	there is only a medical bag
St Katherine	equipment inventory adequate
Ashtum El Gamil	need for field measuring equipment in the field and tents
Petrified Forest	absent, but we can use equipment of Wadi Degla
Hassana Dome	absent
Wadi Assiuty	extreme lack of field tools
Wadi Assiuty	no tents or bags
Saluga & Ghazal	no walking equipment, tents or observation equipment
Saluga & Ghazal	not present and we need it badly
Wadi Alaqi	equipment is completely insufficient (2)
Wadi Alaqi	some equipment available, like cameras, telescopes and medical case
Gebel Elba	the equipment and infrastructure not enough for area and number of rangers
Burullus	no bags
Wadi Degla	most of equipment unavailable
White Desert	there is only one camera,1 gps, only a lodge for workers since 2005
Red Sea Islands	due to lack of support for monitoring and maintenance by the project

Notes:

Question 11c: Staff facilities are adequate to perform critical management activities.

Results:



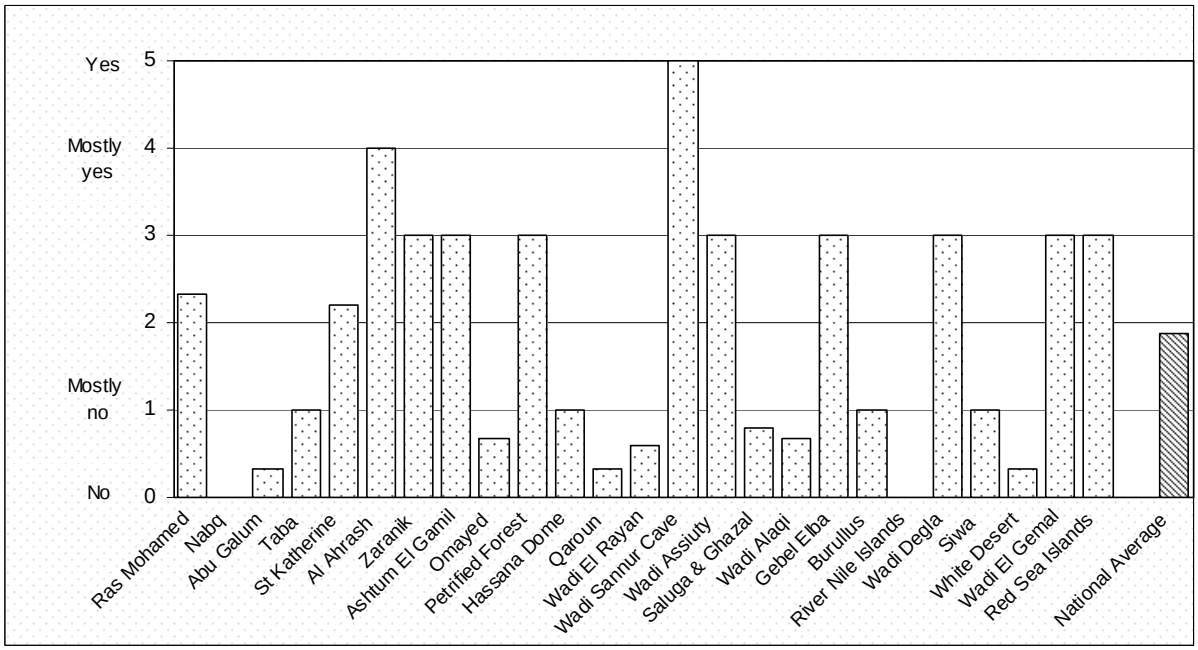
Staff Comments:

Taba	there is only one old building, a wood prefab (2)
St Katherine	no proper office facilities; satelite stations not operational
Ashtum El Gamil	bags and sleeping bags
Petrified Forest	there is a perfect environment but no contact apparatus
Petrified Forest	there are offices but no microscopes or other laboratory equipment
Wadi Assiuty	there are offices but no training or occupiers
Saluga & Ghazal	there is no residence or office or population
Saluga & Ghazal	no administrative offices of our own, but one shared with Wadi Allaqi; not enough space for foreigners and no laboratory for researchers
Saluga & Ghazal	no offices or residence or chairs or cupboards
Wadi Alaqi	there is no administrative residence in the protectorate

Notes:

Question 11d: *Maintenance and care of equipment is adequate to ensure long-term use.*

Results:



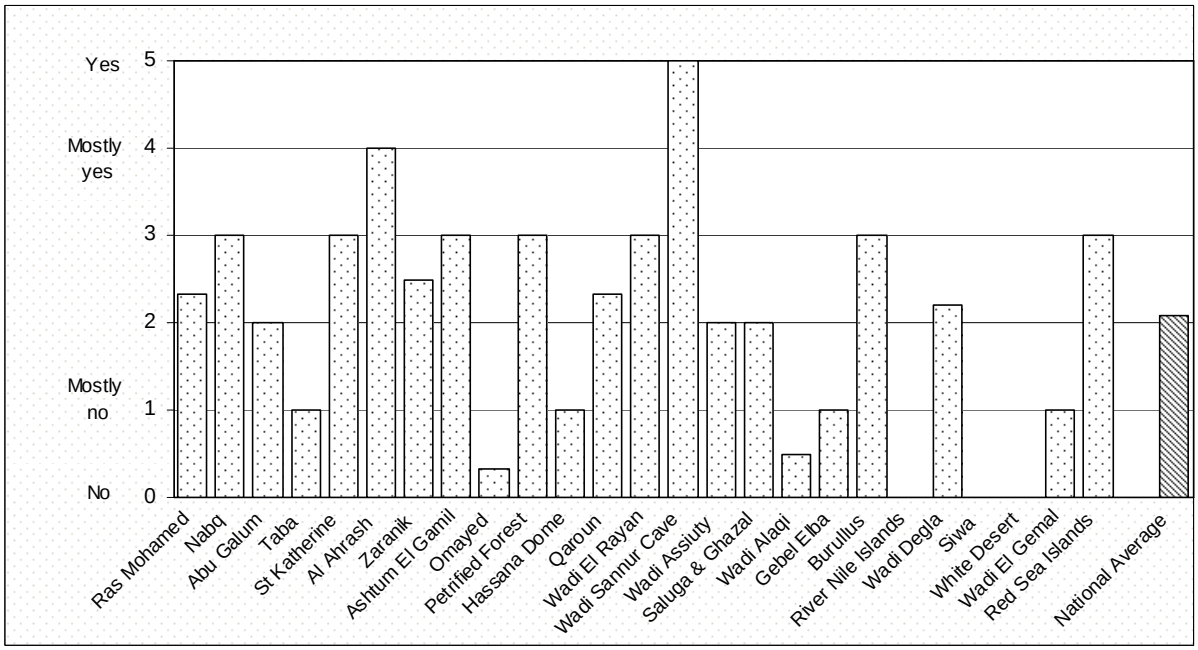
Staff Comments:

Ras Mohamed	the administrative system is very slow after the EU project finished
Ras Mohamed	spare parts unavailable
St Katherine	non professional maintenance
Hassana Dome	absent
Saluga & Ghazal	temporar maintenance only (2)
Saluga & Ghazal	the only car is old and can't be repaired; periodic mantainance of the establishment
Wadi Alaqi	the budget decreases day by day
Gebel Elba	an ongoing plan for equipment maintenance and cars every year; visitor center to be completed by end of 2006
Burullus	no equipment except only one car and computers in a bad state
Burullus	no continuous maintenance
Wadi Degla	no connection apparatus
Wadi Degla	there is a maintenance but some equipment and cars need to be replaced
Siwa	there is very little equipment
White Desert	no maintenance at all
Red Sea Islands	but it is connected to foreign projects and needs a professional to use it after the project

Notes:

Question 11e: *Visitor facilities are appropriate to the level of visitor use.*

Results:



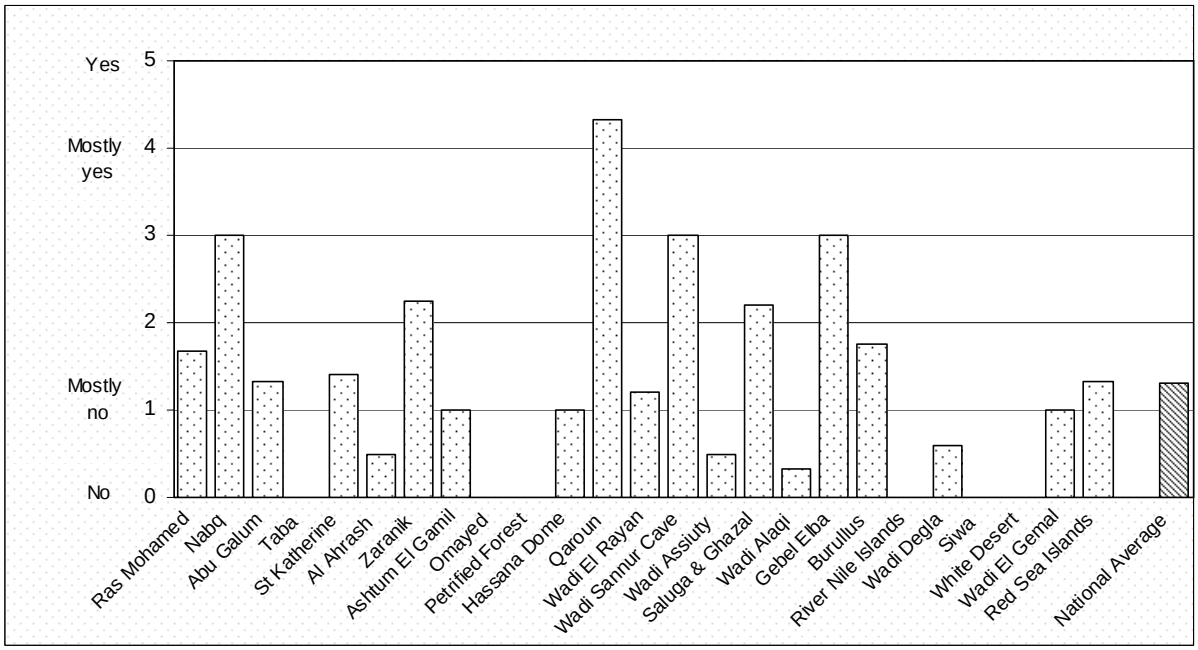
Staff Comments:

Taba	there are only camping places
St Katherine	visitor numbers exceed capacity; no sanitary provisions
St Katherine	visitor center
Zaranik	the visit fees are expensive
Qaroun	no visitor center
Qaroun	in spite of absence of visitor center
Saluga & Ghazal	by means of the protectorate researchers
Saluga & Ghazal	there are basic reception facilities, but of a suitable level for the protectorate (2)
Saluga & Ghazal	no potable water, so no long stays are possible
Saluga & Ghazal	there is no suitable reception center for foreign visitors
Wadi Alaqi	no reception rooms or means of transport from the city or for internal transportation
Gebel Elba	25-100 Egyptian visitors annually, dealt with personally by the staff; visitor center to be completed by end of 2006
White Desert	no services for visitors until now
Red Sea Islands	mostly in form of personal efforts; no proper facilities for visitors

Notes:

Question 11f: *Visitor health and safety requirements are adequately addressed.*

Results:



Staff Comments:

St Katherine	infrastructure exists but not working
St Katherine	previously when we could communicate with Gebel Musa there was a rescue team, but it is no longer operational; rescue team not retrained (2)
Wadi El Rayan	no emergency maps; training on first-aid haphazard
Wadi Assiuty	there are only some first aid
Saluga & Ghazal	no first aid
Saluga & Ghazal	we need a training for first aid
Burullus	no training for workers for rescue or first aid
Burullus	no rescue plans or sanitary help
Wadi Degla	there are no sera against snakes and scorpions, nor any means of transport
Wadi Degla	insufficient doctors
White Desert	no maps or signs or aids
Red Sea Islands	absence of programs because the protectorate is marine, and hence expensive

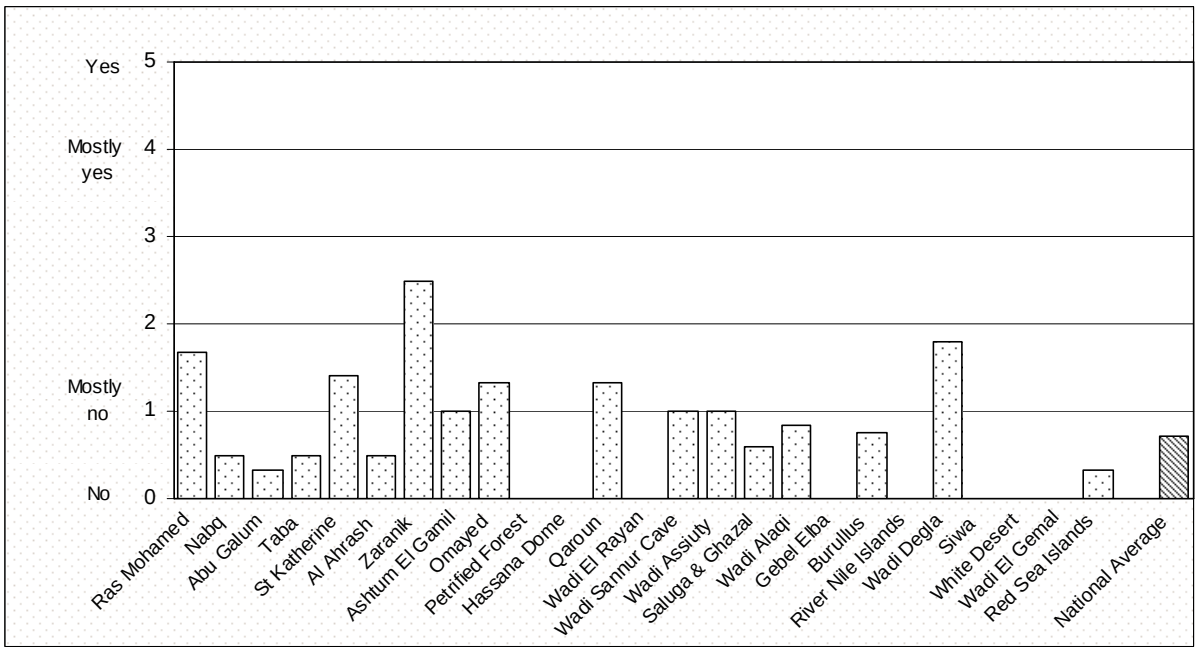
Notes:

Qaroun's high score skews the otherwise low scores. This topic is a critical issue for Egypt if ecotourism is to thrive. A programme is needed to encourage staff awareness about visitor safety and to put in place safety programmes for visitors and staff.

SECTION 12. Finances

Question 12a: *Funding from the GoE in the past 5 years has been adequate to conduct critical management activities.*

Results:



Staff Comments:

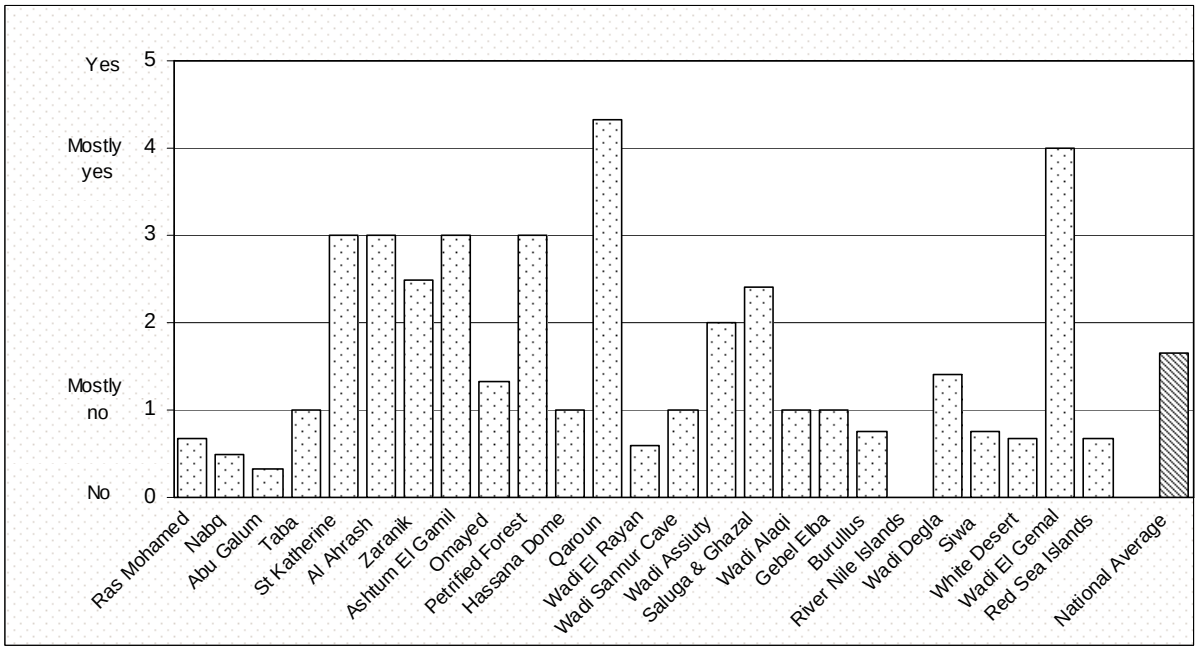
Ras Mohamed	the routine system is an obstacle for management activities
Ras Mohamed	shortage of new equipment and cars; not employing new rangers
Nabq	no financial aid received after the end of the EU project
Nabq	no good maintainance for equipment
Abu Galum	new projects takes a long time to be accepted; the budget is given by the governorate
Abu Galum	no financial aid received after the end of the EU project other than employee salaries
Taba	the financial support is very little
St Katherine	no financial support 3 years ago and until now
St Katherine	funding adequate to 2006; since then woefully inadequate - patrolling, visitor management and data collection compromised
St Katherine	the protectorate is very large; landrover cars spare parts are very expensive
St Katherine	but there is always a delay
St Katherine	the funding is not more than 150,000 LE per year
Al Ahrash	there's a shortage in financial support
Al Ahrash	no money to buy equipment
Ashtum El Gamil	no funding for purchasing equipment for monitoring
Omayed	not enough rangers and equipments
Omayed	the funding in the last five years was supplied by foreign projects
Petrified Forest	a fence was asked to be built around the protectorate, but nothing was built and this has expose the PA to fragmentation
Hassana Dome	no known budget is specified for the protectorate
Qaroun	the hand-made carpet projects has been stopped because there's not enough money
Wadi El Rayan	old vehicles suffer chronic breakdowns and are costly to maintain
Wadi El Rayan	no enough money for maintainance and purchasing tools for monitoring and awareness
Wadi El Rayan	the funding is not enough for monitoring, equipment and building maintainance
Wadi Sannur Cave	the annual budget isn't enough to receive visitors safely

Wadi Assiuty	low budget
Saluga & Ghazal	no resident management
Saluga & Ghazal	some budget targets haven't been met (2)
Saluga & Ghazal	low budget (2)
Wadi Alaqi	low budget (3); the funding decreases year after year
Gebel Elba	budget is delayed, and not enough to buy monitoring equipment
Wadi Degla	the visitor center has been built, but shortage of equipment
Wadi Degla	a lot of things cannot be bought
Siwa	all programmes are simple and depend on researchers efforts; they need money
Siwa	no enough money for scientific research (for maps, images and necessary equipment)
White Desert	no money in spite of presence of an account in Farafra local assembly
White Desert	no management funding
White Desert	no funding for employing new rangers
Wadi El Gemal	we are dependent on project funding for money
Red Sea Islands	the protectorate depends on foreign support
Red Sea Islands	no benefits from the protectorate income; dependent on project support

Notes:

Question 12b: *Financial management practices enable efficient and effective PA management.*

Results:



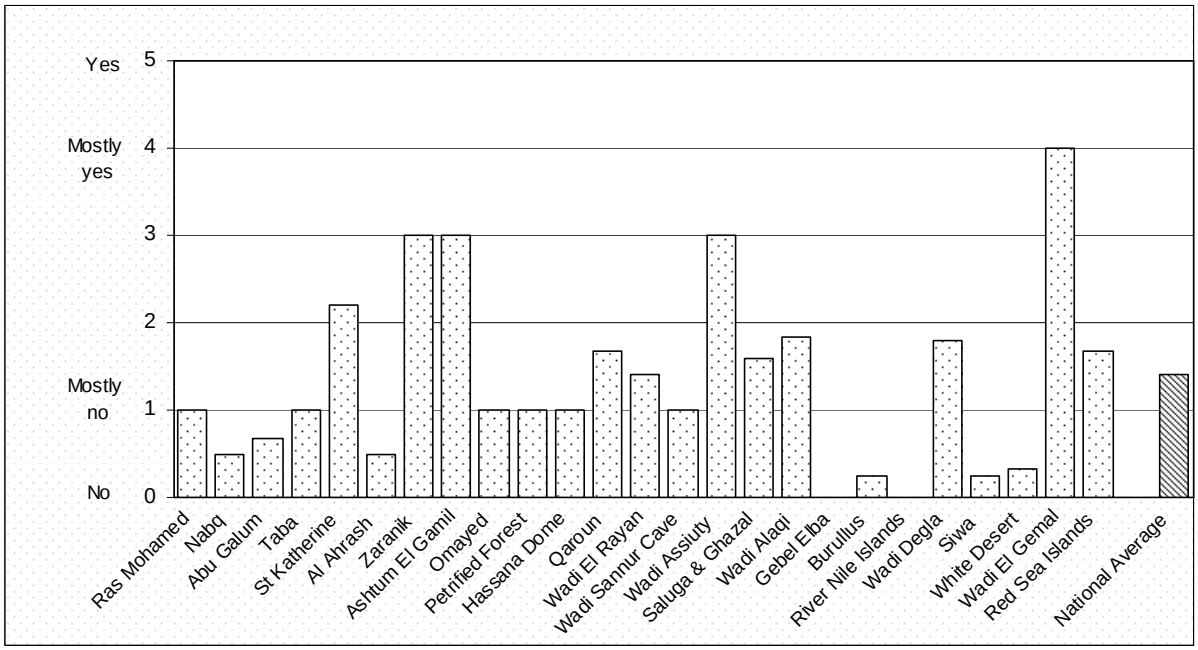
Staff Comments:

Wadi El Rayan	just the governorate funding and no other supplying companies
Saluga & Ghazal	very delayed
Wadi Alaqi	funding delay
Wadi Degla	routine
White Desert	no certain plan or financial supply

Notes:

Question 12c: *The allocation of expenditures is appropriate to PA priorities and objectives.*

Results:



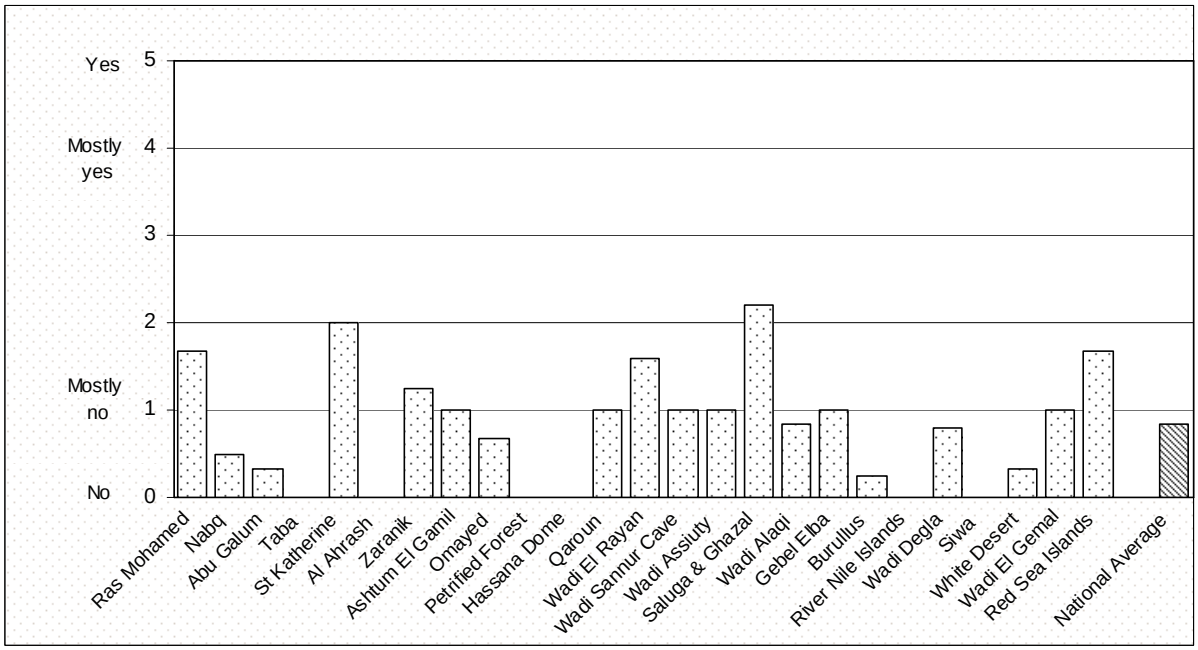
Staff Comments:

St Katherine	the current budget has a negative effect on the PA management and on programmes of development, ecological awareness and monitoring
St Katherine	no business plan
Wadi Assiuty	budget delay
Saluga & Ghazal	needs developing
White Desert	no supply, no plan
Taba	the PA budget is a part of South Sinai protectorates budget, which is mostly allocated for Ras Mohamed

Notes:

Question 12d: ***The long-term financial (5 years) outlook for the PA is stable.***

Results:



Staff Comments:

Taba	the rights of the protectorate benefits are not being used by the protectorate itself
St Katherine	conditional on fee recycling
St Katherine	there's an income from fees
St Katherine	this year funding is 270,000 LE in addition to the fees
Zaranik	funding is different each year; the project did not fulfil its financial and management duties
Qaroun	not enough financial support
Wadi El Rayan	just for the 3 years of the project
Saluga & Ghazal	the annual budget is always late
White Desert	no supply, no plan

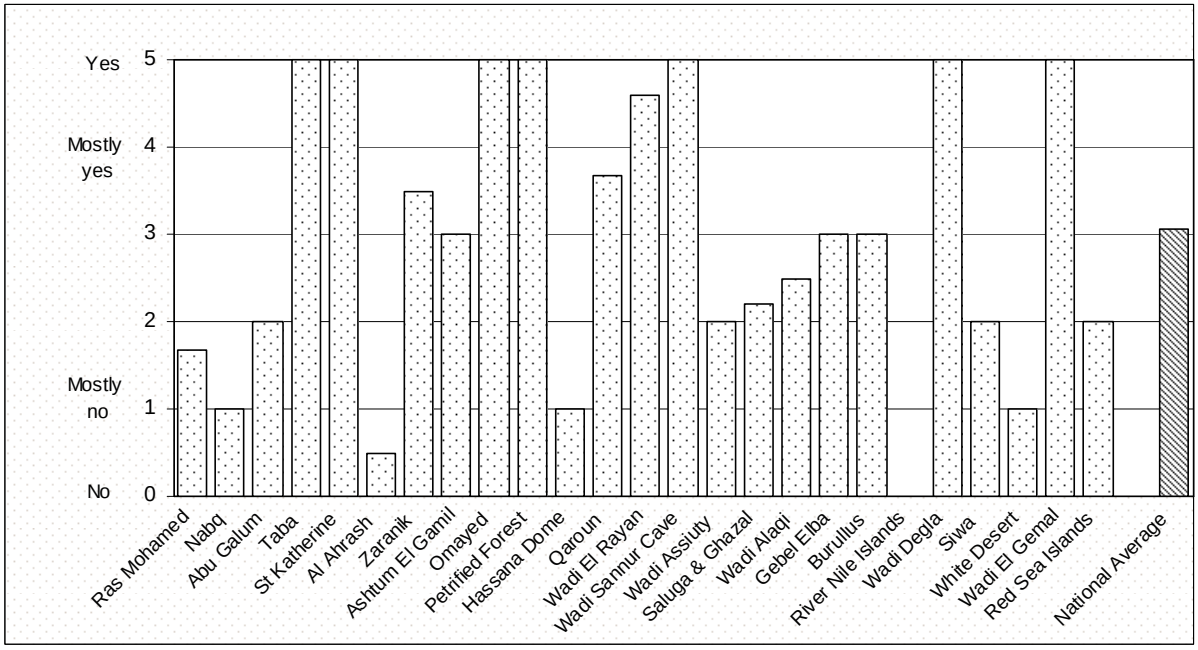
Notes:

This indicator has considerable impact on staff perspective and attitudes. It is often difficult to keep staff motivated if there is no hope of realizing the goal.

SECTION 13. Management Planning

Question 13a: *There is a comprehensive, relatively recent written management plan.*

Results:



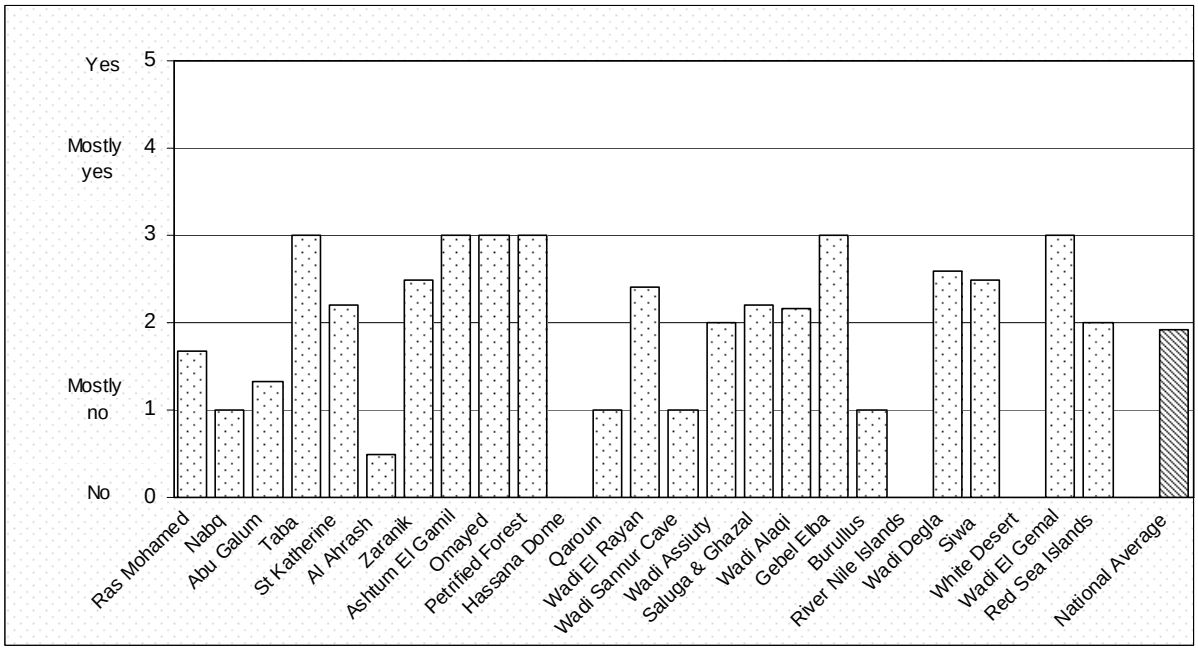
Staff Comments:

Ras Mohamed	needs developing
Abu Galum	the plan is prepared but waiting for authorization (2)
Taba	but under supervision and authorization
St Katherine	but have not been applied yet because not enough funding, employers, training and managemental and political support
St Katherine	but waiting for authorization
Zaranik	there is a plan but not concerned with MEDWET targets
Petrified Forest	but have not been applied yet (waiting for authorization)
Qaroun	but unclear and not enough
Wadi El Rayan	but needs revision
Wadi Assiuty	there's a plan but not complete
Saluga & Ghazal	unclear for NCS but clear for the protectorate management
Saluga & Ghazal	there's a yearly plan but not good enough and may not be performed at all (2)
Wadi Alaqi	there is an applied yearly plan for work, but needs modification and revision (2)
Wadi Alaqi	a plan has been put by the scientific consultant proposed to the central management
Gebel Elba	There is a complete unwritten plan for the administration, approved by the work team
Burullus	the main reason for the imbalance between human needs and natural resources conservation is the multiplication of responsible authorities working in the PA
Wadi Degla	there is a plan but has not been approved yet
Siwa	There are studies and researches, yet they are not documented under the administration plan; there is a work plan approved by all the work team
Siwa	The plan does not include all these points
White Desert	There is no administration plan; one is being prepared by NCS (3)
Red Sea Islands	the protectorate is managed by an adaptive management system

Notes:

Question 13b: *The management plan is largely implemented and effective.*

Results:



Staff Comments:

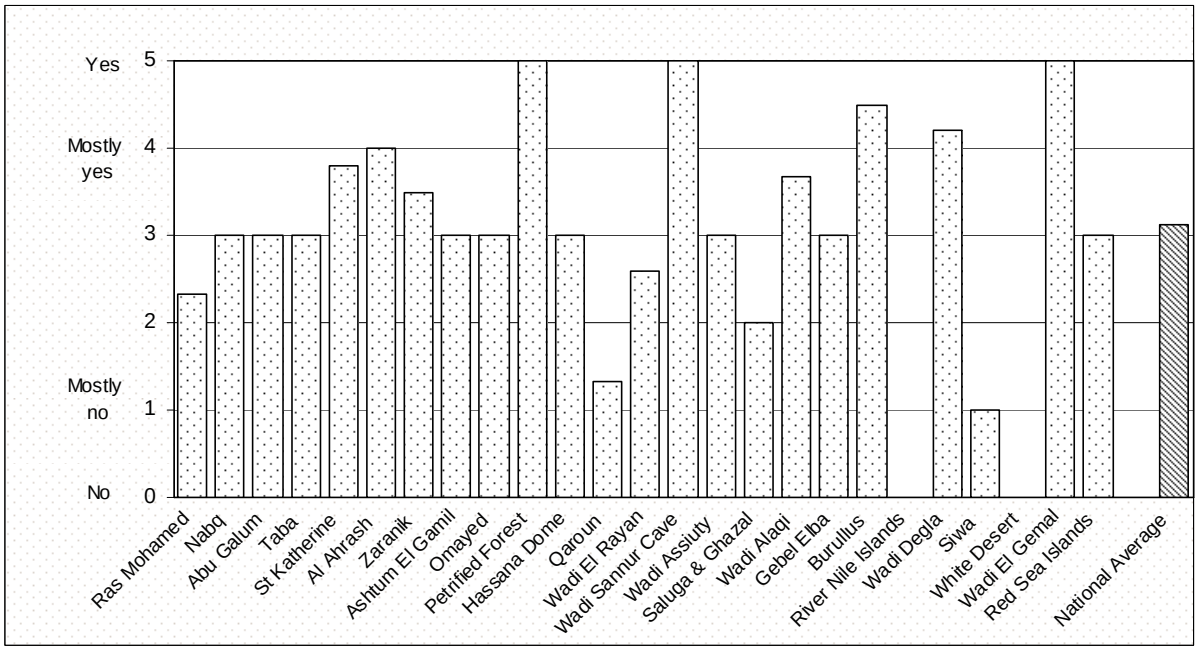
Abu Galum	no enough manpower or equipment
St Katherine	but there are some management obstacles, such as shortage of employees
Qaroun	because of low funding and absence of technical abilities (like new good vehicles)
Wadi Sannur Cave	no enough money
Wadi Assiuty	there are obstacles
Saluga & Ghazal	for the protectorate, it is clear
Saluga & Ghazal	no response from the NCS to accept or refuse the annual plan (2)
Wadi Alaqi	low budget
Wadi Alaqi	the weakness of the PA abilities is an obstacle against acheivement of the aims
Wadi Degla	because there are obstacles to applying the plan, mostly financial
Wadi Degla	has not been applied effectively yet (2)

Notes:

Although management plans are being prepared for many PAs (***Q13b***), this response suggests they are not being implemented. To make them effective, the plans should be given some sort of legal 'authority'.

Question 13c: *There is a comprehensive inventory of natural and cultural resources.*

Results:



Staff Comments:

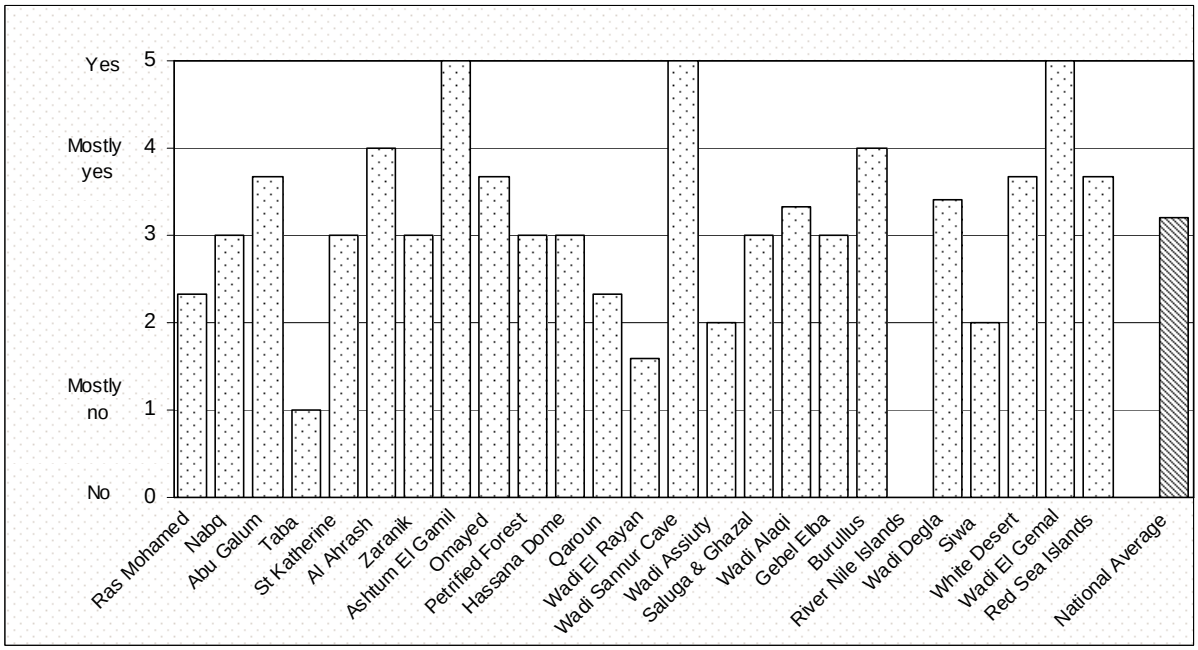
Ras Mohamed	but recently we've started working on this
Abu Galum	but there are no maps
Taba	but the archaeological sites have not been surveyed yet
Ashtum El Gamil	there's a database but no maps
Omayed	there's a database but no maps
Saluga & Ghazal	there is a database, but not mapped
Saluga & Ghazal	needs more clarification
Burullus	there is monitoring of plants, birds and other species

Notes:

See discussion for Q ***10c***.

Question 13d: *There is an analysis of, and strategy for addressing, PA threats and pressures.*

Results:



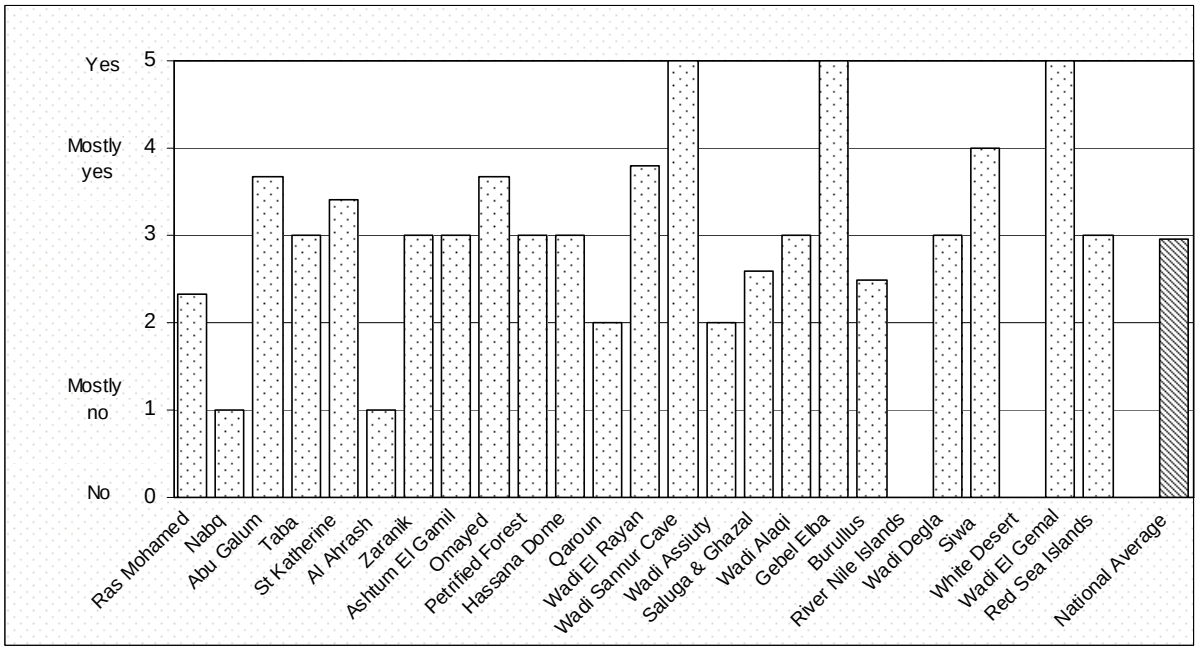
Staff Comments:

Ras Mohamed	we are working on developing this
Omayed	there is a plan for new grazing lands to face the danger of overgrazing
Saluga & Ghazal	there are some solutions but they are not effectively applied
Wadi Alaqi	the steps taken to face pressures are unorganized and there's no clear strategy
White Desert	only among researchers
Wadi El Gemal	but analysis is not being well used
Red Sea Islands	there are resources databases including information collected by researchers and foreign projects

Notes:

Question 13e: *A detailed work plan identifies specific targets for achieving management objectives.*

Results:



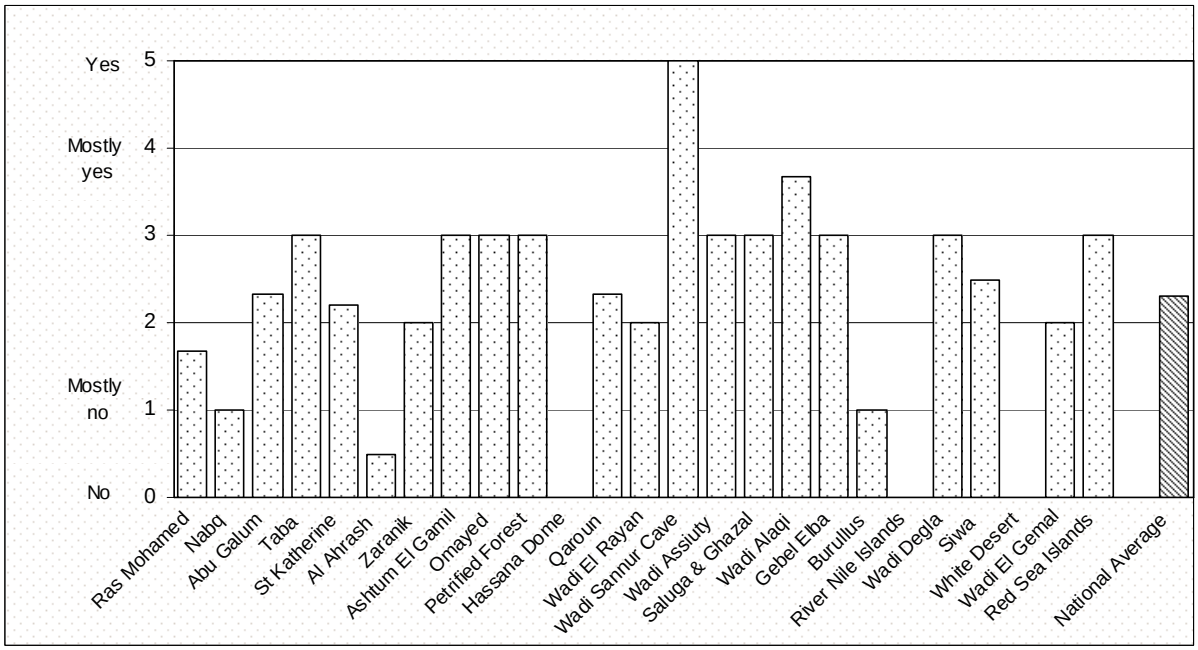
Staff Comments:

Wadi El Rayan	but ineffective
Wadi El Rayan	The Italian project lasts for 3 years, but after that the situation is uncertain
Wadi Assiuty	there's a plan, but it is not organized
Saluga & Ghazal	by cooperation between all the employees as a one team
Saluga & Ghazal	there is only an annual plan and what is being done each month
Saluga & Ghazal	a short-term plan, that needs to be clear
Wadi Alaqi	a complete plan exists with aims and methods of achievement, but it's not periodically updated
Gebel Elba	PA administration depends on a clear plan for the rangers as well as the researchers; this appears clearly on preparing and applying the annual business plan for the current project of the protectorate for the year 2005 and 2006.
Wadi El Gemal	but the meams are not available
Red Sea Islands	there are a group of work plans

Notes:

Question 13f: *The results of research and monitoring are routinely incorporated into planning.*

Results:



Staff Comments:

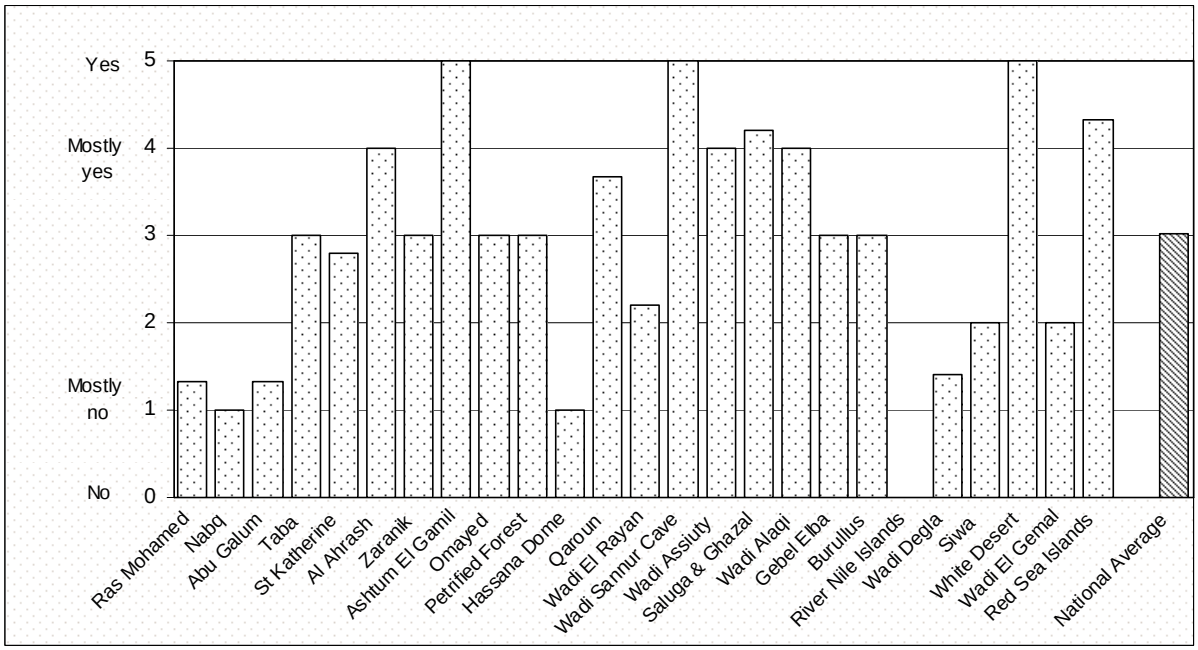
Abu Galum	because of the budget
St Katherine	the results of research are very little as there are no enough patrols
Saluga & Ghazal	in some kinds of monitoring; most results agree with the general plan of the PA
Saluga & Ghazal	some work is being modified in the light of research results
Saluga & Ghazal	done spontanously without any reporting
Wadi Alaqi	results are analysed but skills shortage is the reason why these results don't appear
Burullus	there is a separation between research in the PA and monitoring operations
Wadi El Gemal	they can be used as a scientific research for some researchers
Red Sea Islands	the results of monitoring programmes are incorporated to improve the management programmes

Notes:

SECTION 14. Management Decision-Making

Question 14a: *There is clear internal organization.*

Results:

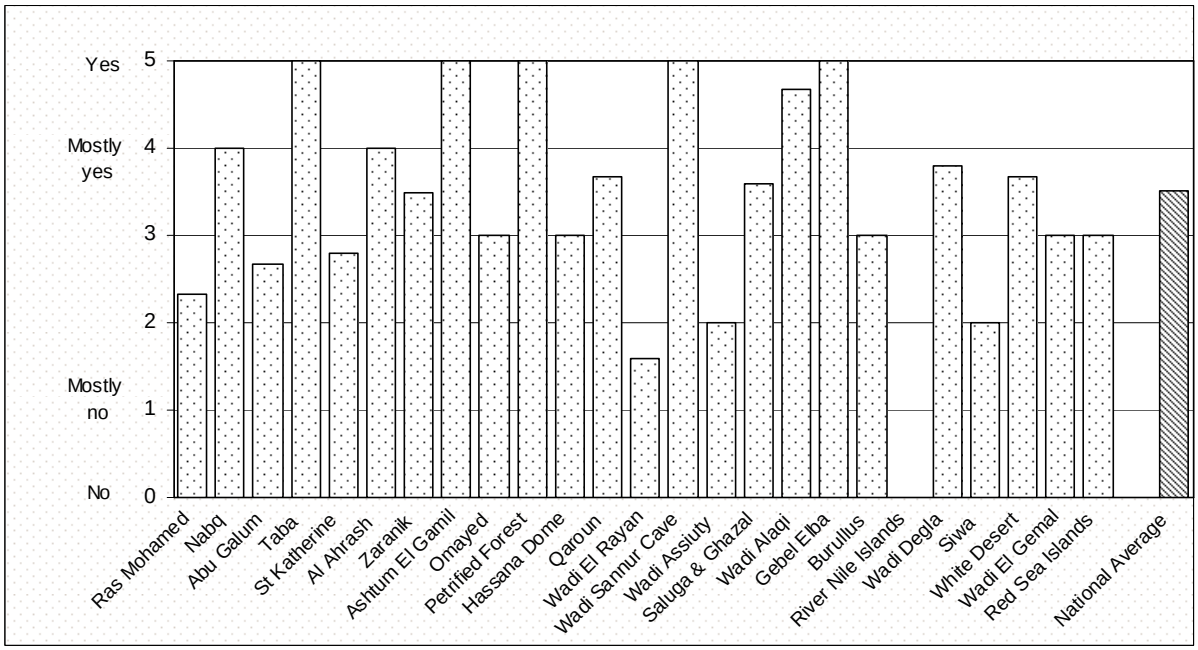


Staff Comments:

Ras Mohamed	There is an internal organization followed but it does not submit to any governmental rules
Ras Mohamed	There is unclear vision in regards to the professional frame of the protectorate workers
Abu Galum	Decreased number of persons as well as insufficiency of specialities
St Katherine	The financial organization of the administration, sectors and protectorates is not appropriate
St Katherine	There is no particular frame for organization except what the PA manager introduces, yet the goals are clear and the roles are specified
Zaranik	There is an internal organizational frame in the PA for organizing the tasks, but not in the central administration
Zaranik	This organization includes the protectorate workers only, whereas it is vague in regards to the central administration
Qaroun	Along with some conflicts regarding some missions and posts within the protectorate.
Wadi El Rayan	The virtual presence of the administration which messes up the submitting and receiving of papers withing the protectorate
Wadi Assiuty	Within the protectorate level; in regard to the central administration it is not known
Wadi Assiuty	Roles have been allotted to each researcher and worker as well as monitoring tasks
Saluga & Ghazal	This takes place within the rules regulating government workers
Saluga & Ghazal	There should be a professional organization with definite job descriptions due to the minimal number of researchers, yet as far as the general skeleton of the central administration, it is pretty clear
Saluga & Ghazal	It needs to be clearer, especially when it comes to the sector level as well as the channels and means of communication
Wadi Alaqi	The internal skeleton is already specified but specifying jobs for researchers is not available
Wadi Alaqi	Each researcher works in every direction
Wadi Degla	in regards to the administration, it is completely unclear
Wadi Degla	Researchers work in every direction
White Desert	The roles are clear in the protectorate
Wadi El Gemal	Yes in regards to the sector as a whole and often in regards to the protectorate
Wadi El Gemal	Such as moving around the protectorate
Red Sea Islands	There is clear internal organization

Question 14b: *Management decision making is transparent.*

Results:



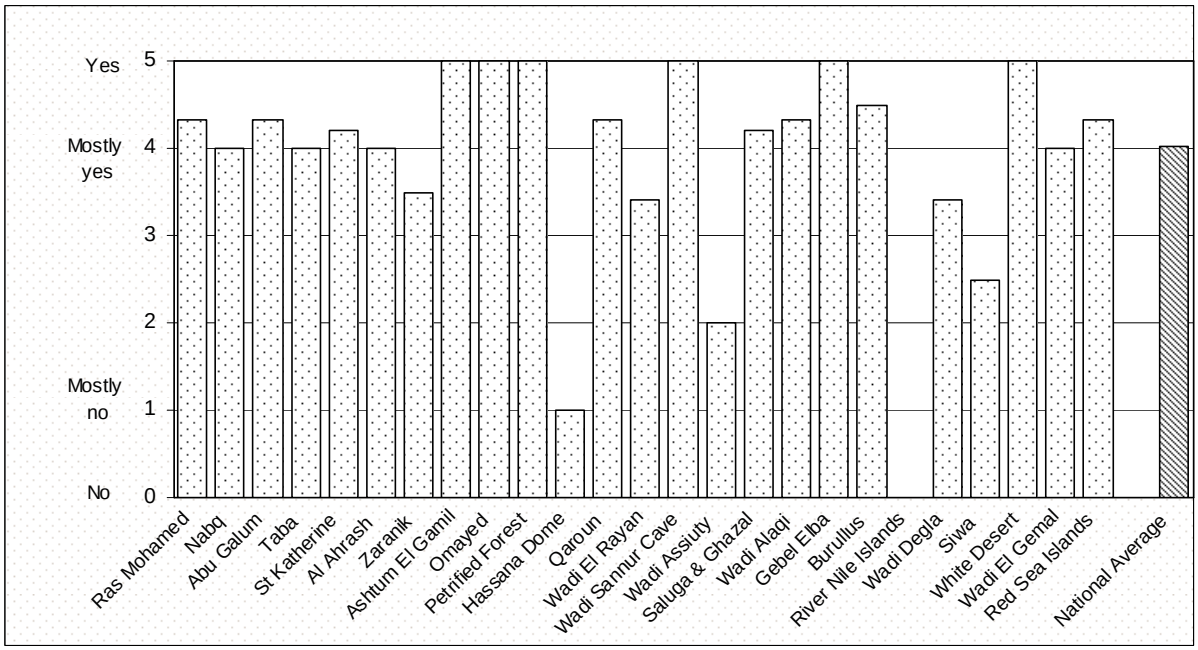
Staff Comments:

Saluga & Ghazal	This occurs throughout applying the punishment and reward strategy.
Saluga & Ghazal	Not all decisions necessarily initiate actions which could be ignored most of the time.
Saluga & Ghazal	It is not clear.

Notes:

Question 14c: *PA staff regularly collaborate with partners, local communities, and other organizations.*

Results:



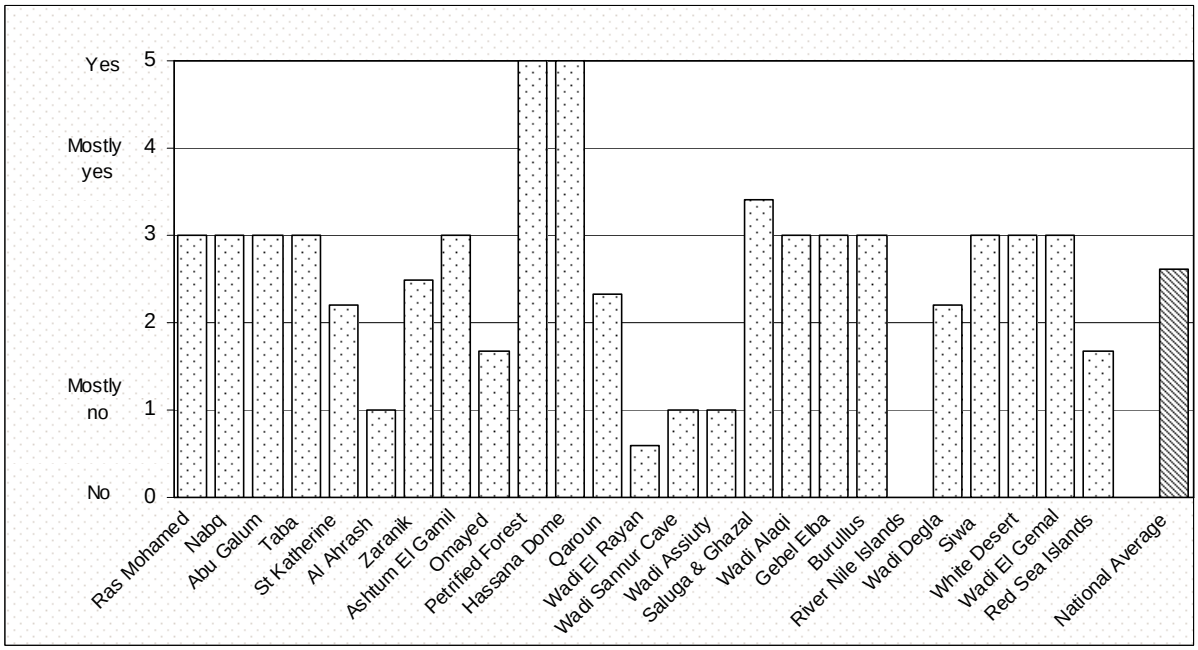
Staff Comments:

St Katherine	Contact with the local community and the authorities occurs only under specific circumstances and it is not regular
Wadi Assiuty	There is only a limited cooperation, not as demanded
Saluga & Ghazal	This occurs throughout communication channels which serve the protectorate.
Saluga & Ghazal	It is good, yet needs more and clearer cooperation that would pay back financially
Wadi Alaqi	Cooperation is restricted to some authorities (the county council and the universities only)
Wadi Alaqi	Researchers work on serving the local community in regards to what helps to reach the goals of the management plan
Wadi Alaqi	Co-ordination along with all authorities and local residents takes place
Gebel Elba	There is a complete sharing in management and making decisions
White Desert	local residents - some associations - people who work in tourism - institutions and schools
Wadi El Gemal	There is good coordination between the administration, residents and others
Red Sea Islands	We adopt the policy of participating with the local community and the private sector

Notes:

Question 14d: *Other Government authorities endorse and enforce the decisions made.*

Results:



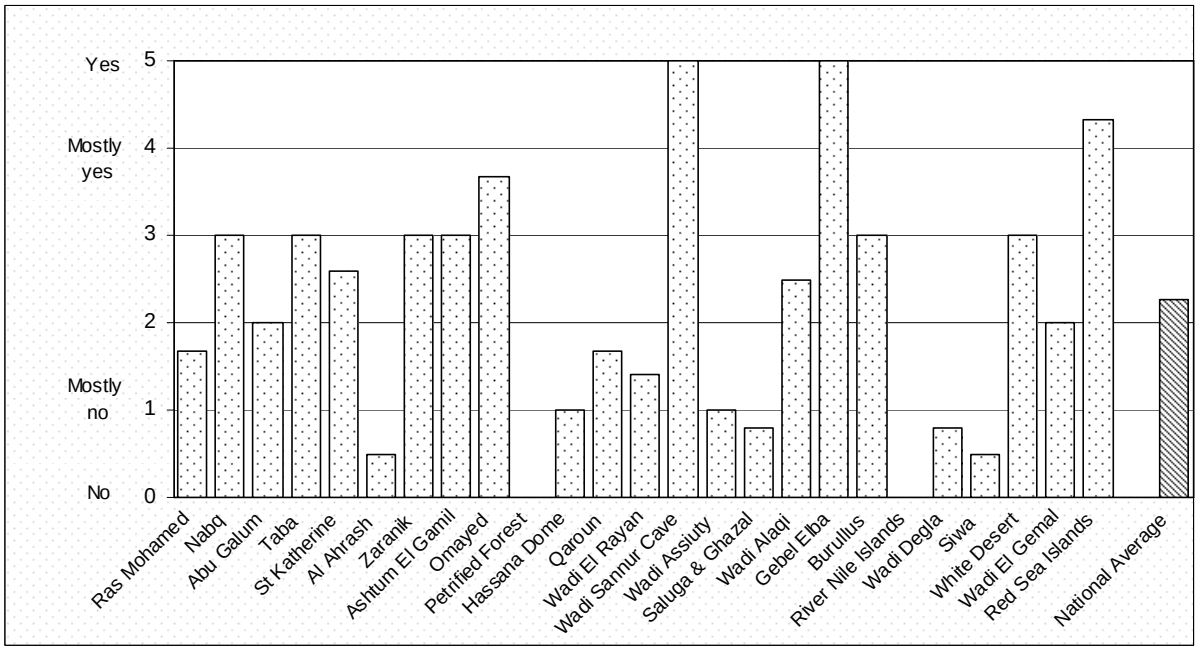
Staff Comments:

Abu Galum	The protectorate is a subsidiary of the South Sinai PA administration, which make almost 90% of all decisions of the protectorate.
St Katherine	The authorities often reverse the protectorate's decisions
Petrified Forest	Setting meetings with the working ministries for coordination.
Qaroun	There is no complete cooperation from the legal authorities, nor other governmental bodies
Wadi Assiuty	There is only a little communication
Wadi Alaqi	There is no cooperation between the working authorities within the region of the PA
Gebel Elba	There are some specialization interference with other authorities within the PA
White Desert	Most of the governorate authorities except the county council, because they are not cooperative, especially the governor (2)
Red Sea Islands	The local authorities respect the protectorate's decisions and apply them

Notes:

Question 14e: *Local communities participate in decisions that affect them.*

Results:



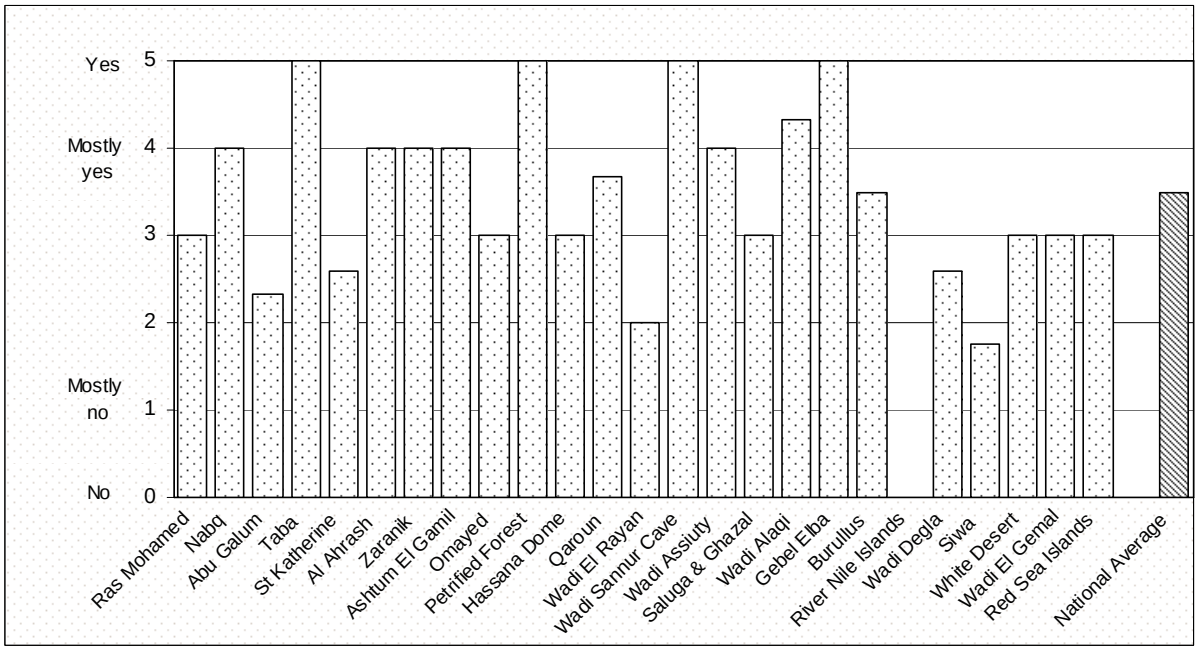
Staff Comments:

St Katherine	Meetings with Sheikh of the tribes take place for discussion
Wadi El Rayan	The PA takes care to meet occasionally with cruise-boat owners, as well as stock owners who violate the rules
Saluga & Ghazal	The organizing rules back up the application of these decisions
Saluga & Ghazal	Especially from the administration (the sector of environmental protection residency).
Gebel Elba	Recruitment decisions within the PA and the plan of control takes place by discussion of the local community and authorities.
Burullus	Yet limited to their personal interests
Burullus	Yet not on regular basis
Wadi Degla	Having reports from all working authorities within the limits of the protectorate
White Desert	Awareness campaigns started and we ran a workshop for this reason; note that there are no residents within the PA
White Desert	Participation of the local community has started making decisions through a workshop held in El Farafra last month

Notes:

Question 14f: *There is effective communication between all levels of PA staff and administration.*

Results:



Staff Comments:

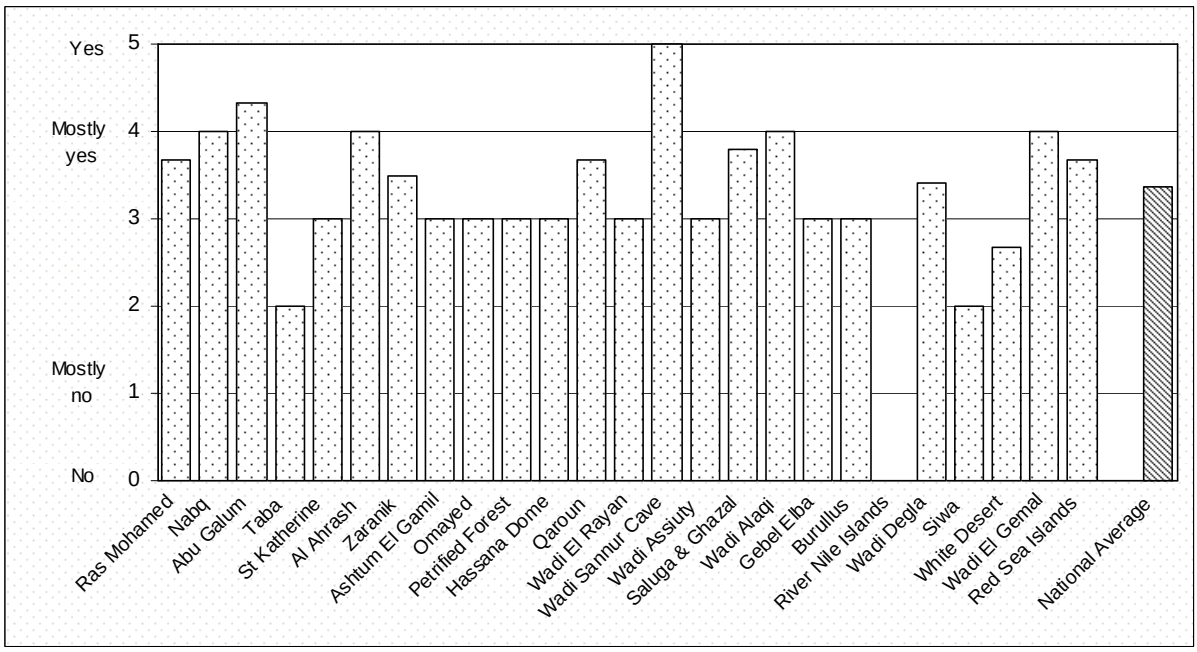
St Katherine	communication between the administration and workers occurs in a personal context
St Katherine	The central administration sends many decisions so late
Wadi Assiuty	There is communication, but it is not perfect
Saluga & Ghazal	There is a one-team spirit within the PA among all the workers
Saluga & Ghazal	There is communication between the researchers and the PA manager, but we lack effective communication between the manager and the NCS in regard to the PA demands, in responding or considering these demands
Wadi Alaqi	The working communities within the PA do not obey the management regulations because they oppose their personal interests (using pesticides in agriculture)
Wadi Alaqi	But there has been no comments on our reports lately
White Desert	It happens in almost a good way yet not a perfect one
Wadi El Gemal	As for reports, reverse communication does not occur

Notes:

SECTION 15. Research, Evaluation and Monitoring

Question 15a: *The impact of legal and illegal uses of the PA are accurately monitored and recorded.*

Results:



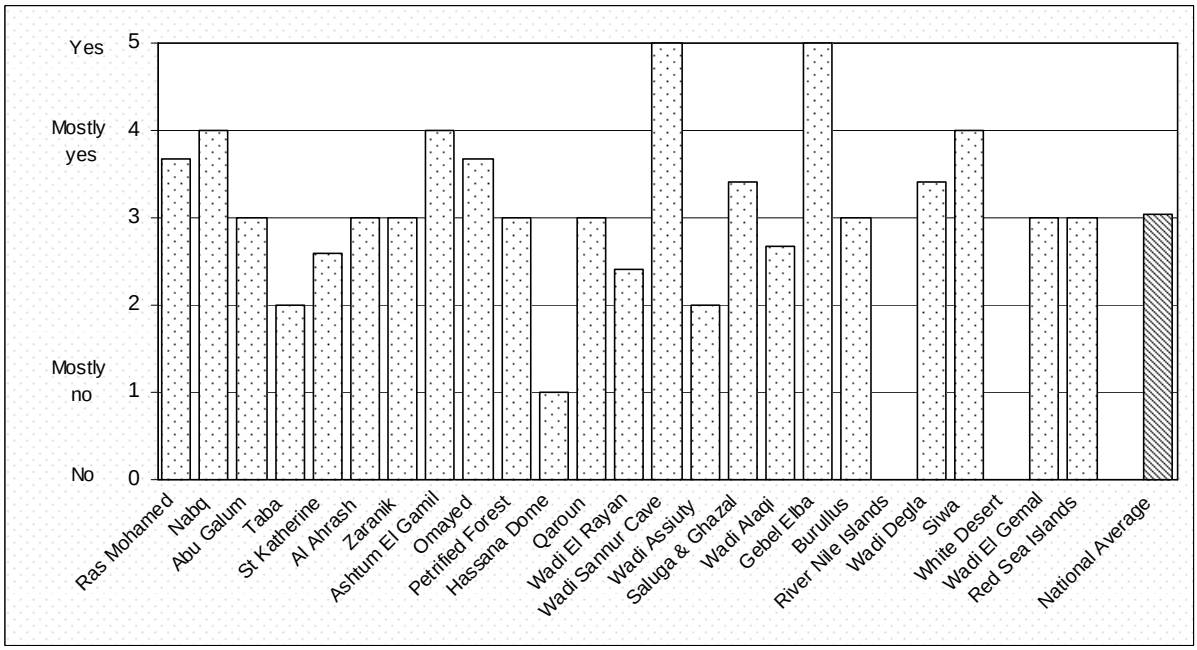
Staff Comments:

St Katherine	Administrative efficiency is lacking in the NCS planning for continuous pressures.
Qaroun	As much as facilities are available for us.
Saluga & Ghazal	Especially if these usages have direct negative effect on the protectorate from those in touch with the protectorate.
Saluga & Ghazal	Legal uses are not being recorded and we lack the precise records of illegal usages.
Saluga & Ghazal	Not quite precise.
Wadi Allaqi	They occur here under the working conditions of the PA, and thus recording efficiency may vary
Wadi Allaqi	Recording is focussed on events near to the lake; getting to distant ones is very difficult.
Burullus	Yet no legal decisions nor sentences are being carried out.
White Desert	Occurring for some aspects of legal violations and its effect on the PA.
White Desert	As far as is possible with the low number of workers.
Wadi El Gemal	If the necessary equipment is available.

Notes:

Question 15b: *Research on key ecological issues is consistent with the needs of the PA.*

Results:



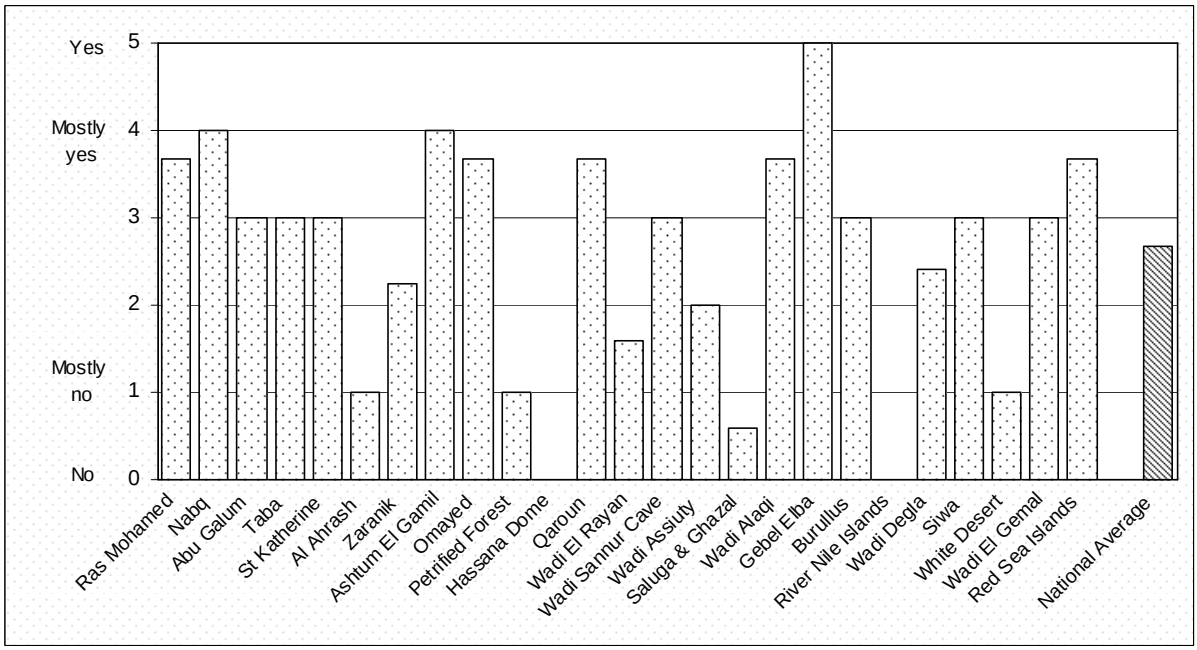
Staff Comments:

St Katherine	formerly, but not now
St Katherine	Rather little research; some researchers obtain their degree even before working in the PA.
Wadi Assiuty	All researches are done on plants only, whereas the main target is the gazelle.
Saluga & Ghazal	All research serves the needs of the PA.
Saluga & Ghazal	Sometimes changes occur in the research direction as a result of direction from the central administration, which delay PA research and results for a period of time (e.g. monitoring avian flu)
Saluga & Ghazal	There are defects in some aspects such as insects, reptiles and fish.
Wadi Allaqi	Work research but not academic research, which only occurs irregularly
Burullus	There is no research to cover all fields.
Siwa	There are some important cases which are not given due care, such as hunting, yet this is because of the lack of facilities.
White Desert	There are no scientific researches within the PA (2).

Notes:

Question 15c: *Research on key social issues is consistent with the needs of the PA.*

Results:



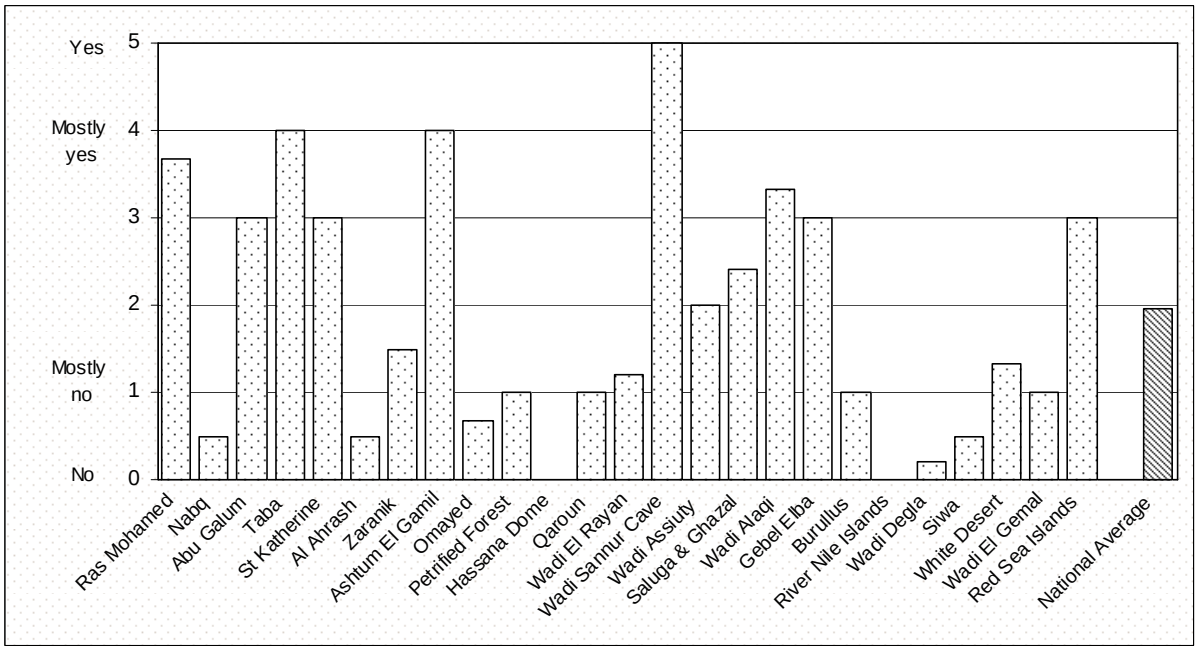
Staff Comments:

St Katherine	The efficiency of the administration depends in the first place on evaluation by workers.
Zaranik	Chances of economic development via handcraft bedouin project and artificial farms.
Wadi El Rayan	little research on social issues being done
Saluga & Ghazal	There is no social research; the PA lacks opportunities of economic development.
Saluga & Ghazal	This is because there are no residents within the PA.
Wadi Allaqi	Among the local communities.
Siwa	There is no clear social research.

Notes:

Question 15d: *PA staff members have regular access to recent scientific research and advice.*

Results:



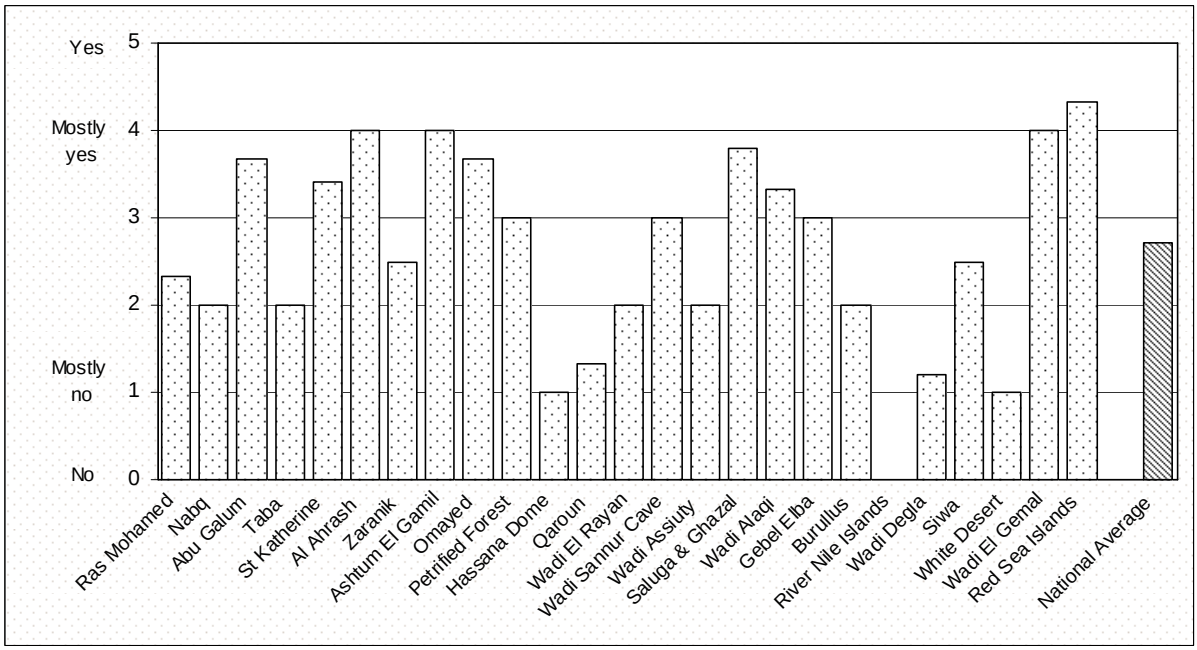
Staff Comments:

Ras Mohamed	There are no programs of research.
Abu Galum	There are no means within the PAs yet they exist in the main center at Sharm el Sheikh.
St Katherine	Not enough exchange of information among PAs.
Qaroun	There are no training courses nor information exchange for the PA.
Wadi El Rayan	affected by lack of access to the Internet since there are no phone lines in the PA
Wadi Assiuty	Help does not reach the PA from the Ministry. There is no internet connection, nor subscriptions to any scientific magazines or such.
Saluga & Ghazal	Indirect communication with South Valley university and their Environmental studies & Development; contact with foreign experts via the Internet, or receiving them at the PA.
Saluga & Ghazal	This occurs by the cooperation of South Valley University as well as other research authorities. The NCS should send the PA a copy of the reports done in the PA.
Saluga & Ghazal	Some information is lacking regarding some aspects of the PA, which gives a chance for workshops and training within the PA.
Saluga & Ghazal	We need this point pretty much; we do have an Internet connection, but it is so slow.
Wadi Allaqi	In spite of the lack of exchange of information between PAs.
Gebel Elba	25 % of rangers have the ability to get scientific and other papers, and some rangers are members in scientific forums or societies
Burullus	There are no scientific periodicals, no Internet nor outside courses.
Wadi Degla	There are no phone lines, direct library, or enough copies of papers.
Wadi El Gemal	There is not any means for keeping up with scientific research.(libraries, Internet, etc)
Red Sea Islands	In spite of having the Internet, some employees are not interested because of their different and variable interests

Notes:

Question 15e: *Critical research and monitoring needs are identified and prioritized.*

Results:



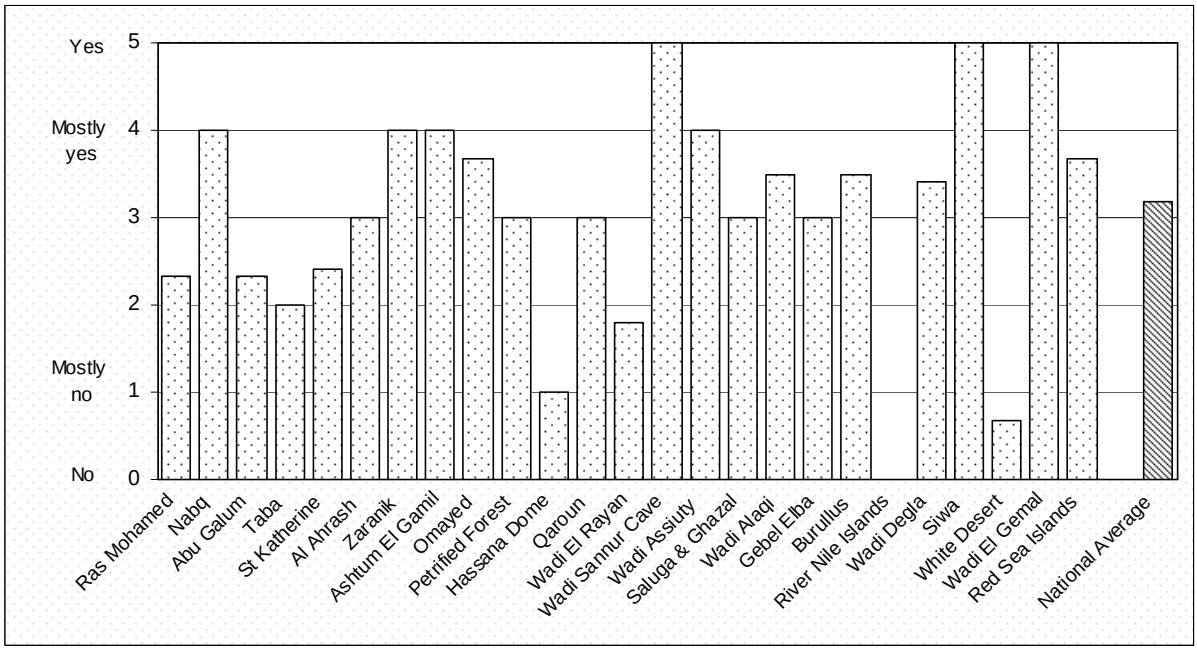
Staff Comments:

St Katherine	previously this was the case
Wadi El Rayan	there is activity within the Italian project
Gebel Elba	Monitoring may be considered as a priority, but only after patrolling, controlling and direct protection for species and areas, because there's a high risk to species from hunting and plant harvesting

Notes:

Question 15f: *The PA management, including management effectiveness is routinely evaluated and reported.*

Results:



Staff Comments:

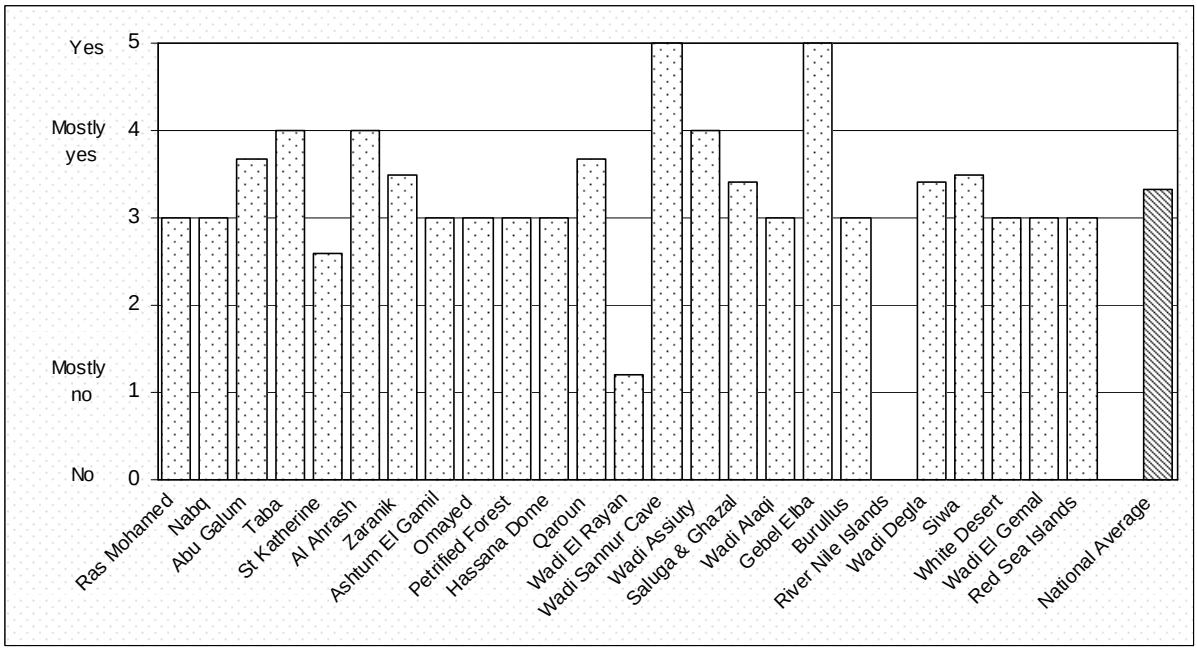
St Katherine	this workshop is the first initiative
Wadi El Rayan	this was done during phase I of the Italian project. We plan to re-institute it
Wadi El Rayan	The system exists, yet it needs effort to be applied and monitored.
Saluga & Ghazal	The administration of the PA produces monthly, semi-yearly and yearly reports which includes the accomplishments of the protectorate.
Wadi Degla	No evaluation done by the workers; occurs only periodically by the administration.
White Desert	The administration is not being evaluated, but there is a monthly report written about the tasks accomplished.
Red Sea Islands	this occurs from the desire for development, but it is not followed in a stable system
Red Sea Islands	In highly-used sites this occurs precisely (as in Hurghada Islands), but there are some distant sites which are only occasionally monitored (as in Akhwein Islands), where we depend on the reports of users.

Notes:

SECTION 16. Outputs

Question 16a: *Threat prevention, detection and law enforcement.*

Results:



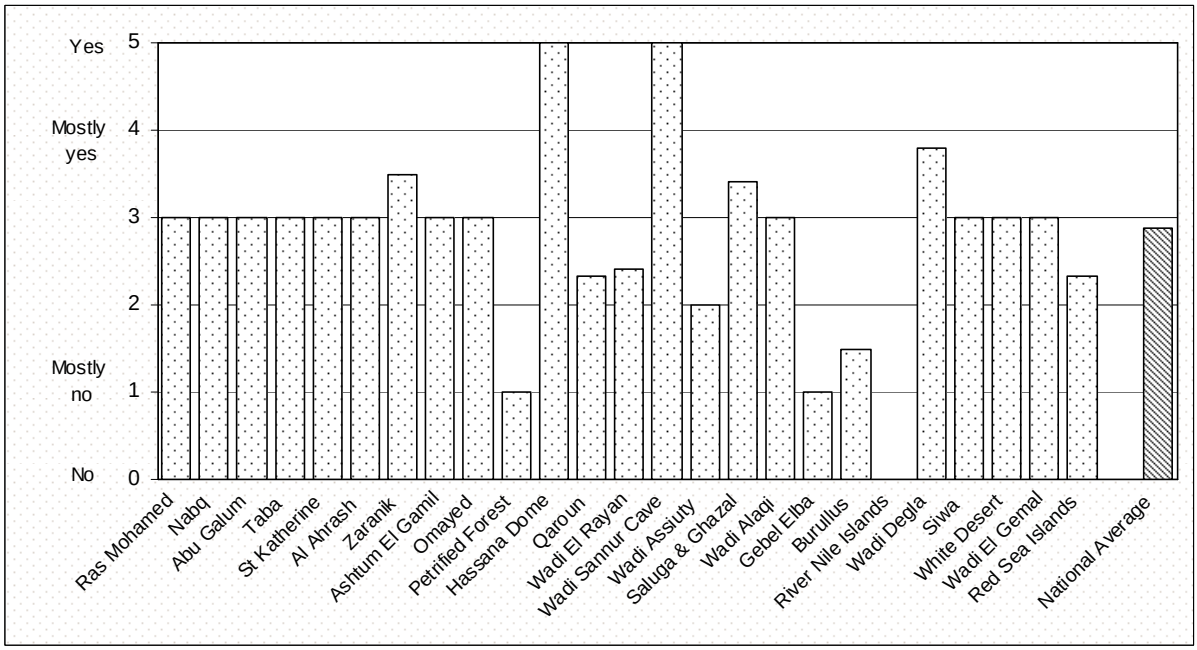
Staff Comments:

Abu Galum	This is only where facilities allow.
St Katherine	Applying the law does not always end up the way it should be: for example, removal does not occur, but the situation often ends up with paying a fine.
St Katherine	The law is applied, yet not all threats are detected due to the limited number of patrols.
Al Ahrash	This is because of not being able to apply the law.
Zaranik	There is continuous patrolling for preventing any threat, but it is difficult to apply the law due to the nature of the area (2).
Qaroun	The law is not applied.
Qaroun	As much as possible, because of the lack of facilities to reach the threats and monitor them.
Wadi El Rayan	Threats are discovered, yet applying law still misses a great deal.
Wadi El Rayan	Due to some obscene exceptions (the monks), in addition to a violating cafeteria.
Wadi Assiuty	Threats are detected and people get fines, but the law is not then being applied.
Saluga & Ghazal	After a fire, a fire station was constructed in 2003 to cover about 80% of the protectorate (2)
Wadi Allaqi	Some pressures can not be prevented either for military reasons, or because the environmental law is not strong enough to be applied.
Wadi Allaqi	Prevention is attempted, the fine is specified, yet it is difficult to apply the law (3).
Burullus	Threats can be detected, yet it is so hard to apply the law; it needs cooperation of many authorities.
Wadi Degla	Threats are detected, but applying the law is not then the concern of the PA.
Siwa	Impossible to regulate desert hunting by princes because of obstacles by frontier guards
White Desert	This occurs during patrols, but staff numbers and cars are not enough to eliminate.
White Desert	Detection and prohibition happen, but without applying the tourism law.
Wadi El Gemal	The law cannot be applied.

Notes:

Question 16b: *Site restoration and mitigation efforts.*

Results:



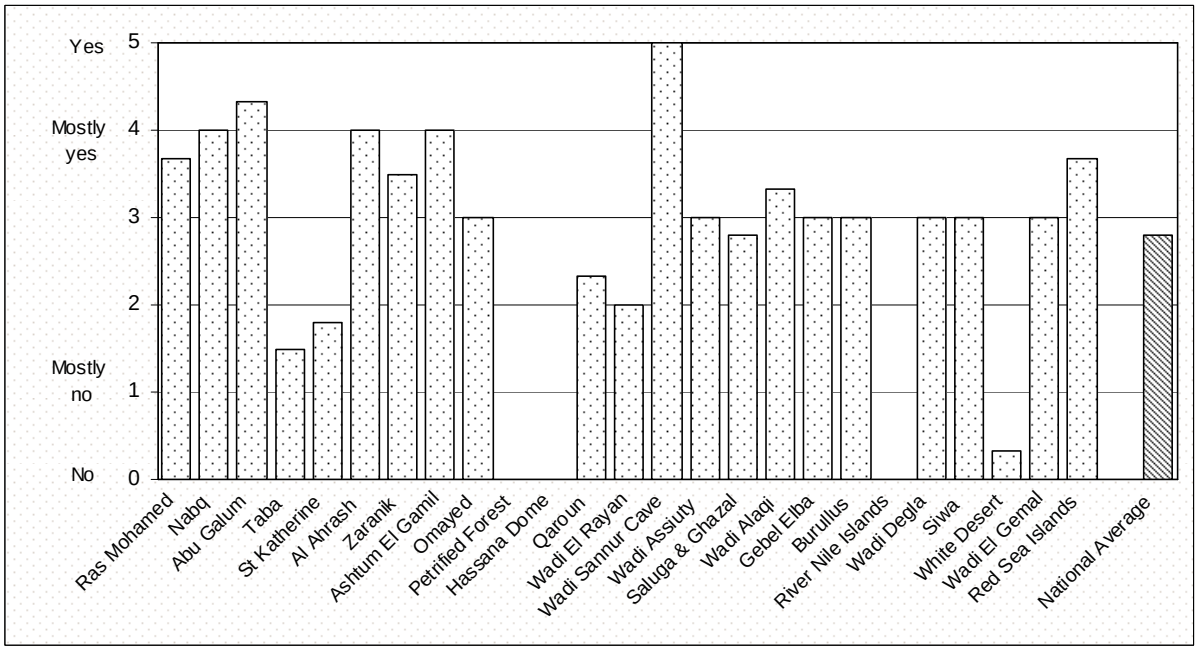
Staff Comments:

Wadi Assiuty	Since the law was not applied and no removals were performed, despite this we are demanded to put things back in the right track.
Gebel Elba	There are primary plans to restore the site, but there is not enough materials for carrying it out.
White Desert	Eliminating the danger of unmanaged tourism.
White Desert	Eliminating the danger of waste products and invading plants.
Red Sea Islands	There are no rehabilitation programs. There are attempts, such as university research into restoration of stony corals, and more than one attempt for restoration of mangroves in Wadi El Gemal.

Notes:

Question 16c: *Wildlife or habitat management.*

Results:



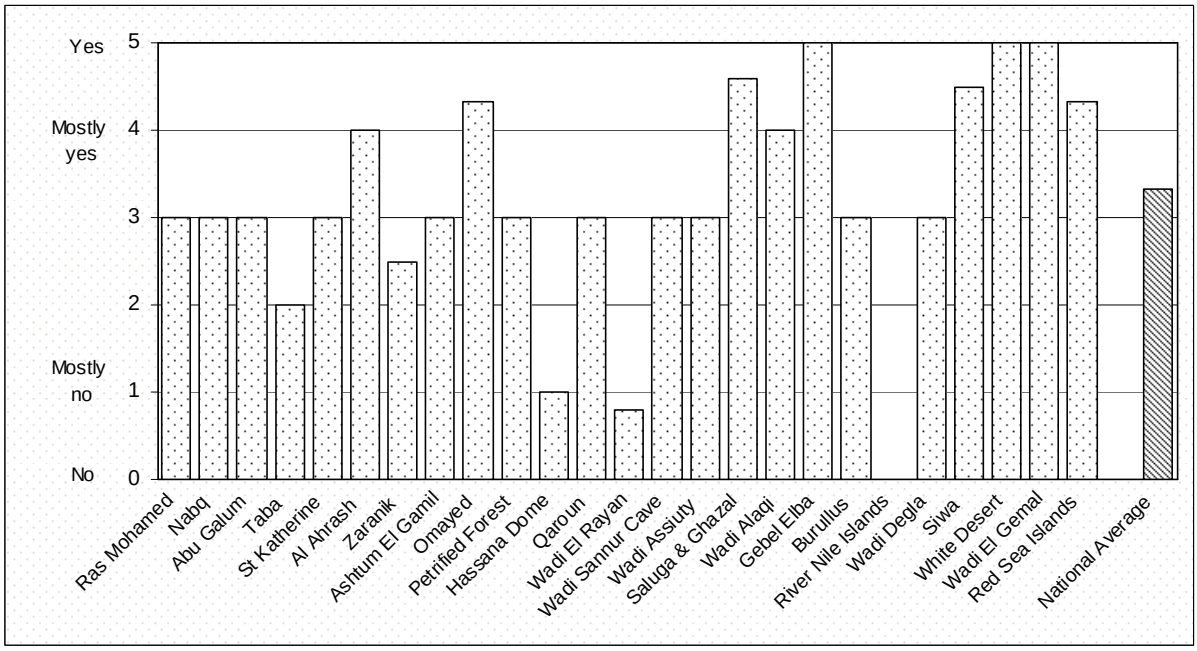
Staff Comments:

Taba	There is a lack of appropriate financial support for the application of environmental management.
Saluga & Ghazal	The PA needs research about the wildlife present in the PA, especially the reptiles on which we lack enough information.
Saluga & Ghazal	Somewhat deficient.

Notes:

Question 16d: *Community outreach and education efforts.*

Results:



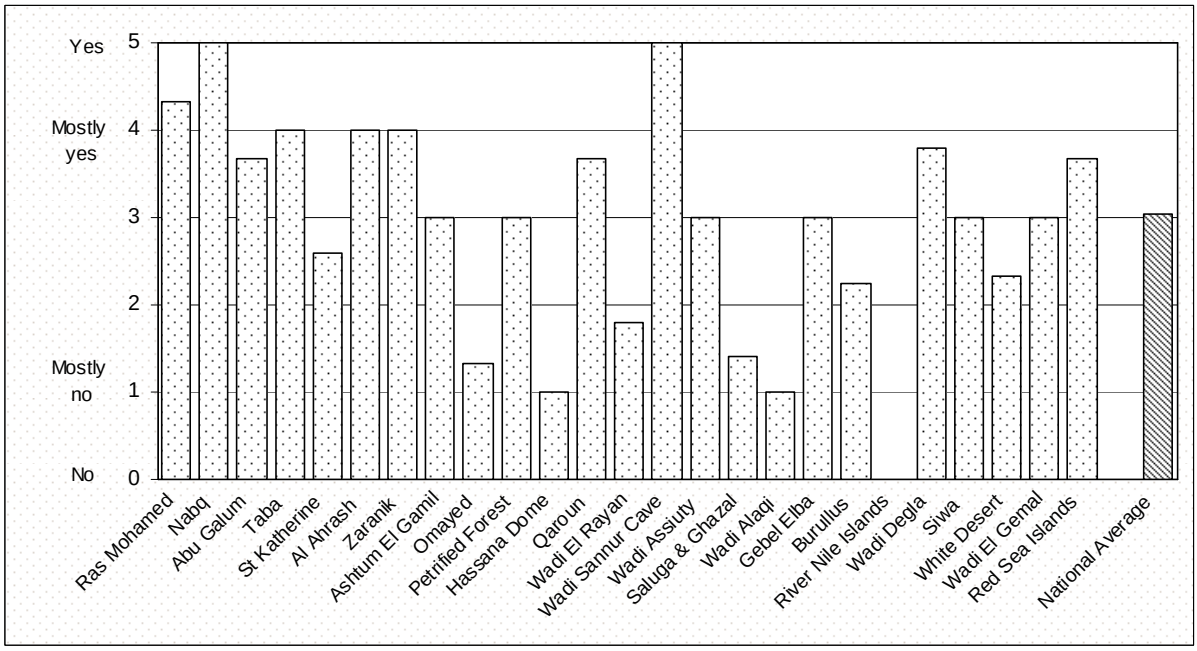
Staff Comments:

Ras Mohamed	Environmental awareness of all those who work in tourism and have direct or indirect relation with the natural resources.
Taba	First aid training program for the local Bedouin.
Zaranik	It is hard to fulfill this with Bedouin.
Qaroun	Environmental awareness for schools and clinics. Working on environmental projects for the community.
Qaroun	The administration building was developed, but there is no place for visitors.
Wadi Assiuty	Teaching and spreading awareness among the community within the PA
Wadi Assiuty	There is only awareness.
Saluga & Ghazal	This occurs through awareness programs for school students and residents. The PA receives about 2000 people per year.
Saluga & Ghazal	The PA receives a number of school students for environmental awareness, yet it needs development so that the awareness process becomes effective and affects attitudes.
Saluga & Ghazal	Through awareness programs for school students and universities.
Wadi Allaqi	Bedouin children are being taught.
Siwa	Lectures in governmental schools for different stages.
White Desert	Awareness campaigns have been carried out.
White Desert	Regarding awareness campaigns for schools and governmental institutes.
Wadi El Gemal	Awareness programs for residents, hunters and others.

Notes:

Question 16e: *Visitor and tourist management.*

Results:



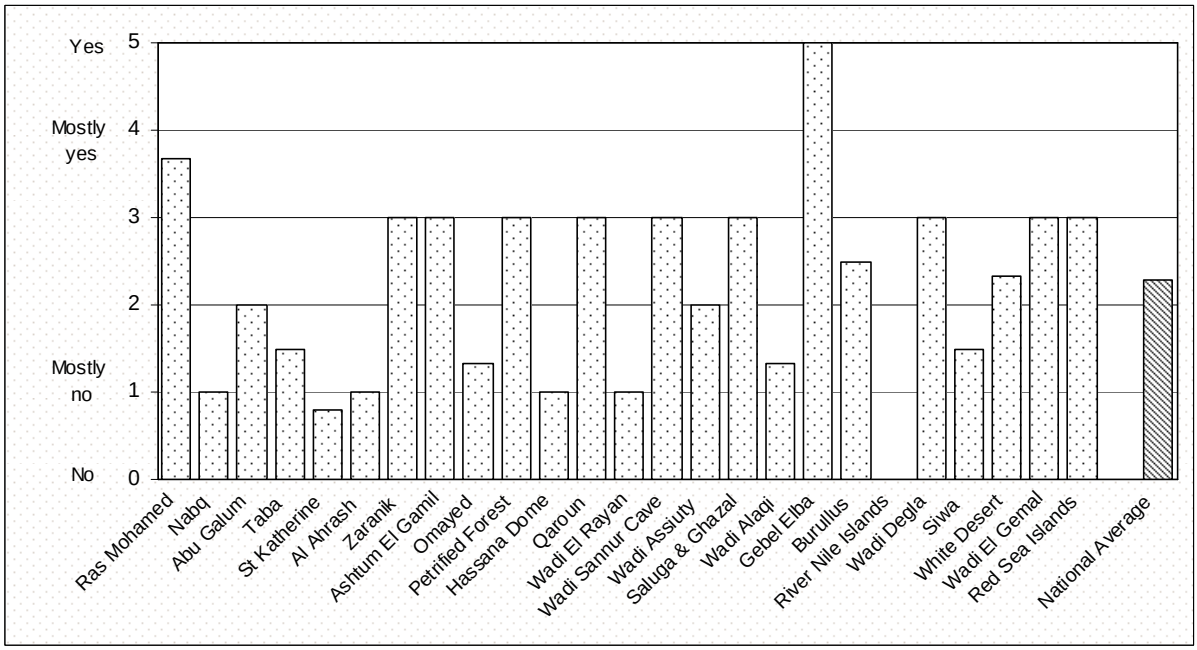
Staff Comments:

St Katherine	The presence of many defects in the management plan.
Ashtum El Gamil	Yet most visits are from the local community, not tourists.
Wadi Assiuty	There are limited numbers of visitors.
Saluga & Ghazal	There is not enough tourism.
Saluga & Ghazal	This does not occur regularly and with a very small number of people.
Saluga & Ghazal	There are tours to the PA yet without any arrangement with tourism companies, or any fees or preparations for receiving them. We need to advertise, as well as to add the PA onto the tourist map so that they can be aware and make use of it.
Saluga & Ghazal	We hope to accomplish this in the future and open up the PA for tourists.
Wadi Allaqi	There is no sight-seeing for tourists in the PA.
Wadi Allaqi	The number of visitors is pretty limited: only scientific trips restricted to egyptians.
Wadi Allaqi	Because entering the protectorate occurs through the armed forces (secret intelligence).
Wadi Allaqi	Tourists cannot visit due to the presence of the PA in a military area.
Burullus	There are no intensive tourist visits. The PA needs signage, cars, etc.
White Desert	This is because the PA was not totally informed about trips in advance.
White Desert	Due to the increase of the tourists during the season.
White Desert	The plan is under construction.

Notes:

Question 16f: *Infrastructure development.*

Results:



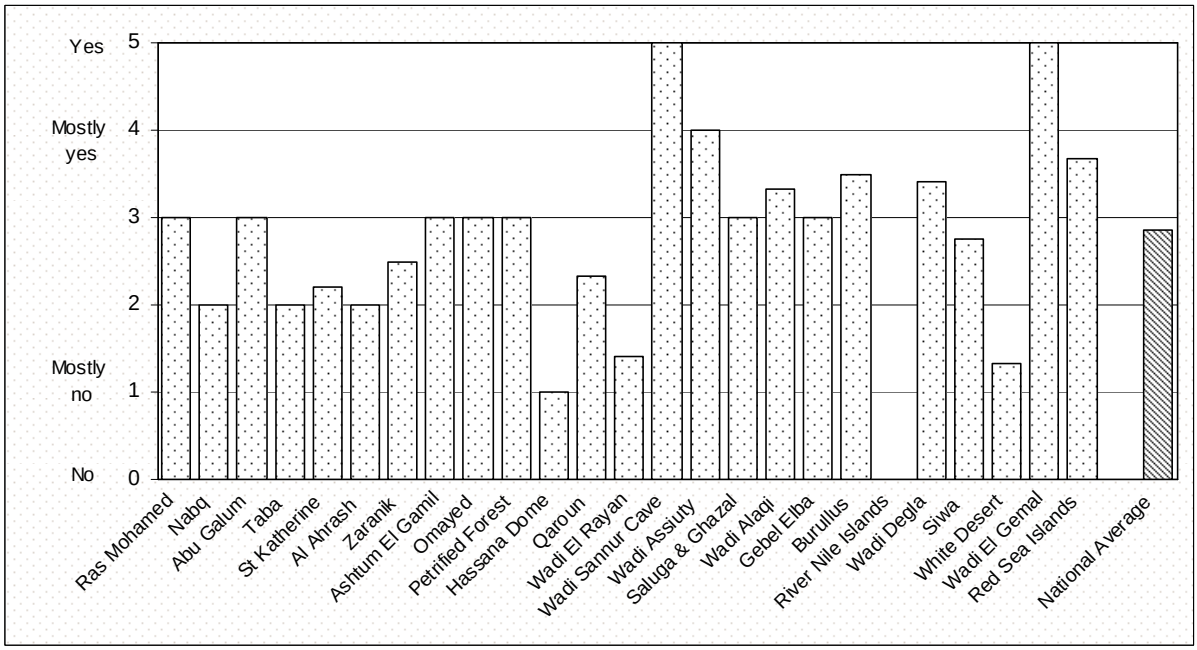
Staff Comments:

Abu Galum	Little has been accomplished.
Taba	The lack of appropriate financial support for developing the main environment during the past couple of years.
St Katherine	Borrowing some cars to work in the PA.
St Katherine	Delay in the financial plan and administrative conflicts.
Al Ahrash	Due to the lack of financial facilities (2).
Wadi Sannur Cave	Due to the decrease of the financial situation.
Saluga & Ghazal	Somehow in regards to the amount of the financial support provided to the PA.
Saluga & Ghazal	It lacks administration cooperation as well as financial aid.
Saluga & Ghazal	Developing tents for receiving visitors, as well as bathrooms and paths.
Wadi Alaqi	There are no financial resources.
Siwa	Represented by border signs.
White Desert	There is no plan for desert roads and direction signs to facilitate the movement of tourists, especially if they are by themselves.
Wadi El Gemal	There is no residential accommodation for married staff.
Red Sea Islands	It need a clear strategy for the long term.

Notes:

Question 16g: *Management planning and inventorying.*

Results:



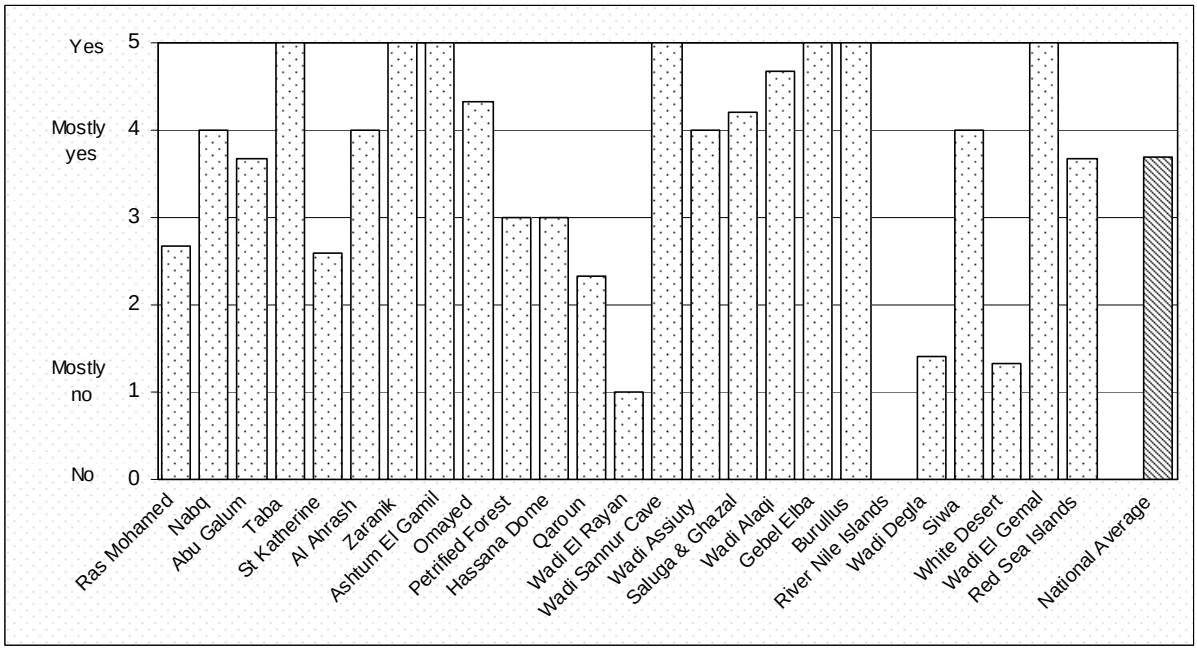
Staff Comments:

Ras Mohamed	Started recently but funding is slow, meagre, and not up to reasonable expectations.
Ashtum El Gamil	But we need to have direction signs.
Saluga & Ghazal	85% accomplished so far.

Notes:

Question 16h: *Staff monitoring, supervision, and evaluation.*

Results:



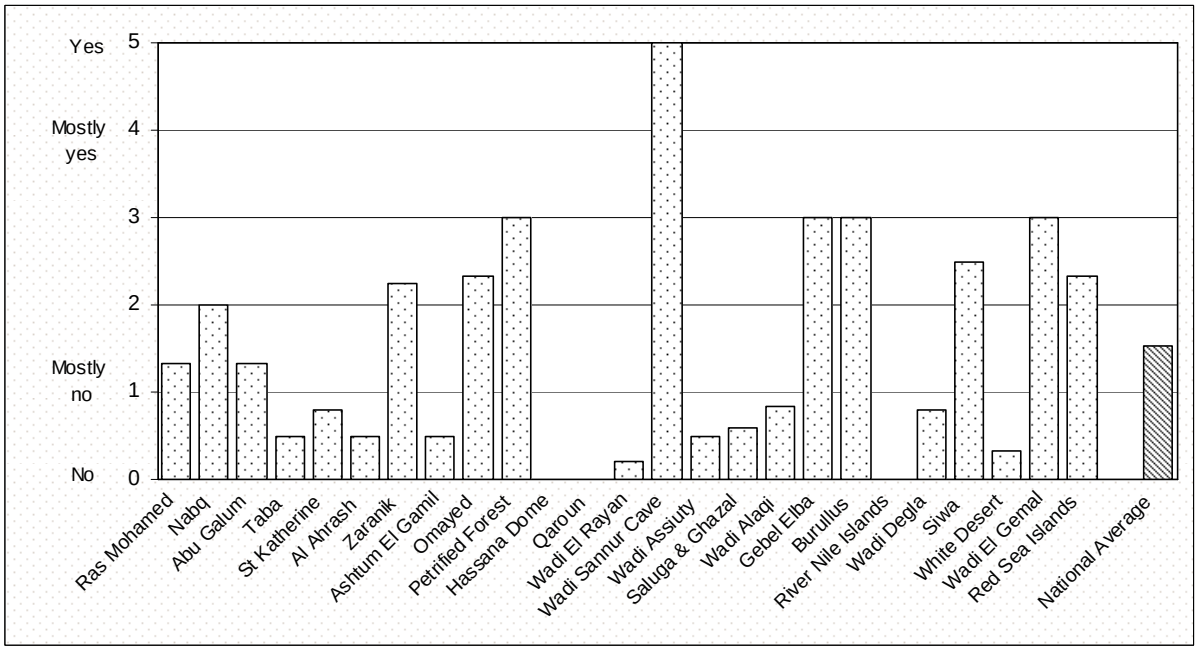
Staff Comments:

Saluga & Ghazal	This occurs with complete sensitivity.
Saluga & Ghazal	There is monitoring and supervision, but no evaluation.

Notes:

Question 16i: *Staff training and development.*

Results:



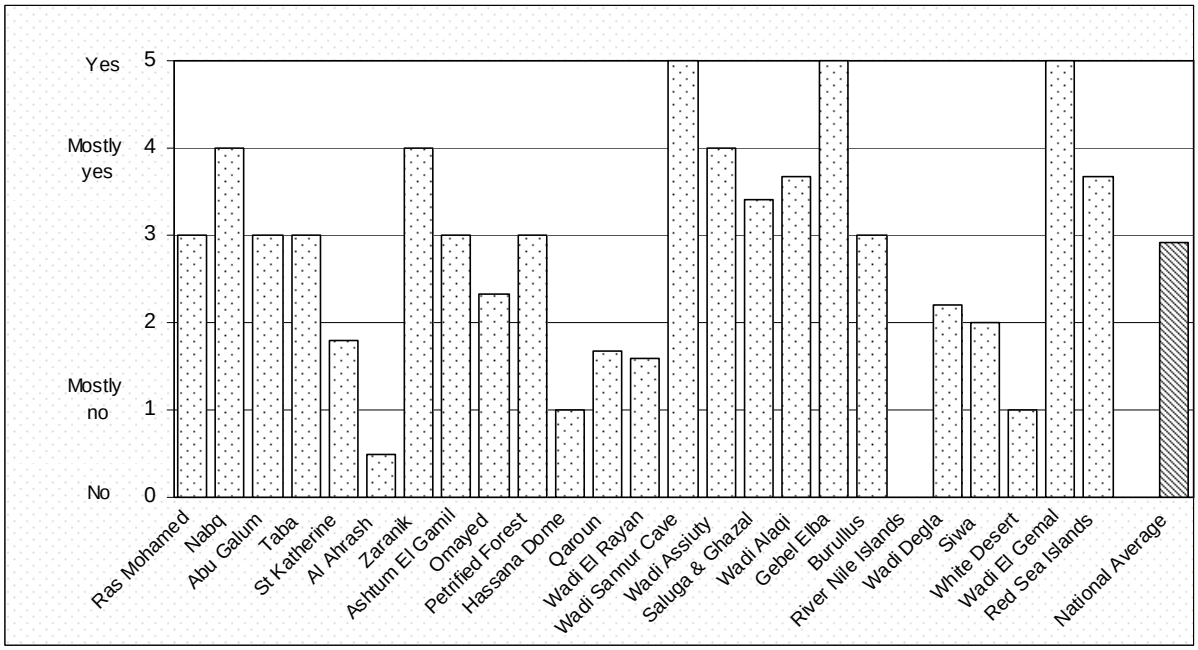
Staff Comments:

Taba	The lack of training course chances.
Ashtum El Gamil	We need training, especially monitoring and evaluating environmental impact.
Qaroun	There is no training.
Wadi Assiuty	There is severe shortage in training couses.
Wadi Assiuty	The administration did not provide training.
Saluga & Ghazal	The PA lacks all kinds of training sources.
Saluga & Ghazal	Training does not occur fairly among all the workers.
Saluga & Ghazal	There is no plan for training and development.
Wadi Allaqi	There are pretty few training courses.
Wadi Allaqi	I have had no chance for training since I started working, and this applies to most of the workers and researchers.
Wadi Allaqi	There is hardly any available training chances.
Wadi Allaqi	Due to the lack of a plan and facilities.
Wadi Allaqi	The absence of training courses specific for researchers.
Burullus	The workers need larger specialized courses.
Wadi Degla	There is no training but development occurs as much as possible.
Red Sea Islands	It needs support from both administration and Ministry so as to provide appropriate training for appropriate people, and working this out with what's best for the PA.

Notes:

Question 16j: *Research and monitoring*

Results:



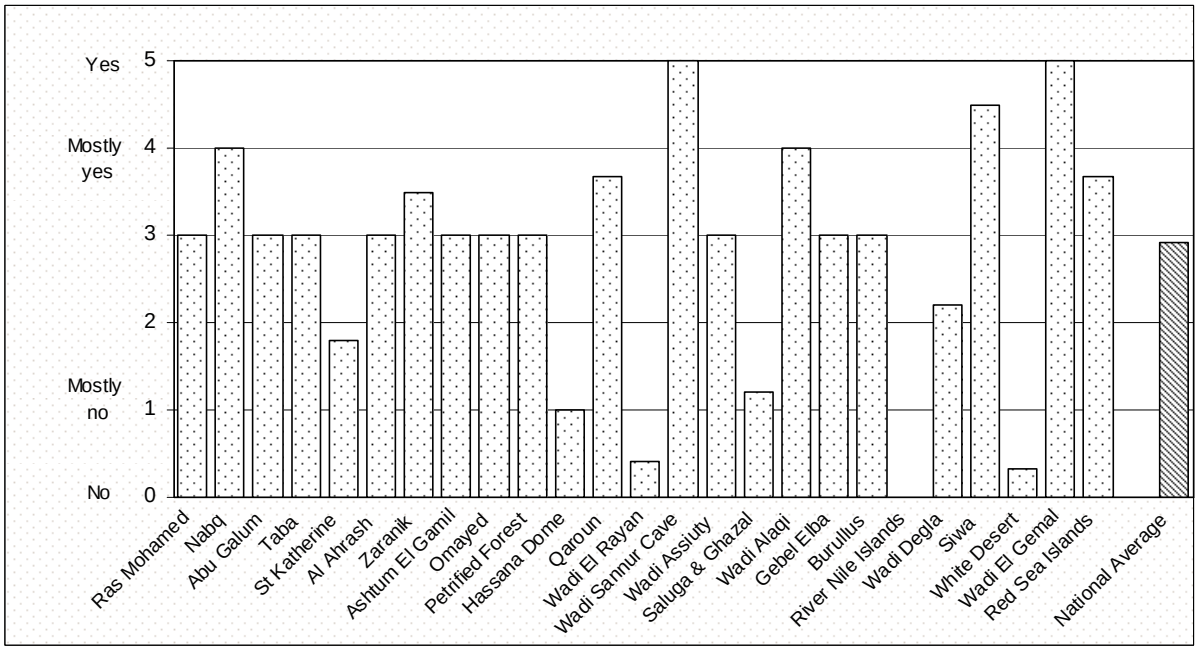
Staff Comments:

Taba	On the underground water south of the protectorate.
Taba	In a very narrow range due to the lack of financial resources.
Ashtum El Gamil	Due to the lack of enough funding.
Qaroun	Very weak due to the usual break down of the only car that we have.
Wadi El Rayan	There is no plan for research; there is monitoring plan which sometimes cannot be accomplished in full because of a lack of facilities.
Wadi Assiuty	Depending on available equipment.
Saluga & Ghazal	It occurs according to available facilities.
Wadi Allaqi	The weakness of the available resources.
Siwa	Pretty simple research happens, not exceeding one day for lack of camping equipment.
White Desert	There are no research operations.

Notes:

Question 16k: *Evaluation and reporting.*

Results:



Staff Comments:

Taba	Writing reports, recording fines and accomplishments all occur, but the problem is the actual evaluation of the administration.
Wadi El Rayan	Monthly reports, evaluation, monitoring, and supervision reports. A yearly report as well as a mid-yearly one. Yearly work plans. Emergency plans such as Avian flu.
Saluga & Ghazal	There is none or it is not being well covered.
Wadi Alaqi	Reporting occurs periodically while the evaluation does not.
White Desert	Monthly report is always presented.
White Desert	There is no plan for training courses for administration.
Abu Galum	All the mentioned activities are carried out in a very limited range due to the limited availability of financial aid.
St Katherine	Carelessness due to the shortage of facilities, workers, training courses and budget.

Notes: