



# Ras Mohamed National Park

## *Business plan*

January 2008



## Document Information

This report and the related workshop were undertaken for the Nature Conservation Sector Capacity Building Project under the Egyptian-Italian Environmental Cooperation Programme. The programme is funded by Italian Cooperation and Debt for Development Swap Initiative.

Citation: Jose Galindo; Gen. Ahmed Shehata; Ahmed Salama; Khaled Allam Harhash; Bassem Abd El-Kader; Mohamed Talaat; Wael Ibrahim and Essam Saadalla, (2008).

Ras Mohamed National Park Business plan, Egyptian-Italian Environmental Cooperation Programme, Nature Conservation Sector Capacity Building Project, Cairo.

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October 20, 2007

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## **Terms and Acronyms**

|         |                                                                     |
|---------|---------------------------------------------------------------------|
| AWP     | Annual Work Plan                                                    |
| BP      | Business Plan                                                       |
| RMNP    | Ras Mohamed National Park                                           |
| EIECP   | Egyptian-Italian Environmental Cooperation Programme                |
| FTE     | Full Time Employees                                                 |
| BioMAP  | Monitoring and Assessing Biodiversity Project                       |
| CBD     | Convention on Biological Diversity                                  |
| EEAA    | Egyptian Environmental Affairs Agency                               |
| EIA     | Environmental Impact Assessment                                     |
| GoE     | Government of Egypt                                                 |
| IUCN    | World Conservation Union                                            |
| MEE     | Management Effectiveness Evaluation                                 |
| MSEA    | Ministry of State for Environmental Affairs                         |
| NCSCB   | Nature Conservation Sector Capacity Building Project                |
| NCS     | Nature Conservation Sector                                          |
| PA      | Protected Area                                                      |
| PAMU    | Protected Area Management Unit                                      |
| BU      | Business Unit                                                       |
| RAPPAM  | Rapid Assessment and Prioritization of Protected Area Management    |
| UNDP    | United Nations Development Programme                                |
| WESCANA | Western/Central Asia and North Africa Region of IUCN                |
| WWF     | Worldwide Fund for Nature                                           |
| PERSGA  | Protection of Environment of the Red Sea and Gulf of Aden Authority |

## Manager's Foreword

In 2008 Ras Mohamed National Park, will celebrate its Silver Jubilee which is an appropriate time to reflect on how far the park come and to chart a new course for the future. The direction of the park is currently being addressed with the ongoing steps for preparations of RMNP management plan and produced the first draft for its management plan in addition to its management effectiveness evaluation report. This management plan will be finalized before the end of 2008. The future RMNP management plan will provide guidance in park management for a five year horizon, whereas this business plan lays out a fiscal roadmap for the next ten years, incorporating the park's priorities, needs, and actions toward financial sustainability.

In today's world, maintaining park operations is equivalent to managing a community, township, or city. Park managers must manage available congressionally-appropriated funds and visitor fees to operate the park on a daily basis, to maintain the park's infrastructure and resources, and to invest for the future.

Business plans provide another perspective of park operations and an accounting of park financial and human resources. From this analysis, parks can define the financial and staff resources required to provide protection of park resources and the visitors' enjoyment. Importantly, business plans also enable park managers to foresee to the future and identify adequate strategies to rationalize costs and raising new funds for more progress and innovation.

This business plan helps the current management of the park to know, restore, protect, and connect the park to the public. It also provides a near-term projection of the park's fiscal ability to meet future challenges. The plan provides knowledge and understanding of the park's capacity to do its activities and to improve biodiversity conservation.

The area of Ras Mohammed National Park is about 480 km<sup>2</sup> extents into the Gulf of Aqaba, encompassing Tiran and Sanafir islands. RMNP known globally for the diversity and richness of its coral reefs rated amongst the world's best, and is a significant draw for tourists in the Sharm El Sheikh area, particularly amongst SCUBA divers. RMNP also includes mangroves, sea grasses, marine life and desert ecosystems and is an important spot for migratory birds.

In conclusion, I would like to thank the Business Plan consultant team, our planning team, our business plan team and other key staff for the many hours of hard work in the preparation of this business plan. I hope that you, the stakeholder, will take time to review this plan and get to know a part of your heritage – Ras Mohamed National Park.

The Nature Conservation Sector, in partnership with the Nature Conservation Sector Capacity Building Project, has developed a new business initiative for analyzing park operations. This business plans provide another perspective of park operations and an accounting of park financial and human resources. From this analysis, parks can define the financial and staff resources required for resources protection and recreational assets for the visitors.

This business planning process is undertaken to accomplish three main tasks. First, it provides the park with a synopsis of its funding history. Second, it presents a clear, detailed picture of the state of current park operations and funding. Finally, it outlines park priorities and funding strategies.

## Executive summery

Ras Mohamed National Park (RMNP) with its unique natural heritage and ecological diversity, are considered the cornerstone of environmental tourism within the South Sinai Peninsula, which encompasses geological features, coral reefs, mountains, transitional coast, marine and terrestrial wildlife. RMNP includes natural treasures, extraordinary landscape, beautiful beaches, magnificent coral reefs, tremendous types of fishes and fascinating nature. The park is located at the southern tip of Sinai adjacent to Sharm El-Sheikh City and 446 km from Cairo, it covering 480 km<sup>2</sup> overlooking the junction of the Gulfs of Suez and Aqaba.

The purpose of business planning for Ras Mohamed National Park service is to improve the abilities of parks to more clearly communicate their financial status with principal stakeholders. A business plan answers such questions such as: What is the business of this park? How much money does this park need to be operated within appropriate standards? This plan demonstrates the functional responsibilities, operational standards, and financial picture of the park.

In the methodology applied to develop this business plan, RMNP activities are organized into five main programmes, which describe all areas of business for which the park is responsible. The main programmes are then further broken down into twenty three actions. This allows the park to move beyond the traditional way of park reporting method about expenditures in terms of fund sources, and instead would report expenditures in terms of activities. As a result, the park can communicate its financial situation more clearly to external audiences and requires financial and operational baseline knowledge for future decision-making.

The development of a range of quality, viable products with a distinctive and marketable theme is the priority objective over the first two years of this plan. Products need to capitalize on the natural, cultural and historical assets of the park and be sufficiently diverse to meet and stimulate the demand of the various market sectors.

In the first phase business plan implementation will focus on improving tickets collection, increase the existing entrance fees and concessions, create camping and bird watching fees, and opportunities to rent the visitor centre cafeteria, shops and probably RMNP diving centre to be followed up. At a later Phase, Bedouin camp, underwater observatory and aquarium may be established in partnership with the private sector. It is important that supportive infrastructure and facilities are constructed to provide best practice ecotourism standards that ensure the environmental and social support.

The policies and guidelines to be developed by EEAA for pricing and the management of revenues generated by the park will be a key factor in determining the viability of the park programmes and its success in meeting conservation and poverty alleviation objectives. Higher policy decisions are needed on how income from the park can be used to support park management and for sustaining the implementation of the business plan.

Ras Mohamed National Park has three sources of funds. The governmental fund, which is allocated by EEAA (LE 1.56 Million), provide continuous inappropriate budget covering annual operating expenses, salaries and maintenance. The second source of fund is generated through visitor entrance fees, concession fees and penalties applied for violations. The third source of fund is the unsustainable donations (projects). The total entrance fees of RMNP in 2006/2007, is about LE 10 Millions, or in other word, RMNP receive LE 48.5 Million from entrance fees only from 2002/2003 until 2006/2007, although there is no mechanisms to collect entrance fees from 60% of the remaining area of the park (Tiran and Sanafir Islands). All the collected revenues from RMNP go to the Environmental Protection Fund of the EEAA and kept there for other activities related to all departments of the EEAA.

All expenditures of the park programmes were analyzed exploring the parks needs in both the basic status (to be achieved within the next five years) and the ideal status (to be achieved within the next ten years). The five main programmes of the park are;

- Resource Protection: includes all activities related to the management and protection of the park's cultural and natural resources.
- Visitor Management: includes all park activities directly related to providing visitors with a safe and educational experience while at the park.
- Park Operation: includes all activities required to manage and operate the park's infrastructure on a daily basis.
- Maintenance: includes activities directed to prolonging the life of park assets and infrastructure.
- Administration: encompasses all park-wide management and administrative support activities.

During the several steps within this business plan, it is found that RMNP actual budget (LE 1,560,746) is far from the budget needed in both the basic and ideal status. Financial analysis show that RMNP face a financial gap of LE 34,419,849 (LE 34.4 millions) in the basic status and a gap of LE 81,902,281.9 (LE 81.9 millions), which mean sthe park is severely suffering from lack of financial support that allow the PAMU to operate it in ana acceptable manner.

According to the calculations, RMNP generate LE 10-14 millions annually (source: RMNP income department, 2007), in addition to the preliminary estimation of market opportunities inside RMNP show that, the park has a good chance to generate about \$ 8,302,240 as a net annual profits (equal to LE 45,662,320). This means if RMNP has the enabling environment that allow it to implement the investment opportunities mentioned in this study and the generated money reused for the development of the park products and services, the park will be able to cover the financial gap of LE 34.4 millions in the basic status and addition the park will also able to cover 15% of the financial gap of LE 81.9 millions in the ideal status.

The preliminary market opportunities within RMNP include;

- Improve the existing process of tickets collection within the park through; (1) collecting entrance fees from Local, Tiran and Sanafir Islands which represent 60 % of the park territory (net annual profit = \$ 6,088,000), (2) increase the existing entrance fees and link it to the market demands (net annual profit = \$ 580,000), (3) Increase and justify antenna concession fees (net annual profit = \$ 10,500).
- Create mechanisms for new fees inside the park through; (1) auction for visitation sites in high season (net annual profit = \$ 10,500), (2) create camping fees (net annual profit = \$ 139,240), (3) bird watching fees (net annual profit = \$ 9,000), (4) rent of laboratories and facilities (net annual profit = \$ 2,000).
- Create mechanisms for new concessions inside the park through; (1) concession of the cafeteria inside the park visitor centre (net annual profit = \$ 36,000), (2) concession of the gift shops inside the park visitor centre (net annual profit = \$ 56,000), (3) concession of the diving centre inside the park (net annual profit = \$ 42,000), (4) concession of Bedouin camp (net annual profit = \$ 24,000), (5) fees from the underwater observatory and aquarium (net annual profit = \$ 1,140,000).

## 1. Park overview

Ras Mohamed National Park is located at the Southern tip of the Sinai Peninsula at the northern end of the Red Sea. In itself a peninsula, it is bordered to the West by the relatively shallow waters of the Gulf of Suez of around 300 m, and to the East by the deep waters of the Gulf of Aqaba and Red Sea proper where the water reaches depths of up to 2000 meters that compiles the beginning of an enormous cleavage in the earth's crust that separates the, African and Eurasian continental plates.

Ras Mohammed National Park (RMNP) is classified into two parts: the marine part (part from Gulf of Suez and part from Gulf of Aqaba and Red Sea proper) which represent 70% and the remaining 30% representing the terrestrial part. RMNP coasts contain sandy and rocky beaches along the two gulfs. The east coast of Gulf of Suez is very wide and may exceed 1 km at some areas, which gives the chance to migratory and resident birds to rest and feed without disturbance. On the other hand the Western coast at Gulf of Aqaba is narrow and representing a typical sea cliffs and fringing coral reefs.

In the North-East of Ras Mohamed lies the world recognized town of Sharm-El-Sheikh which is about 12 km away. Directly to the South lies the vast expanse of the Red sea which is bordered to the West by the North East African coast and by the Arabian Peninsula to the East. RMNP was declared in 1983 by the Prime Ministerial Decree 1068 including only the tip of South Sinai Peninsula of almost 96 km<sup>2</sup> in addition to Tiran and Sanafir Islands. The park itself has been expanded in its size in 1989 by the Prime Ministerial Decree 2035 to incorporate much of the surrounding waters and territory to enclose 480 km<sup>2</sup>.

The West side has two deep fissures in its center and on the Southeastern side is a sandy - called the Mangroves Island from which it is separated by a shallow channel running northwest to southeast, called the Mangroves Channel. In the North, large dunes are interspersed with outcroppings of Miocene limestone in which are embedded an astonishing number and variety of marine fossils. The peninsula itself is made up of a fossil coral reef that emerged during the Quaternary period about 75,000 years ago and as a result of changes in the coastline caused by variations in sea levels.

Due to its position, strong currents prevail throughout the year thus relatively enriching the waters around it. This attracts huge numbers of schools of pelagic and reef fish. Only 12 percent of the park is accessible to visitors.

Ras Mohamed Peninsula is fringed by coral reefs which provide some of the best diving spots in the world. The reefs at Ras Mohamed are the most magnificent in the whole world. They are unrivalled in their beauty and diversity of life. Amongst and alongside them live thousands of colorful fish and other marine creatures, which together with the reef form a complete ecosystem. Here they seek refuge from predators and look for food. Within the crevices and caves lives the minuscule to the very large reef fish. However the coral reefs here are not just shelter and food for the different reef and pelagic fish. They are in fact living creatures which breathe, eat and reproduce. They also come in many different forms, shapes and colors ranging from the largest colonies of hard corals to the tiniest swaying soft ones. In the north of the Red Sea where Ras Mohamed is located, coral reefs grow on the continental shelf, and which is a narrow strip here ranging from 15 to 30 km wide. The area is noted for its extensive, luxurious, and sharply defined fringing reef platforms, on either sides of Ras Mohamed-whether in the Gulf of Aqaba or that of Gulf of Suez. About 205 hard coral species and about 120 soft coral species have been recorded here, with the western side facing the Gulf of Suez having about 45 coral species, including some endemic ones. Coral cover around the islands and Ras Mohamed is an astounding 60–80%, with 20–25% on exposed fore-reef slopes, and in some places soft corals dominate up to 80%. Coral cover along the Gulf of Aqaba in general ranges from 11% to

63%, with the higher cover, of course, being at Ras Mohamed. These reefs are made up of both fossil and live corals. The fossil reefs are those that are made up of the fossilized bodies of ancient corals which have long gone but whose bodies have fossilized together for more coral to attach to. In fact these fossil reefs can also be seen on land as the water level had dropped from previous periods. On the whole, these reefs range in age between 15,000 to 2 million years and many of the descendants of these ancient species are still alive today among the abundant living coral colonies. The reef structure here also varies from the vertical walls where coral can be found at depths of up to 100 meters, such as at Shark Observatory, Shark Reef, and Yolanda Reef, to the very shallow secluded Sha'ab El Talaba on the northern end of Marsa Bereika.

Ras Mohamed peninsula is a raised fossil reef and as a result, has many low rising cliffs. There are, however some beaches that were formed some 75,000 years ago. Beach areas are more prevalent on the eastern coast of the peninsula facing the Gulf of Aqaba;

- **Main Beach:** This is the main beach in Ras Mohamed. It is the biggest and offers beautiful white sands and crystal clear waters. The beach is located south west of Shark Observatory and to the east of Yolanda Beach. Directly south of it is the wide expanse of the Red Sea. There are many people found here during the high season as most tour buses will offload their passengers here for a short swim or a brief stroll. To the east lies the famous Shark Reef. This beach is accessed by the main road and there are parking facilities here.



- **Yolanda Beach:** An excellent secluded beach which is one of the favorites. Yolanda is the southernmost beach and is at the tip of the Ras Mohamed Peninsula. Directly at the front of it is the famous Yolanda Reef. To the south is Yolanda Bay leading to the Hidden Bay. To the North East is Shark reef. Yolanda beach is surrounded by low rising dry coral cliffs with some small caves to the east where the cliffs meet the water. The water off the beach is a shallow reef flat that vertically drops to an impressive depth less than 50 meters away. It is an excellent starting point to the Yolanda and Sharks' Reef diving sites if visitors plan to do it swimming. The beach is accessible by the main road and there are parking facilities here.



- **Shark Observatory:** This is a rather small beach which is found under the Shark Observatory. It is more of an access point to the famed diving site with the same name than an actual beach. For some reason, smaller reef fish here appear to be very "domesticated" and will swim up to you in the shallower waters directly off the beach. A great place to swim with some of the larger inhabitants of the sea such as the large wrasses and occasionally, some sea turtles as well.



- **Old Quay:** One of the few beaches found facing the Gulf of Suez. It is the place of the Old Quay at Ras Mohamed and the water here has a shade of turquoise. This beach can serve as an access point to the Quay diving sites.
- **Aqaba beach:** Located west of the Shark Observatory, it can be accessed by one of the side tracks leading from the main road. The beach represent a break between the low lying cliffs to the north and south and is the main access point to the Eel Garden and Jackfish Alley diving sites.



Birds are considered as an important species to the area e.g. storks, waders and herons, about 241 bird species were recorded in the area both of migratory and resident. Sea grasses, mangroves and vegetation are important species to turtles- fishes, shrimps, crustaceans - birds and rodents, respectively.



One main road runs through the park and it is prohibited to leave that road by car. It is strictly adhered to, so be careful or you might find yourself paying a hefty fine to the otherwise very friendly, yet omnipresent rangers.

There is one camping site which is at the northern end of Marsa Bereika Bay. On the Eastern coast of the peninsula.



### Islands

There are two marine islands included in the park, which are Tiran Island, and Sanafir Island. Marine islands offer an important habitat for many organisms. Seabirds and marine turtles intensively using these islands for nesting, because of the lack of predators and disturbance.

Each of the islands represents a unique natural evolutionary experiment, which could provide important insights into the ecological past of the region. Urgent, effective management of these islands should be a priority for future conservation efforts in the region. The topography of Tiran Island is made of a combined wadi systems and hills. Small wadis are one of the characteristic features of the landscape of the Island. These small wadis are the drainage system of existing hills, concentrating meager precipitation into limited areas, allowing vegetation and other life to get a foothold in a patchy fashion. Near the foothills, the wadis are wide with a sandy or salty bed

### Park facilities

RMNP has a visitor centre, four laboratories, hatchery, researchers' accommodation, one car and four boats. Also, RMNP receive other facilities from the units working under the umbrella of Sinai protected areas headquarters (more cars, other staff, etc.). Staff housing existing in Sharm El-Sheikh, help RMNP staff for more settlement in the area. The Nature Conservation Training Centre in Sharm, also help RMNP in having training courses, workshops and meeting for the stakeholders and local communities in the area. RMNP have 13 shelters and 8 dry compose toilets as a tourism facilities on its beaches opened for tourists.



## 1.1. Park uniqueness/relevance

The beauty of Ras Mohamed National Park coming from its naturalness, all habitats located in the area are natural habitats (coral reefs, fish, mangroves, plants, birds, mammals, etc.) from this point of view the area was the first protectorate in Egypt and is the only National park. The desert lands of Ras Mohamed are crawling with life. This is why the lands, as well as the offshore reefs are protected. From the tiniest rodent to the camels, many desert mammals can be found in this small peninsula. The reptiles in Ras Mohamed can be found on the land in the shape of the many awesome snakes and lizards, as well as in the sea where large turtles converge with the pelagic fish. There is no shortage of birds here either, as Ras Mohamed is an important transit station for migrating birds. It is however the osprey that is most abundant and magnificent here. The crustaceans here are also well represented with many ghost crabs, hermit crabs, prawns and lobsters. 15% of the whole area is opened to the visitors and the rest either closed area or used by the staff only or untouched places.

The coral reef ecosystem found in RMNP is recognized internationally as among the world's best throughout the great biodiversity of coral species. Existence of this coral aggregations in 220 species with different colors and shapes in relatively small area give the place high specificity to be considered as unique ecosystem. The area has 3 kinds of endangered marine turtles (Green, logger head and hawksbill turtles). The area is the bottle neck for the endangered white storks. The mangroves (*Avicenna marina*) considered as an endangered habitats.

One of the most important ecological elements for RMNP is fish population. The fish diversity depend on the coral reef sites which play a crucial role in their life cycles, either as an important spawning area or a safe hatchery or as food source and income for fishermen. Sea mammals of high conservation value like, Dugong dugong associated with the sea grasses of the area. The ecological systems at RMNP are very fragile to both natural disasters and human impacts. The site is also fragile for oil pollution occurred by leakage from oil extraction platforms, which affect all life forms of the area. Fishing is controlled and managed on an environmental and economical basis, because the over fishing have direct effect on the marine ecosystem especially the coral reefs.

Few could dare argue the fact that Ras Mohamed is the best place to dive in the world! Ras Mohamed is known as the world's greatest spot to dive. This because it contains hundreds of thousands of living species representing its immensely diverse coral reef and it contains luxuriant sea walls and terraces that provide some of the most awesome sights anyone can lay eyes on. Also Ras Mohamed water contains few historical wrecks in the vicinity which are very well preserved and accessible. Diving at Ras Mohamed National Park is probably the cheapest place to dive in the whole world.

The economic value of RM is coming from the naturalness. The protection functions of the coral reefs through coastal protection against erosion by wave action and water currents. This protects the sandy beaches and shoreline which is used today in tourism attraction. This process also, keeps the wide intertidal areas for birds and turtle nests. Up to 250,000 Tourists came to Ras Mohammed last year throughout internationally famous diving sites which include recognized coral reefs famous for an explosion of color and its unique seascape. Hundreds of hotels and tens of diving centers and tourism companies in addition to the local Bedouin populations are profiting from the tourism development which depends absolutely on the natural resources of the park. Fishing is the main job of the local populations as a source of income and food, the fishermen at Gulf of Suez practice their fishing activities after the park borders. The EEAA and NCS cooperated with the concerned local Bedouin to understand the Importance of the ecological system and how they can share in the protection of natural resources. Bedouin staff at Ras Mohammed has been contracted be EEAA as skippers or to provide services to the area (Garbage collectors).

## 1.2. Park programs and actions

### Mission Statement

Ras Mohamed National Park mission is to maintain biodiversity in all its natural facets and fluxes, marine and terrestrial resources, to provide human benefits and preserve as far as possible the wilderness qualities and cultural resources associated with the park

### Enabling legislation

- Law No.102 of 1983 provides the legal framework for the establishment of protected areas throughout Egypt. These protected areas are designated by Prime Minister's Decrees upon recommendations of the Egyptian Environmental Affairs Agency (EEAA). Articles II, II and IV of the law No. 102 of 1983, expressly forbid any activities leading to destruction or degradation of natural ecology, harm marine or terrestrial life or the aesthetic level in the area; they forbid the destruction, transfer of plants or geological features, pollution of land air or water; not allow any form of construction, development commercial activities or agriculture unless permitted by the authorized agency (EEAA).
- Ministerial Decree 1067/1983: it designates the Egyptian Environmental Affairs Agency as the authorized body to apply Law 102.
- Law 4/1994: it establishes principles and procedures to address all environmental issues in Egypt. This comprehensive law includes measures to face terrestrial, air and water pollutions. It notes that the EEAA has the power to administer and supervise the natural protectorates, it also stipulates that any developmental activities inside or around PAs, should apply for EIA in order to get permissions.
- Prime Ministerial Decree 2035/1996: it modifies the boundaries of Ras Mohamed National Park that stated before in the Prime Ministerial Decree 1068/1983.
- Prime Ministerial Decree 264/1994: it describes the special rules and conditions for all development activities inside the protected areas in Egypt.

### Ras Mohamed National Park Inventory

#### General

- 480 km, 70% of which are marine while the other 30% are terrestrial.
- Two Islands: Tiran Island and Sanafir Island.

#### Biodiversity

- Over 1,145 species of plants and animals
- 220 hard corals + 123 soft corals
- 1000 fish species
- 241 bird species
- 80 terrestrial flora
- 26 threatened and endangered species

#### Important Natural Features

- 275,000 White stork resting area on the west coast
- High diversity marine life (core reef – fish – etc.)
- Mangrove channel and associated fauna.
- The biggest spawning fishing ground in the Red Sea.
- Earthquake and Hidden bay
- Fossilized coral reefs of 150 million years ago.

#### Cultural Resources

- Very old maritime pass way.
- Military, and Coast Guard architecture and landscape features

### Ras Mohamed National Park objectives

- To protect and manage examples of the natural marine habitats and ecosystems of the Gulf of Aqaba and Red Sea, to ensure their long-term ecological viability and to maintain their biological diversity at all levels.
- To protect and assist the recovery of depleted, threatened, rare, endangered and endemic species within RMNP, including Tiran and Sanafir Islands, in particular to preserve the marine habitats considered critical for the survival of species.
- To prevent extinction within the Park of any species on the IUCN's global critically endangered or endangered lists, and to work with other conservation initiatives to secure and strengthen the future of such species.
- To develop, manage and enhance a range of sustainable tourism products in synergy with the NCS conservation ethic through strong cooperation with community and private sector.

## 2. Fund Source analysis of RMNP

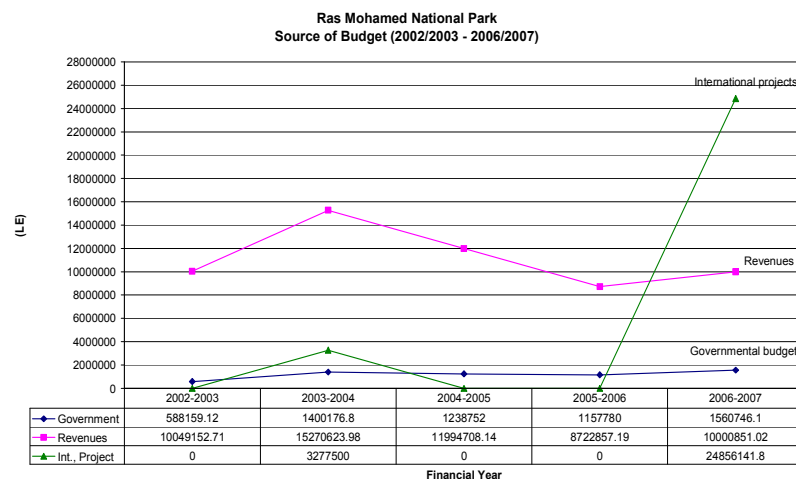
Funding for activities at Ras Mohamed National Park comes from three sources. The first is the governmental fund, authorized by EEAA (NCS), which provides annual operating expenses for staff (salaries and wages) and maintenance costs related to the exclusive responsibilities of the park. This fund is inappropriate to cover running costs of park programs and actions and even is not related to the growing activities of the park. The second fund source for RMNP is resulted from cost of services provided to other entities and fines collected from violations. This revenue are generated through visitor entrance fees, concession fees and penalties applied for violations against environmental laws and park regulations. The money collected from this fund is not reimbursable fund; all the money goes to **the Environmental Protection Fund** of EEAA and kept there for activities related to all departments of the EEAA. Although this fund does not come back to the park, it is mentioned here because big efforts are needed toward developing mechanism to retain necessary percentage of that fund for the park looking for its self-financing. The third source of fund is the international, regional and national donations (projects); these projects have substantial support to the park's activities, however they are unsustainable projects because the EEAA is not able to finance the activities of the park by the same standards as the projects.

Since 1989 the European Union has supported the government through the Gulf of Aqaba Protectorates Development Programme by providing technical assistance to the park management, as well as training of EEAA staff, and investments, such as vehicles, equipment, construction of visitor's center etc with the following funding:

1989 – 1996 by ECU 8 million

1996 – 1997 by ECU 10 million

The following chart explains the park sources of funds in the last five years (2002/2003 - 2006/2007).



**Fig. (1):** Ras Mohamed National Park – Source of budget (2002/2003 – 2006/2007)

As indicated in the previous graph; in 2002/2003, the governmental fund allocated to RMNP was LE 0.58 Million which represent **1.5%** of the total source of funds. In the same year, RMNP generated revenues of LE 41.3 Million which represent **98.5%** of the total sources of fund. This means that **Forty one million** Egyptian pounds were kept in the account of the Environmental Protection Fund without any percentage was given back to the park. The high revenues of RMNP in this year comes from a fine settlement of about (\$6 Millions = LE 34.2 Million) form boat accident on the coral reefs in year 1999 and the rest of the revenues come from visitor entrance fees (LE 6.8 Million). In 2003/2004, PERSGA support that the park through a project called Sustainable Development of Coastal and Marine Resources along the

Gulf of Aqaba Egypt with some equipments and infrastructure. In 2006/2007, RMNP is receiving substantial marine equipments (boats – moorings – etc.) as donation from EU through South Sinai Regional Development Programme (SSRDP) as new vehicles, operational support for economic and social development, resource protection, visitor services, and law enforcement due to amount of about LE 24.8 Million.

The governmental fund was slightly increased during the five years however not on the level of growing activities and responsibilities of the park, the exchange rate of currency which was doubled in year 2003 and not compensates the inflation of 10 – 15 % increase. The revenues depends mainly on the visitor entrance fees, it was higher in year 2003 and 2004 while decreased in 2005 due to some terrorist accident and then increased.

It appears that there is no relation between the revenues generated by RMNP and the fund allocated by the EEAA because these revenues goes to the **Environmental Protection Fund** within the EEAA without any re-investment in the park services and activities.

### **Governmental funding comparison**

Governmental funding was intended to cover permanent personnel costs and other expenses necessary for daily park operation. This funding source has been grown from LE 0.58 Million in 2002 to LE 1.56 Million in 2006. This equates to a compound annual growth rate of 6.2 % for 2002 through 2006. This budget increase is typical for a park growing in area and program scope. Since 2002, the park has increased its duties and has been in response to a growing understanding of the resources it must protect. Combined, these additions brought significant infrastructural, logistical, operational, interpretative, administrative, and natural and cultural resource management responsibilities. Because each of these increases in base funding comes with constraints and expectations tied to specific programs, the park must absorb the rising costs of existing daily operating expenses, including salary, benefits, and costs such as fuel, supplies, and administration.

### **Fluctuations in international funds and revenues**

Given the growing role of donors and revenue, their year-to-year variability presents a significant management challenge. The unpredictability of revenue and the short cycle of international funding (international projects) strain the park's ability to meet operational needs like providing visitor services and monitoring ecosystem health.

#### **Existing entrance fees structure:**

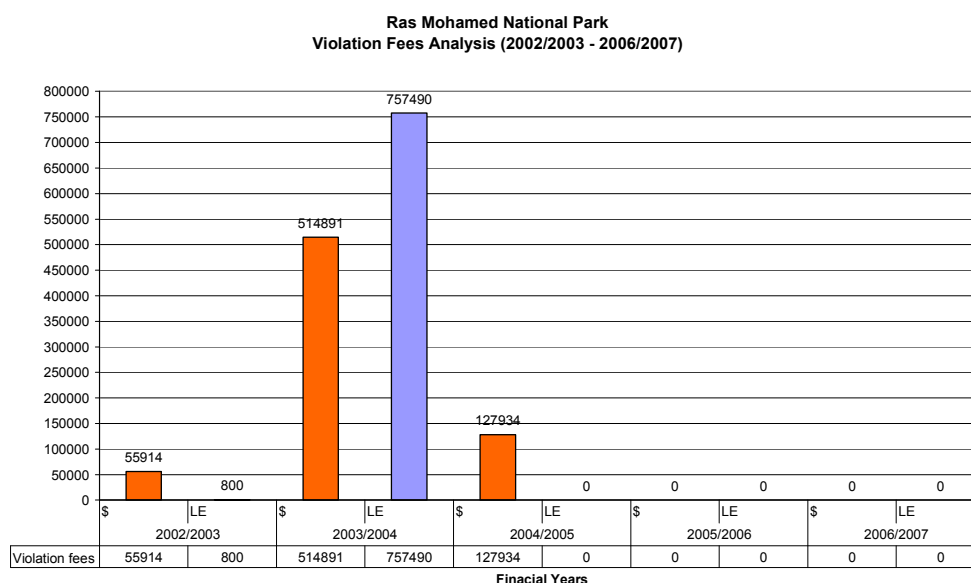
The entrance to the Ras Mohammed National Park is as follows:

##### **1. Land based:**

- Egyptian visitors: 5 E LB/day
- Foreign visitors: 5 US dollars/day
- Egyptian vehicle: 10 E LB/day
- Foreign Vehicle: 10 US dollars/day

##### **2. Sea based:**

- Egyptian visitors: 5 E LB/day
- Foreign visitors: 5 US dollars/day



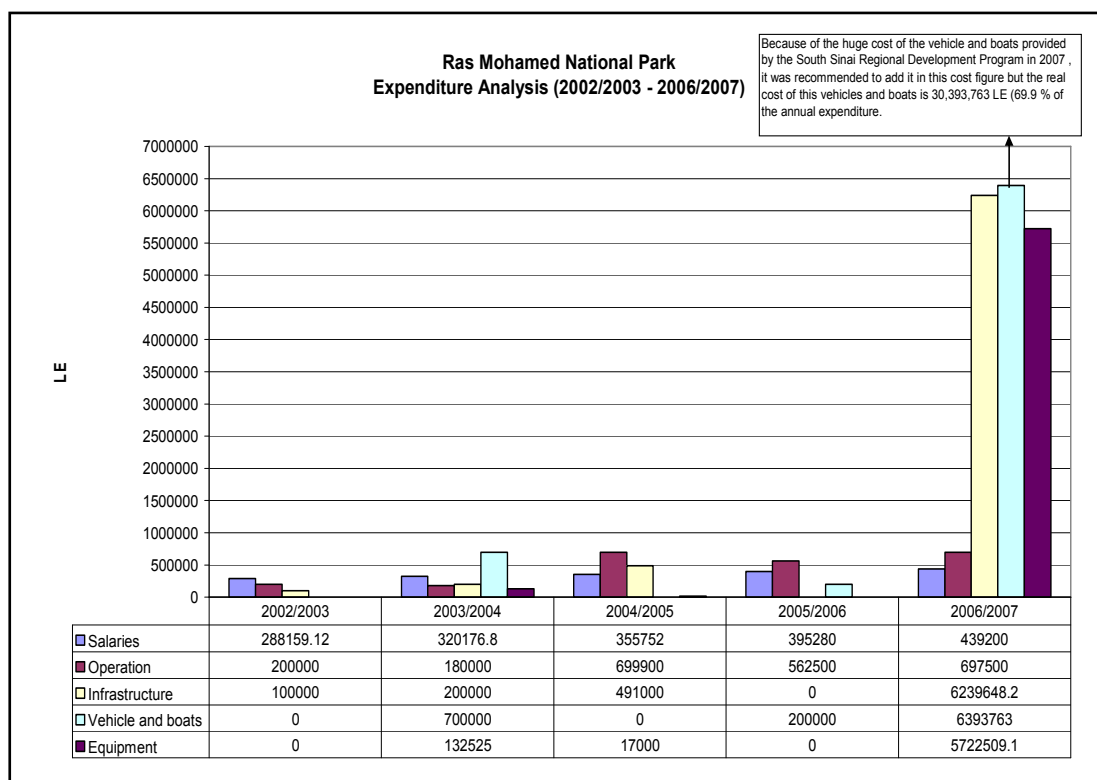
**Fig. (2):** Ras Mohamed National Park – violation penalties analysis (2002/2003 – 2006/2007)

Figure (3) shows the violation settlements of fines against the environmental laws. It is clear that in 2003/2004 RMNP receive the highest fees from violations and after that decreased until reach to zero on years: 2005/2006 – 2006/2007. Although there is no fees collected during the last two years as a violation fees, that means there in no longer any violations happened but because the settlement of violations most of the time happened after several years after the year of the violations.

## 2.1. Analysis of expenditures

The following graph presents park expenditures from all funding sources, including governmental fund and international project for 2007. RMNP received about 24.8 Million LE from South Sinai Regional Development Programme (SSRDP) in terms of vehicles, boats, equipments and infrastructure. Total personnel costs, including salary and incentives for fulltime and seasonal employees, averages 2% of total expenditures, while operation represents 12%, maintenance represents 5%, vehicles and boats represents 28%, equipment represents 14% and infrastructure represents 39% of the total expenditure in this year.

Significant fixed assets expenditures in 2003/2004 reflect the support that the park received from the Regional Organization for the Conservation of the Red Sea and Gulf of Aden (PERSGA) through small project (Sustainable Development of Coastal and Marine Resources along the Gulf of Aqaba Egypt). This project supplied the park with some equipments and infrastructure.



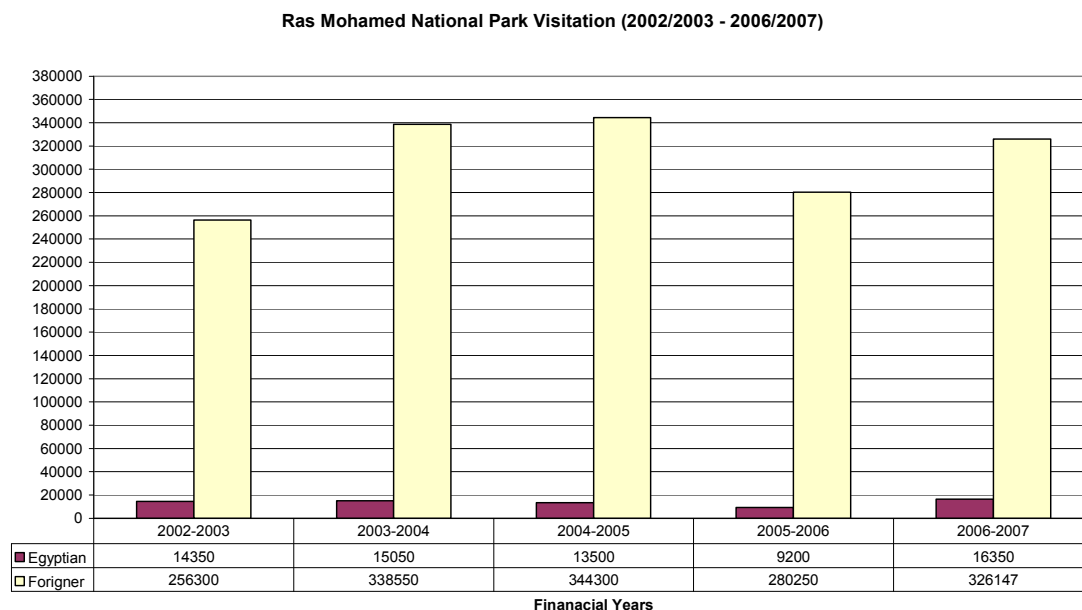
**Fig. (3):** Ras Mohamed National Park – expenditure analysis (2002/2003 – 2006/2007)

## 2.2. Visitation and Revenues

The park receives between 500,000 and 750,000 visitors per year. One third of these visitors number visits the park through the main gate of RMNP (beaches – mangroves – etc.), while the remaining two thirds visit the park throughout the sea by boats.

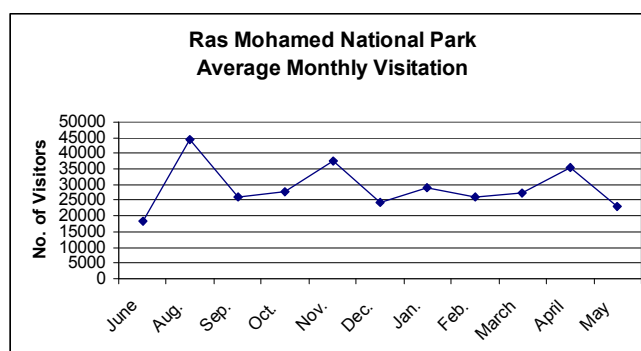
Mainly divers' journeys to dive destinations in daily bases are using diving boats; each diver makes two dives per day. Based on available data there are around one million dives undertaken yearly within the area between Ras Mohammed and Tiran Island.

Tiran Island is currently the most visited island in the park. Visitation there has been increased annually since there is no entrance fee for diving near the island. Sanafir Island, is situated close to Tiran Island, it is not a popular destination for visitors. Combined, visits to Tiran Straight and both Tiran and Sanafir islands account 66% of the total visitation of the Park since 2000.



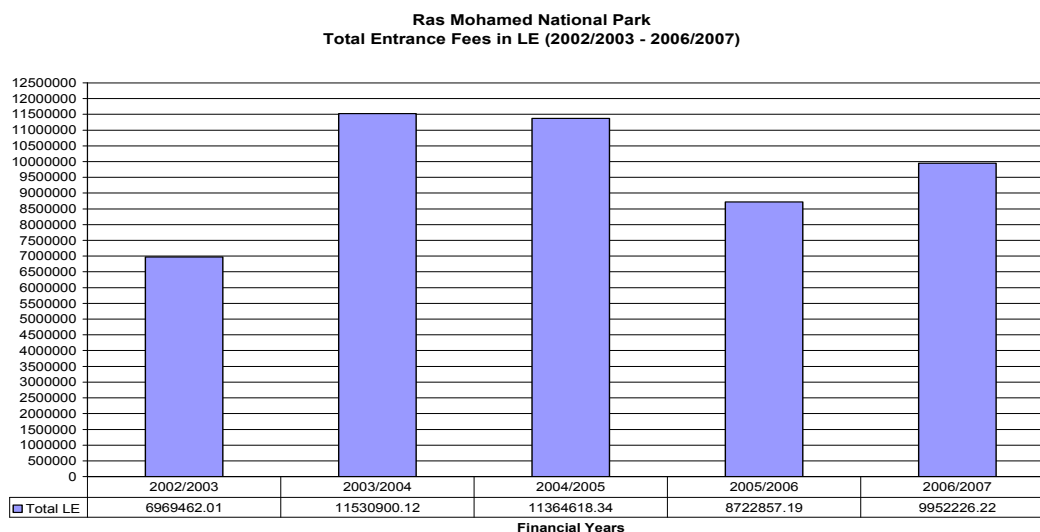
**Fig. (4):** Ras Mohamed National Park – visitation analysis (2002/2003 – 2006/2007)

Visitation to Ras Mohamed National Park has steadily increased through 2002, 2003 and 2004 due to the high quality of nature and spectacular experience the visitors enjoy in the area. At the end of 2004, Sharm el-Sheikh city was attacked by terrorist accidents through three explosions and consequently visitation level to RMNP has decreased significantly since that year. In 2007, the number of visitors increased again to the highest peak on 2004.



**Fig. (5):** Ras Mohamed National Park – average monthly visitation 2006/2007

Visitation peaks are from June to September, particularly during holidays. Winter visitation is characterized by desert tours and increased school participation in park activities.



**Fig. (6):** Ras Mohamed National Park – total entrance fees in LE (2002/2003 – 2006/2007)

The previous chart shows that Ras Mohamed National Park has received LE 48.5 Million from entrance fees only from 2002/2003 until 2006/2007 (this amount collected from one third of the total number of visitation to the park). This means that in the same period RMNP had lost about LE 97 Million because of administrative constrains that not allow the park from collecting entrance fees from visitors to Tiran Island.



## 2.3. Financial Needs Assessment of the Park

This business plan differentiates between different types of expenditures: Salaries, Operations, Equipments, Infrastructures, Maintenance, and Investments. Operations and Maintenance requirements are those funds needed to carryout everyday operations at a park unit. Some examples include annual payroll costs, janitorial operations, telecommunications network, and a long-term ecological monitoring program. On the other hand, investments are significant one-time costs that parks incur in order to fix current problems or provide future park management. Investments may include projects such as a resource inventory lists necessary to establish a credible baseline before beginning a monitoring program, as well as constructing a new building.

This section of the plan focuses on the Operations (including salaries) and Maintenance activities of the park. In order to describe park operations for this business plan, park activities were divided into five main programmes, which describe the five areas of business for which the park is responsible.

### Ras Mohamed National Park programmes and main actions

#### 1. Resource Protection

- Marine protection
- Land protection
- Monitoring of biodiversity
- Integrated Coastal Zone Management

#### 2. Visitor Management

- Education and public awareness
- Interpretation
- Visitor Centre Operation

#### 3. Park Operation

- Boats Operation
- Boats logistics & support
- Vehicles Operation
- Camp sites Operation
- Solid wastes and sewage management

#### 4. Maintenance

- Boats maintenance
- Boy lines maintenance
- Tracks maintenance
- Building maintenance
- Equipments maintenance

#### 5. Administration

- Communication
- Public relations
- Park finance
- Park safety
- Planning
- Partnerships

### Park Main Programmes

**Resource Protection** encompasses all activities related to the management, preservation and protection of the park's cultural and natural resources. Activities include research, ecological monitoring, restoration efforts, integrated coastal zone management, species-specific management programs, wild management, archives and collections management, and information integration activities.

**Visitor Management** includes all park activities directly related to providing visitors with a safe and educational experience while at the park. It includes all interpretation, education, visitor center management, interpretive media, in-park concessions management, fee collection, and visitor safety services.

**Park Operations** includes all activities required to manage and operate the park's infrastructure on a daily basis. Buildings, roads, trails, utilities, and campgrounds require a range of operational activities from basic sanitation to minor repairs to water testing.

**Maintenance** includes activities directed solely to prolonging the life of park assets and infrastructure through substantial repair, replacement or rehabilitation of park assets, such as buildings, roads, trails, utilities, fleet vehicles, and equipment.

**Administration** encompasses all park-wide management and administrative support activities. It includes all park communications and external affairs activities, park level planning, human resource management, information technology, park leadership, and financial management.

The coral reef and marine habitats are high value resources with a high degree of threat and should be the top priority for conservation. Now, as the park is developed for more visitors to improve local economic benefits, these sensitive natural resources must be maintained, and over-development or over-use from tourism must be avoided.

The five main programmes are: Resource Protection, Visitor Experience, Park Operations, Maintenance and Management and Administration. These programmes are then further subdivided into 23 actions that more precisely describe park operations. Programs are general in order to cover a broad suite of activities that should be occurring in the park.

The next component of the business planning process is the completion of a detail sheet for each program, which is completed by RMNP staff and the assistance of the Business Planning Team during a workshop. These forms describe the daily activities performed by the 55 full time employments (FTE) (both permanent and non-permanent personnel) who work in the park in 2006/2007 and the total financial need associated with them.

Statements of work are developed to describe the suite of activities encompassed by the program. Then operational standards are generated to describe the duties and responsibilities required to meet the mission critical functions of the program as stated in the statement of work. These standards are then used to determine the total financial resources required to perform the standard tasks of the program. The final step in this section is to compare current park activities to the operational standards to identify the gaps between required and available resources. The following pages discuss each of the main programmes in detail and all the calculations related to RMNP activities will depend only on the annual governmental fund only and the additional financial support from South Sinai Regional Development Programme (SSRDP) will be excluded.

**Notes:**

- The governmental budget allocated for RMNP in 2006/2007 = **1560746 LE**
- RMNP receive EU support of about 24.8 Million LE from South Sinai Regional Development Programme (SSRDP) in terms of vehicles, boats, equipments and infrastructure

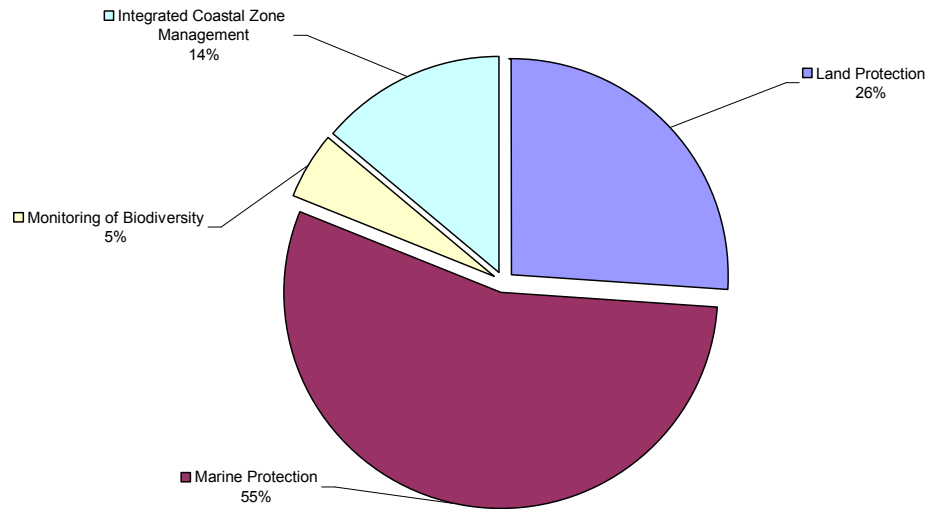
## **A- Resource Protection:**

Ras Mohamed National Park contains unique marine and terrestrial treasures, making resource protection a high priority for the park. The special geographic position of the park has allowed for the evolution and continued existence of many unique species and habitats. In addition, the park is responsible for the protection of many threatened and endangered species that could face extinction if marine ecosystems are not preserved and restored. In 1983, the park declared an inventory and monitoring Prototype Park, making it a valuable source of information on the status of marine and coastal natural resources, but also requiring significant staff time and financial resources.

Resource Protection requires the most financial resources of any programme in the park. The expected amount of money needed to reach the basic state for the resource protection programme **(to be accomplished within the next five years)** was estimated as LE 20,170,072.5 while the expected amount to reach the ideal state **(to be accomplished within the next ten years)** was LE 33,603,063.5. In the mean time, this programme accounting for over one-third of the park's 55 FTE.

Finally, the park faced a shortfall of LE 19,498,952.2 including 14.2 FTE for the basic state and a shortfall of LE 32,931,942.7 including 31 FTE for the ideal state to accomplish operational needs related to the protection of natural and cultural resources, including monitoring, restoration, and law enforcement activities, **(Amount next to program indicates the total Available Funding in 2006/2007).**

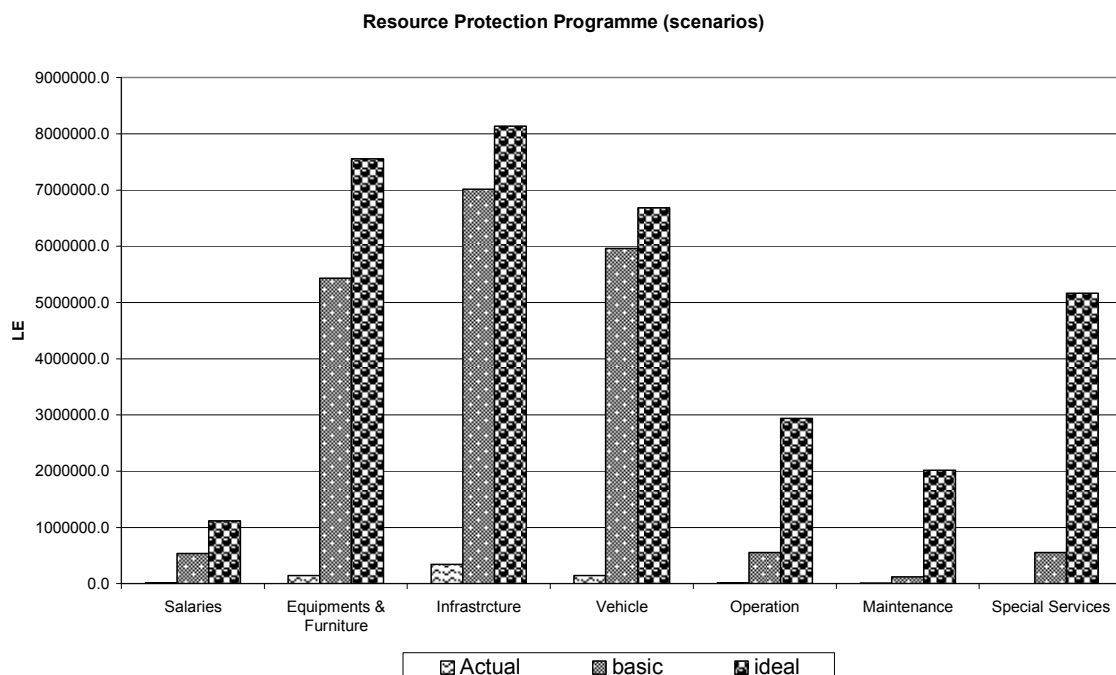
**RMNP - Resource Protection Expenditures by Programmes (2007)**



**Table ( ) : Show RMNP financial assessment of Resource Protection Programme**

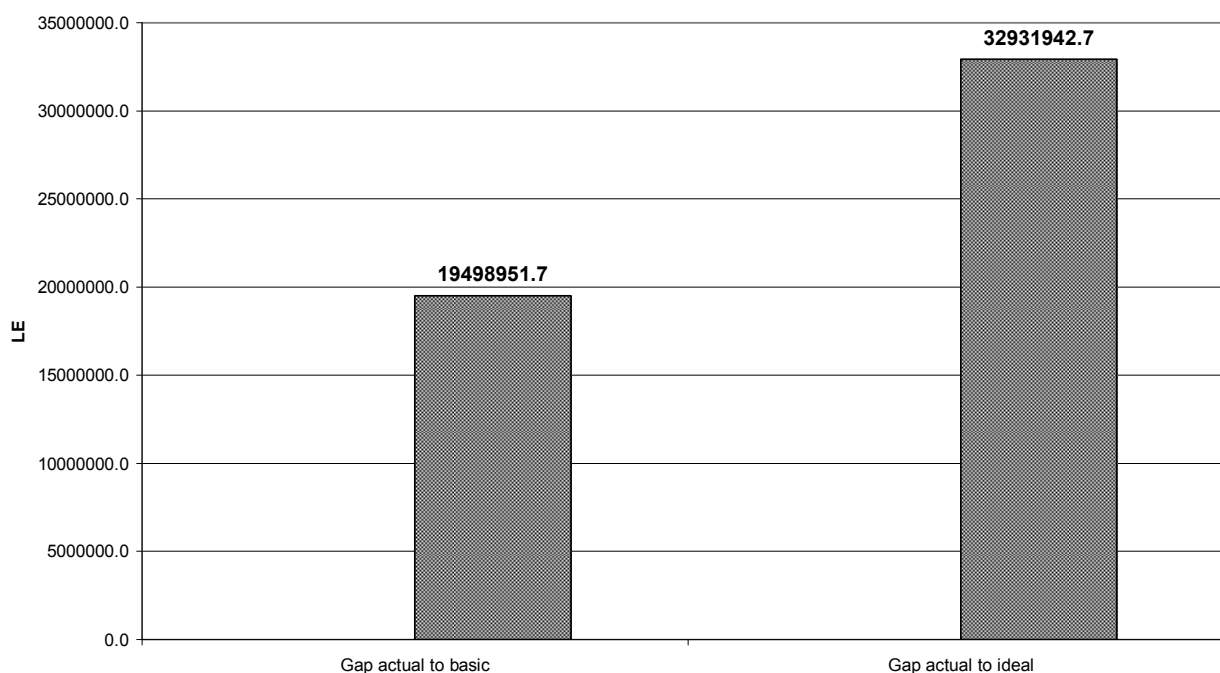
| Resource protection budget | Actual (LE)     | Basic (LE)        | Ideal (LE)        | Gap actual to basic (LE) | Gap actual to ideal (LE) |
|----------------------------|-----------------|-------------------|-------------------|--------------------------|--------------------------|
| Salaries                   | 12465.8         | 534600.0          | 1119000.0         | 522134.2                 | 1106534.2                |
| Equipments & Furniture     | 147044.7        | 5429300.0         | 7552000.0         | 5282255.3                | 7404955.3                |
| Infrastructure             | 341980.0        | 7015985.0         | 8137000.0         | 6674005.0                | 7795020.0                |
| Vehicle                    | 148906.0        | 5960000.0         | 6680000.0         | 5811094.0                | 6531094.0                |
| Operation                  | 16455.9         | 555568.1          | 2936399.7         | 539112.2                 | 2919943.8                |
| Maintenance                | 4268.3          | 118619.4          | 2015163.8         | 114351.1                 | 2010895.4                |
| Special Services           | 0.0             | 556000.0          | 5163500.0         | 556000.0                 | 5163500.0                |
| <b>Total</b>               | <b>671120.8</b> | <b>20170072.5</b> | <b>33603063.5</b> | <b>19498951.7</b>        | <b>32931942.7</b>        |

**Figure (-- a,b) Scenarios for Resource Protection Programme**  
(a)



(b)

**Resource Protection Programme gaps (total)**



The total investments of both NCS and RMNP concerning resource protection programme equal to LE 133,407,475.5

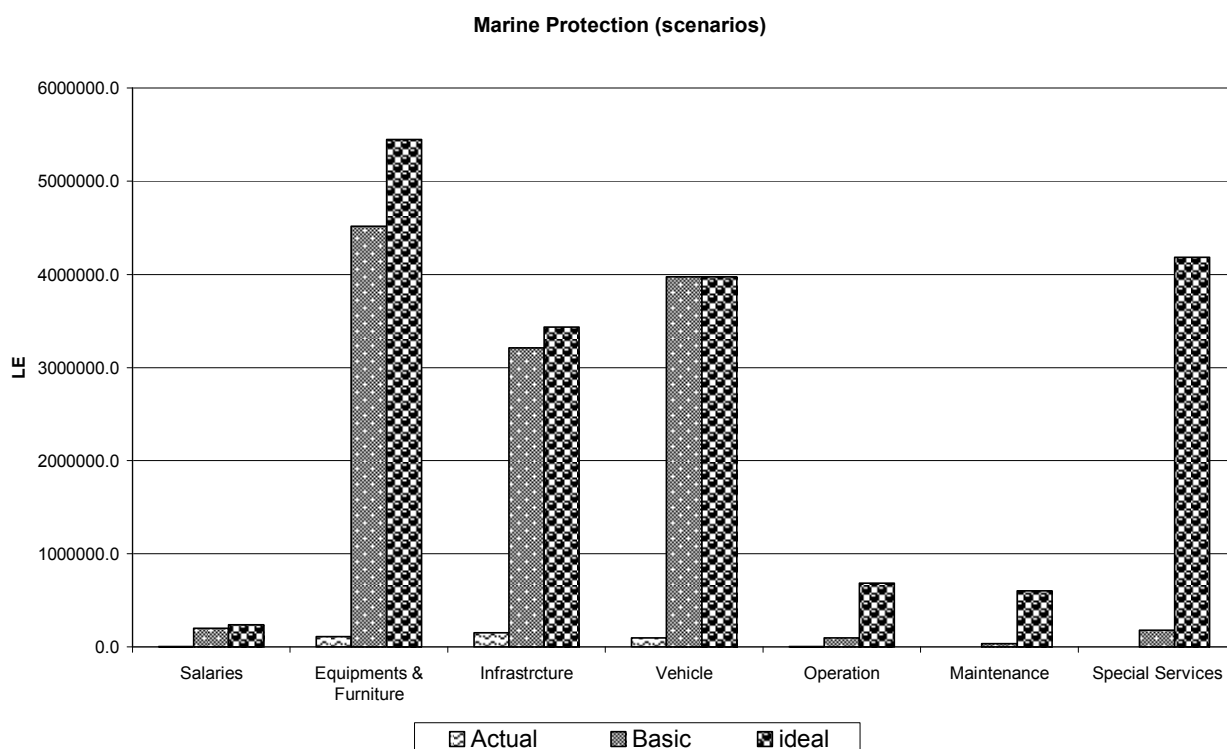
**A – 1. Marine Protection (55%) (369116.4 LE):**

The goal of this program is to manage marine natural resources, processes and diversity, as well as to ensure that park values are maintained, restored, and protected. This is the largest action in Resource Protection, requiring 55% of funds in this programme. The park is currently engaged in some activities to restore marine habitat and species, as well as to protect threatened and endangered species. In 2006/2007, a number of personnel were assigned into this action in order to face the mass development in Sharm El-Sheikh city that expected to increase pressure on the park resources and consequently, raising the total funds needed in this action. It is anticipated that as full control of park activities are achieved, staff time in this action will be gradually reduced over the next five (basic status) to ten years (ideal status) to support ecological monitoring. The expected amount of money needed to reach the basic state for the marine protection was estimated as LE 12,213,450.1 while the expected amount to reach the ideal state was LE 18,559,560.8. Finally, the park faced a shortfall of LE 11,844,333.7 including 7.8 FTE for the basic state and a shortfall of LE 18,190,444.4 including 17 FTE for the ideal status.

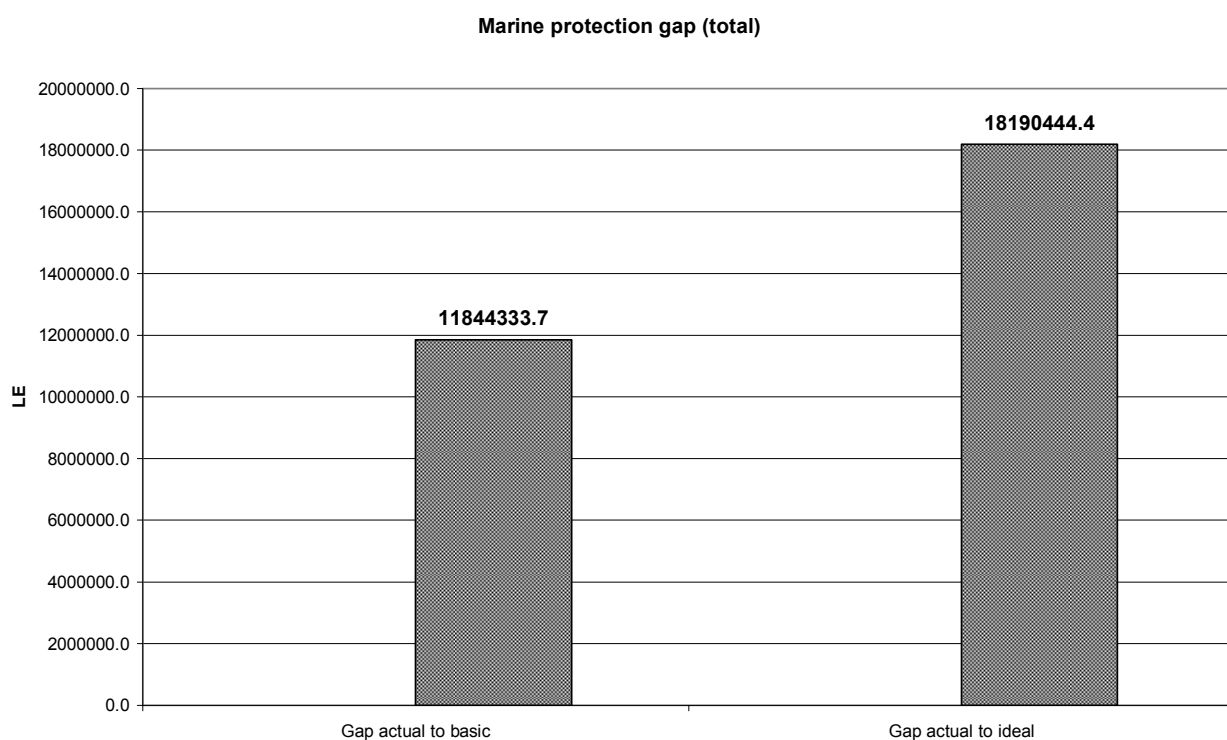
| Table ( ): Show RMNP financial assessment of Marine Protection |                 |                   |                   |                          |                          |
|----------------------------------------------------------------|-----------------|-------------------|-------------------|--------------------------|--------------------------|
| Resource protection budget                                     | Actual (LE)     | Basic (LE)        | Ideal (LE)        | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                       | 4929.6          | 199200.0          | 238800.0          | 194270.4                 | 233870.4                 |
| Equipments & Furniture                                         | 109545.1        | 4515600.0         | 5445600.0         | 4406054.9                | 5336054.9                |
| Infrastructure                                                 | 151136.2        | 3214000.0         | 3437000.0         | 3062863.8                | 3285863.8                |
| Vehicle                                                        | 99356.3         | 3970000.0         | 3970000.0         | 3870643.7                | 3870643.7                |
| Operation                                                      | 2961.5          | 100032.0          | 684818.3          | 97070.5                  | 681856.8                 |
| Maintenance                                                    | 1187.8          | 34618.1           | 603342.5          | 33430.3                  | 602154.7                 |
| Special Services                                               | 0.0             | 180000.0          | 4180000.0         | 180000.0                 | 4180000.0                |
| <b>Total</b>                                                   | <b>369116.4</b> | <b>12213450.1</b> | <b>18559560.8</b> | <b>11844333.7</b>        | <b>18190444.4</b>        |

**Figure (-- a,b) Scenarios for Marine Protection**

**(a)**



**(b)**



The present total investments of both NCS and RMNP concerning Marine Protection equal to **7727364.1 LE**

The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for marine protection in RMNP;

| <b>Marine Protection</b>                                                                                   |  |
|------------------------------------------------------------------------------------------------------------|--|
| <b>Actions Actual scenario</b>                                                                             |  |
| Patrolling and law enforcement (control illegal fishing, anchoring on fringing reef, control tickets, etc) |  |
| Mooring installation and maintenance in diving sites                                                       |  |
| Monitoring (natural phenomena, deliver formats for diving centre)                                          |  |
| Case follow up against violations                                                                          |  |
| Research (not regular, responsive)                                                                         |  |
| Oil pollution control and monitoring coordination with oil combating centre                                |  |
| Mark the borders of diving sites                                                                           |  |
| <b>Actions Basic scenario</b>                                                                              |  |
| Pollution control plan                                                                                     |  |
| Carrying capacity assessment for diving and snorkel sites                                                  |  |
| Fishermen and tour operators strategy                                                                      |  |
| Boat sewage treatment plan with governmental stakeholders                                                  |  |
| Trash collection, coral reef cleaning (1)                                                                  |  |
| Increase demarcation of diving sites                                                                       |  |
| rehabilitation of walkways (6)                                                                             |  |
| <b>Actions Ideal scenario</b>                                                                              |  |
| Zoning review/ update                                                                                      |  |
| Certification schemes for skippers, guides, stakeholders                                                   |  |
| Evaluation surveys, rapid assessments and monitoring programs                                              |  |
| Conduct a contingency plan for environmental emergencies                                                   |  |
| Collect entrance fees for Tiran and local                                                                  |  |
| Satellite monitoring system                                                                                |  |
| Habilitation of walk ways or access. Marked area for snorkels, divers and swimmers.                        |  |
| Increase salaries or contract private company for mooring                                                  |  |

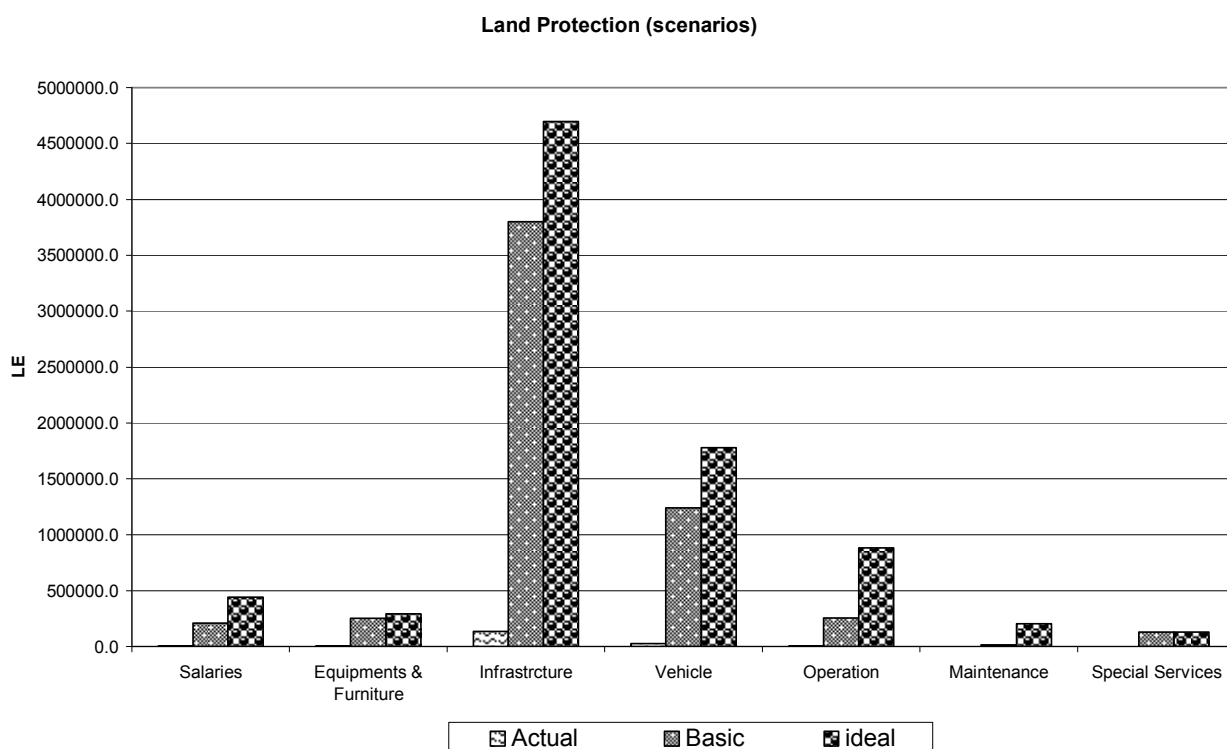
## A – 2. Land Programme (26%) (174491.4 LE):

This program encompasses activities relating to natural resource protection and patrolling by law enforcement rangers. This includes vehicle, foot, and marine patrols for marine resources and terrestrial resources. Because of the increased number of visitors annually to Ras Mohamed National Park, the number of ranger protection activities should be increased parallel to such visitor pressure and this will create unique logistical challenges, requiring a higher level of staffing for ranger safety and effective resource protection.

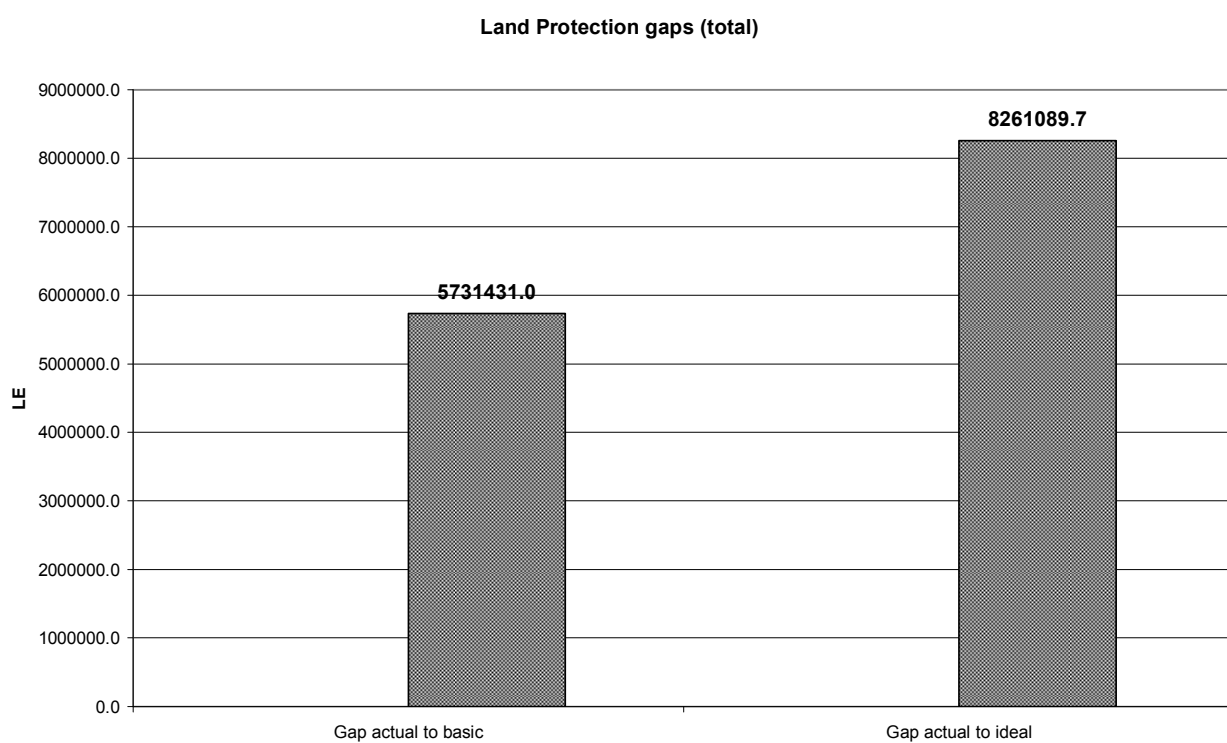
The expected amount of money needed to reach the basic state for the land protection was estimated as LE 5,905,922.4 while the expected amount to reach the ideal state was LE 8,435,581.1. Finally, the park faced a shortfall of LE 5,731,431 including 3.7 FTE for the basic state and a shortfall of LE 8,261,089.7 including 8.1 FTE for the ideal status.

| <b>Table ( ) : Show RMNP financial assessment of Land Protection</b> |                    |                   |                   |                                 |                                 |
|----------------------------------------------------------------------|--------------------|-------------------|-------------------|---------------------------------|---------------------------------|
| <b>Resource protection budget</b>                                    | <b>Actual (LE)</b> | <b>Basic (LE)</b> | <b>Ideal (LE)</b> | <b>Gap actual to basic (LE)</b> | <b>Gap actual to ideal (LE)</b> |
| Salaries                                                             | 3637.4             | 210000.0          | 442800.0          | 206362.6                        | 439162.6                        |
| Equipments & Furniture                                               | 5422.8             | 253700.0          | 295700.0          | 248277.2                        | 290277.2                        |
| Infrastructure                                                       | 134330.1           | 3801985.0         | 4700000.0         | 3667654.9                       | 4565669.9                       |
| Vehicle                                                              | 25505.8            | 1240000.0         | 1780000.0         | 1214494.2                       | 1754494.2                       |
| Operation                                                            | 5216.6             | 255472.2          | 881944.7          | 250255.7                        | 876728.2                        |
| Maintenance                                                          | 378.8              | 14765.1           | 205136.4          | 14386.3                         | 204757.5                        |
| Special Services                                                     | 0.0                | 130000.0          | 130000.0          | 130000.0                        | 130000.0                        |
| <b>Total</b>                                                         | <b>174491.4</b>    | <b>5905922.4</b>  | <b>8435581.1</b>  | <b>5731431.0</b>                | <b>8261089.7</b>                |

**Figure (-- a,b) Scenarios for Marine Protection**  
**(a)**



**(b)**



The present total investments of both NCS and RMNP concerning Land Protection equal to **4720455.3 LE**

The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for land protection in RMNP;

| <b>Land Protection</b>                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Actions Actual scenario</b>                                                                                                                 |
| Land patrolling and law enforcement                                                                                                            |
| Survey and monitoring of wildlife elements                                                                                                     |
| Operating of the visitor center                                                                                                                |
| Improving the services to the visitors (WCs, tracks, signposts...)                                                                             |
| Conduct a contingency plan for environmental emergencies (mangrove channel + gulf of sues beaches                                              |
| International events participation                                                                                                             |
| Emergency first response                                                                                                                       |
| <b>Actions Basic scenario</b>                                                                                                                  |
| Integrated pollution control plan (garbage collection system improvement)                                                                      |
| Stakeholders collaboration strategy (especially tour operators)                                                                                |
| Carrying capacity and human use plan (study conducted 2001, needs review and update)                                                           |
| Enhance public awareness and environmental education for locals, tour operators)                                                               |
| Enhancing training of staff; Establishing continuous courses for training for all people dealing with natural resources                        |
| Developing monitoring methodology and techniques specially for visiting sites                                                                  |
| Interpretation signs (dynamic + alive)                                                                                                         |
| Developing new monitoring program for key species (acacia + mega marine flora)                                                                 |
| Operating visitor center                                                                                                                       |
| Emergency first response                                                                                                                       |
| <b>Actions Ideal scenario</b>                                                                                                                  |
| Patrolling and law enforcement                                                                                                                 |
| Establishing of long term research program of human uses and their impacts to biodiversity conservation                                        |
| Establishing of long term regular monitoring programme                                                                                         |
| Funding to prepare and implement contingency plan                                                                                              |
| Underwater tube as an additional attraction                                                                                                    |
| Development of accurate visitor's data recording on the entrance gate including nationalities and numbers with surveying of general interests. |

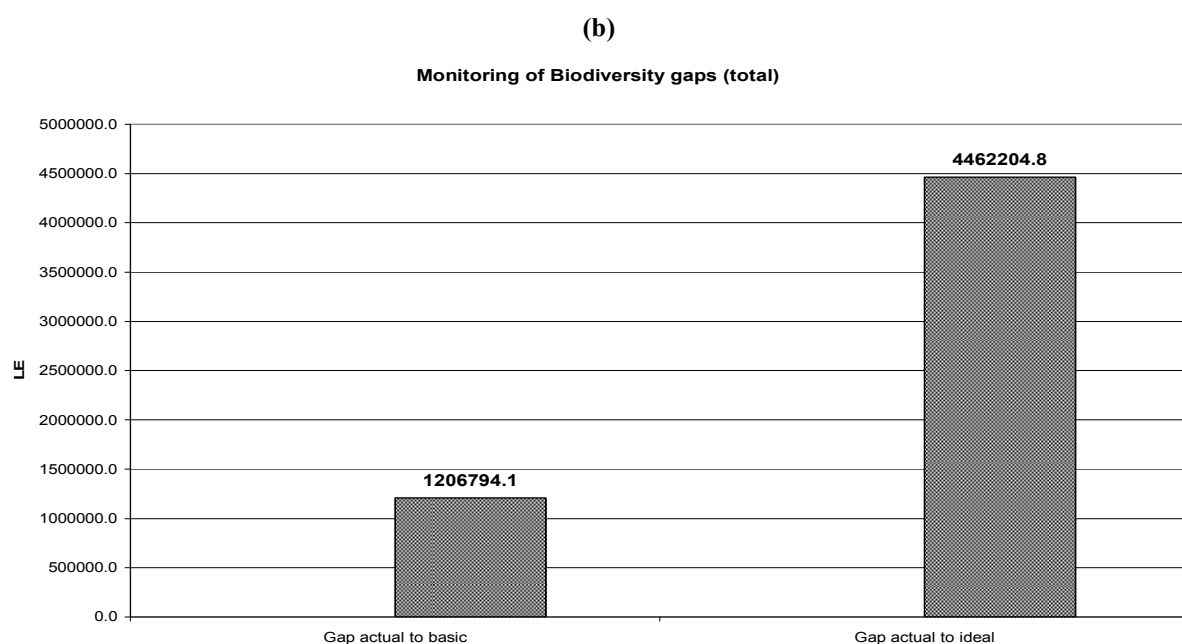
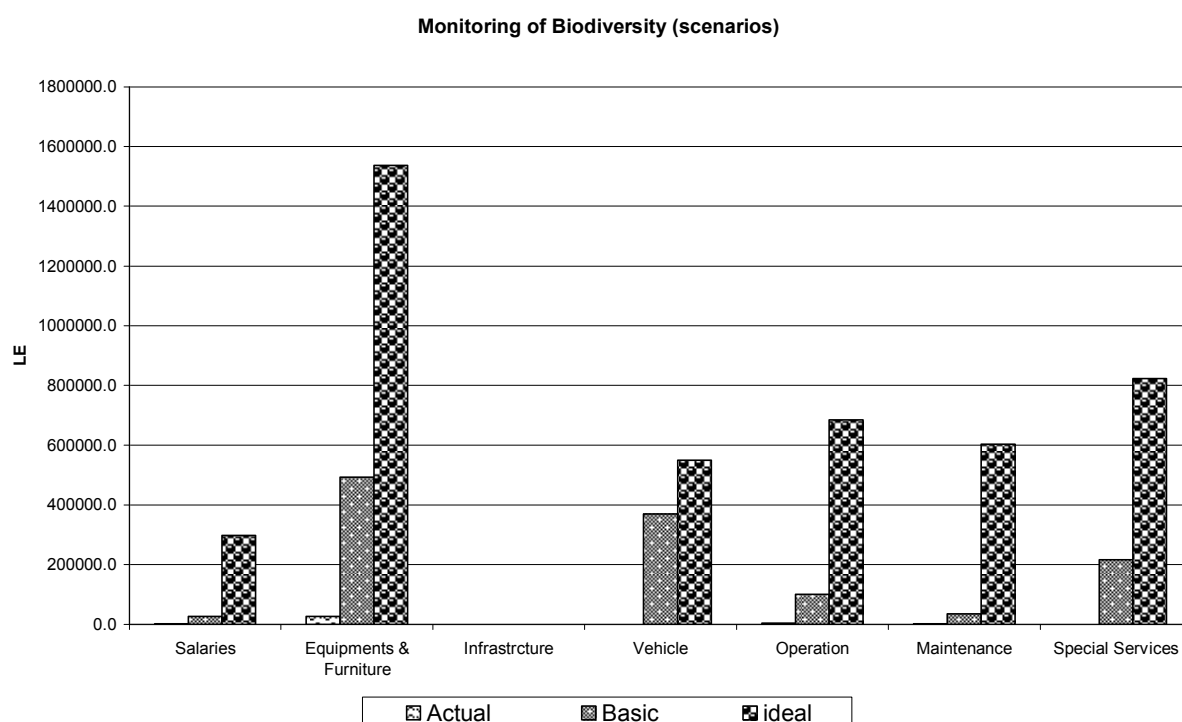
### **A – 3. Monitoring of Biodiversity (5%) (33556 LE):**

Ras Mohamed National Park was designated by the NCS as a Long-term Ecological Monitoring site. As such, the park conducts some activities related to this program such as; inventory and monitoring activities to better understand the nature, condition, and dynamics of natural resources, providing reference points (especially for coral reefs and marine life) for comparisons over time. This program was planned to ensure that the park has adequate knowledge of the status of its natural resources to achieve stewardship objectives for these resources, and to integrate this knowledge into planning and management. Currently, the park lacks the funding and personnel required to conduct its monitoring programs. Additional short-term needs are for a physical scientist to oversee monitoring water, air, weather, soils and biological technicians for marine monitoring.

The expected amount of money needed to reach the basic state for the monitoring of biodiversity in RMNP was estimated as LE 1,240,350.1 while the expected amount to reach the ideal state was LE 4,495,760.8. Finally, the park faced a shortfall of LE 1,206,794.1 including 0.7 FTE for the basic state and a shortfall of LE 4,462,204.8 including 1.5 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment of monitoring of biodiversity |                |                  |                  |                          |                          |
|-------------------------------------------------------------------------|----------------|------------------|------------------|--------------------------|--------------------------|
| Resource protection budget                                              | Actual (LE)    | Basic (LE)       | Ideal (LE)       | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                                | 1589.9         | 27000.0          | 297000.0         | 25410.1                  | 295410.1                 |
| Equipments & Furniture                                                  | 26851.2        | 492700.0         | 1537100.0        | 465848.8                 | 1510248.8                |
| Infrastructure                                                          | 0.0            | 0.0              | 0.0              | 0.0                      | 0.0                      |
| Vehicle                                                                 | 0.0            | 370000.0         | 550000.0         | 370000.0                 | 550000.0                 |
| Operation                                                               | 3650.7         | 100032.0         | 684818.3         | 96381.3                  | 681167.6                 |
| Maintenance                                                             | 1464.2         | 34618.1          | 603342.5         | 33153.9                  | 601878.2                 |
| Special Services                                                        | 0.0            | 216000.0         | 823500.0         | 216000.0                 | 823500.0                 |
| <b>Total</b>                                                            | <b>33556.0</b> | <b>1240350.1</b> | <b>4495760.8</b> | <b>1206794.1</b>         | <b>4462204.8</b>         |

**Figure (-- a,b) Scenarios for Monitoring of Biodiversity**  
**(a)**



The present total investments of both NCS and RMNP concerning Monitoring of Biodiversity equal to **569864.1 LE**

The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for monitoring of biodiversity in RMNP;

| <b>Monitoring of Biodiversity</b>                                                                                                                        |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Actions Actual scenario</b>                                                                                                                           |  |
| Identification of monitoring objectives                                                                                                                  |  |
| Basic training for data collection                                                                                                                       |  |
| EIA supervision and reports                                                                                                                              |  |
| COTS outbreak (not regularly/ responsive)                                                                                                                |  |
| Continuous supervision of the development activities (assistant role in cooperation with coastal development supervision unit)                           |  |
| Carrying capacity study for the diving sites in Sharm El- Sheikh (2001)                                                                                  |  |
| Assessment of the damages resulting from the grounding accidents                                                                                         |  |
| Monitoring for marina in Sharm                                                                                                                           |  |
| Monitoring of mangroves                                                                                                                                  |  |
| Study the impact of the different types of walkway in Sharm El-Sheikh                                                                                    |  |
| Study the effect of desalination unit discharge on the coral reef ecosystem                                                                              |  |
| Investigating the effect of human activities on the current resources                                                                                    |  |
| Reef rehabilitation activities                                                                                                                           |  |
| rapid assessment of coral reef ecosystem (Ras Mohamed, Nabq, Abu Gallum)                                                                                 |  |
|                                                                                                                                                          |  |
| <b>Actions Basic scenario</b>                                                                                                                            |  |
| Baseline of marine life and ecosystems (not completed and developed in 1991)/ fixed record of number of species                                          |  |
| Design and capacity building of a monitoring unit                                                                                                        |  |
| Preparation of a monitoring plan; (marine/Terrestrial)                                                                                                   |  |
| Implement monitoring plan: Regularize all current monitoring activities, considering periodic activities and follow up                                   |  |
| Establish permanent stations for monitoring                                                                                                              |  |
| Information collection/ compilation/ systematization mechanisms (databases, GIS, library with all works related to RM),                                  |  |
| Establish a mechanism to organize and coordinate research activities: Develop research codes, and procedures for scientific researchers and universities |  |
| Process to improve decision making based on monitoring information / strengthen- improve the link between science and management                         |  |
| Assess & update current zoning                                                                                                                           |  |
| Inventories of major marine life (Hard/soft corals, fishes, mollusks, echinoderms)                                                                       |  |
| Building the capacity of the staff in terms of training and research abilities.                                                                          |  |
| Identify significant turtle nesting and feeding areas and study their distribution                                                                       |  |
|                                                                                                                                                          |  |
| <b>Actions Ideal Scenario</b>                                                                                                                            |  |
| Long term monitoring system                                                                                                                              |  |
| Enhancing publications and participation in scientific events                                                                                            |  |
| Establishing of regular evaluation bases for monitoring program                                                                                          |  |
| Initiate a comprehensive study of conservation values and current / potential threats to onshore and offshore.                                           |  |
| Zonation of seagrass, mangeroonne and reef areas.                                                                                                        |  |
| Establishing a program to study the behavior of marine animals to determine management requirements                                                      |  |
| Updating the database of major marine resources into GIS                                                                                                 |  |
| Enhance and strengthen the training program                                                                                                              |  |
|                                                                                                                                                          |  |

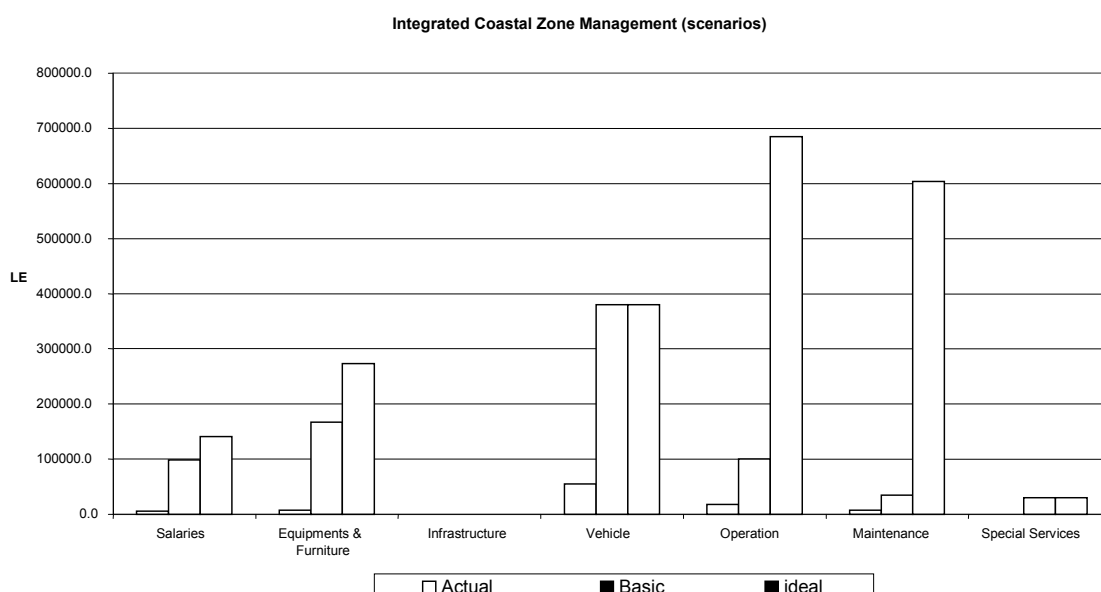
#### A – 4. Integrated Coastal Zone Management (14%) (33556 LE):

Tourism developments in South Sinai, especially in the Sharm El Sheikh area have been and continue to be closely linked to the wealth of the natural resources found in the park. Of these, coral reefs are the most important and have provided Egypt with a well-deserved international reputation as regards to the quality of its reefs and the efforts made to protect them. As economy and capacity of tourism expands in South Sinai, there is a parallel expansion in investments providing tourism services. Until 1967 Sharm El Sheikh, which is the main town of the area, was little more than a fishing village. By 1988, Sharm El Sheikh had witnessed the expansion of diving services that increased the number of diving centers from 5 to 27 in 1995 and 60 in 2004, and the number of diving boats from 23 to 231 in 1995 and 310 in 2004. The Integrated Coastal Zone Management Unit has two primary functions: (1) to carry out or contract EIA for activities or development within the boundaries of declared protected areas. (2) To review EIA documents forwarded from the EIA department of EEAA in areas adjacent or likely to have an impact on the park. The unit carries out field inspection and evaluation of projects and returns the EIA to EEAA with the recommendation and requirements of the NCS.

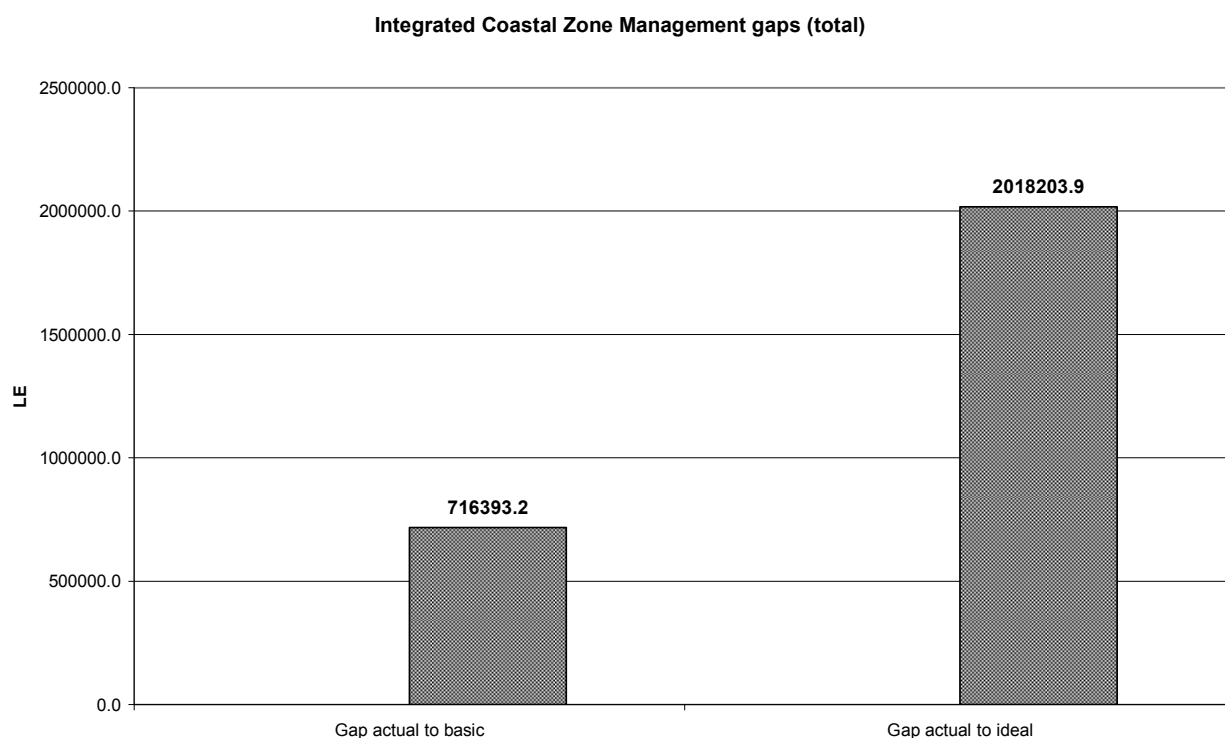
The expected amount of money needed to reach the basic state for the integrated coastal zone management in RMNP was estimated as LE 810,350.1 while the expected amount to reach the ideal state was LE 2,112,160.8. Finally, the park faced a shortfall of LE 716,393.2 including 2 FTE for the basic state and a shortfall of LE 2,018,203.9 including 4.4 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment of Integrated Coastal Zone Management |                |                 |                  |                          |                          |
|---------------------------------------------------------------------------------|----------------|-----------------|------------------|--------------------------|--------------------------|
| Resource protection budget                                                      | Actual (LE)    | Basic (LE)      | Ideal (LE)       | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                                        | 5583.9         | 98400.0         | 140400.0         | 92816.1                  | 134816.1                 |
| Equipments & Furniture                                                          | 7852.4         | 167300.0        | 273600.0         | 159447.6                 | 265747.6                 |
| Infrastructure                                                                  | 0.0            | 0.0             | 0.0              | 0.0                      | 0.0                      |
| Vehicle                                                                         | 55257.8        | 380000.0        | 380000.0         | 324742.2                 | 324742.2                 |
| Operation                                                                       | 18030.9        | 100032.0        | 684818.3         | 82001.1                  | 666787.5                 |
| Maintenance                                                                     | 7231.9         | 34618.1         | 603342.5         | 27386.2                  | 596110.6                 |
| Special Services                                                                | 0.0            | 30000.0         | 30000.0          | 30000.0                  | 30000.0                  |
| <b>Total</b>                                                                    | <b>93956.9</b> | <b>810350.1</b> | <b>2112160.8</b> | <b>716393.2</b>          | <b>2018203.9</b>         |

**Figure (-- a,b) Scenarios for Integrated Coastal Zone Management (a)**



(b)



The present total investments of both NCS and RMNP concerning Integrated Coastal Zone Management equal to **323064.1 LE**

The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for integrated coastal zone management in RMNP;

| Integrated Coastal Zone Management                                                                     |  |
|--------------------------------------------------------------------------------------------------------|--|
| <b>Actions Actual scenario</b>                                                                         |  |
| Relationship with stakeholders                                                                         |  |
| Advisory to Hotels and construction                                                                    |  |
| EIA monitoring and follow up                                                                           |  |
| Multiple human use activities monitoring                                                               |  |
| Construction monitoring/ advisory                                                                      |  |
| Relationship with stakeholders                                                                         |  |
| Advisory to Hotels and construction                                                                    |  |
| Solid waste management/ sewage treatment                                                               |  |
| Beach improvement                                                                                      |  |
| Desalination units discharge monitoring/ needs a team to assess and supervise                          |  |
| Habilitation of floating/ beach structures                                                             |  |
| Law enforcement                                                                                        |  |
|                                                                                                        |  |
| <b>Actions Basic scenario</b>                                                                          |  |
| Integrated pollution control plan                                                                      |  |
| Pollution control / solid waste management                                                             |  |
| Stakeholders collaboration strategy                                                                    |  |
| 50 - 100 meters shoreline control                                                                      |  |
| Carrying capacity and human use plan (study conducted 2001, needs review and update)                   |  |
| Enhance public awareness and environmental education for constructors, hotels, and desalination plants |  |
| Sewage treatment three levels special emphasis in desalination units                                   |  |
| Agriculture control and monitoring                                                                     |  |

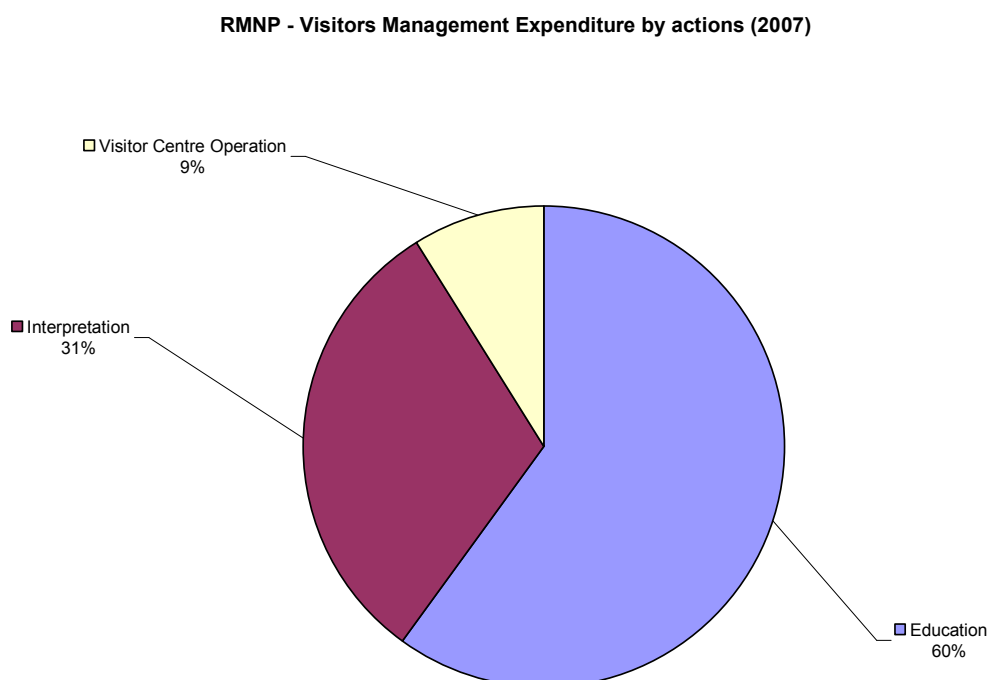
|                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------|
| Participation in city/ regional planning                                                                        |
| <b>Actions Ideal Scenario</b>                                                                                   |
| Zoning review/ update                                                                                           |
| Establish a community consultative committee with local stakeholders to look at means of reducing human impact, |
| Long term education program (courses for skippers, divers)                                                      |
| Research program of human uses and their impacts to biodiversity conservation                                   |
| Operation codes and licenses for hotels and tourist activities                                                  |
| Conduct strategic environmental assessment                                                                      |
| Conduct a contingency plan for environmental emergencies                                                        |
|                                                                                                                 |

## B- Visitors Management:

Given its proximity to Ras Mohamed National Park and the popularity of Sharm El-Sheikh city as a tourist destination, Nature Conservation Sector has the opportunity to reach a large constituency. However, the warm waters of the Gulf of Aqaba separating the Tiran and Sanafir Islands from the mainland of the park pose a significant obstacle for visitor access and enjoyment so bringing the park to the people is an important challenge.

Small percentage of the park's annual visitors (5-10%) come to the visitor center, which serves as the primary base for education and outreach for the park. Outreach programs also include visitors and school presentations. Rangers provide for visitors briefings, presentations and interpretive walks although there are no specialized interpretative specialized rangers.

The expected amount of money needed to reach the basic state for visitor management was estimated as LE 4,852,532.1 while the expected amount to reach the ideal state was LE 8,060,684.6. Finally, the park faced a shortfall of LE 4,805,709.7 including 0.9 FTE for the basic state and a shortfall of LE 8,013,862.2 including 2.1 FTE for the ideal status.

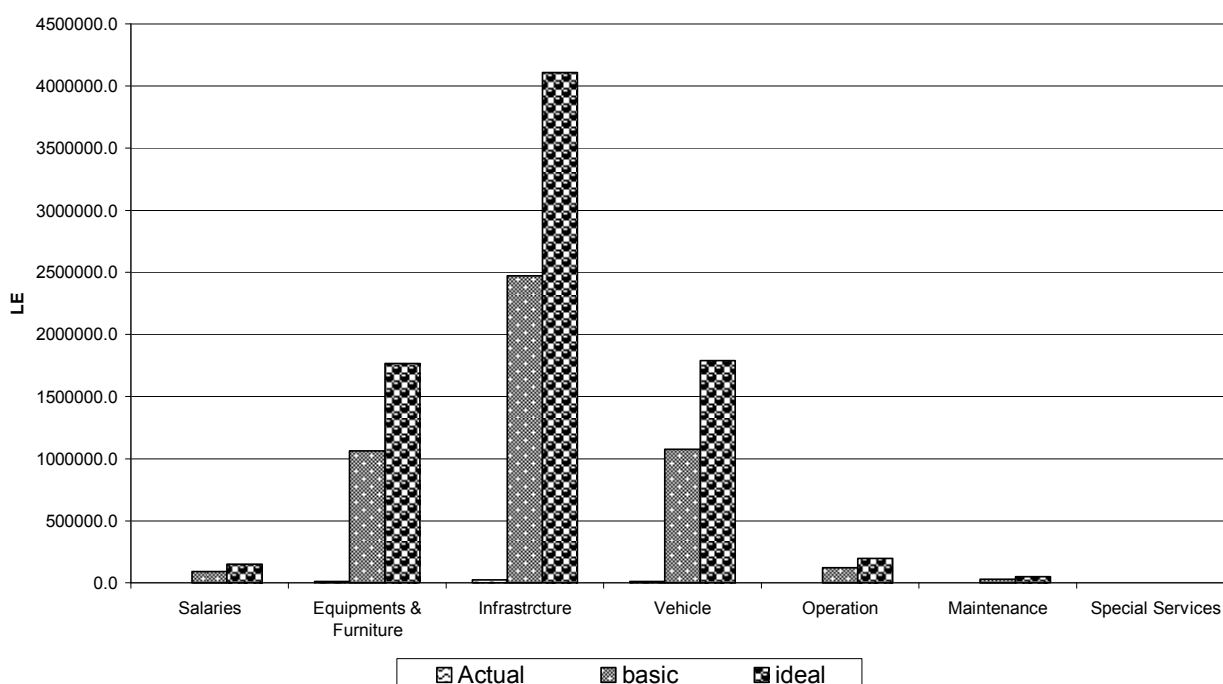


| Table ( ): Show RMNP financial assessment of Visitor Management Programme |                |                  |                  |                          |                          |
|---------------------------------------------------------------------------|----------------|------------------|------------------|--------------------------|--------------------------|
| Resource protection budget                                                | Actual (LE)    | Basic (LE)       | Ideal (LE)       | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                                  | 869.7          | 90134.2          | 149724.6         | 89264.5                  | 148854.9                 |
| Equipments & Furniture                                                    | 10258.9        | 1063205.1        | 1766121.5        | 1052946.2                | 1755862.6                |
| Infrastructure                                                            | 23859.1        | 2472683.1        | 4107447.0        | 2448824.0                | 4083587.9                |
| Vehicle                                                                   | 10388.8        | 1076663.4        | 1788477.5        | 1066274.6                | 1778088.7                |
| Operation                                                                 | 1148.1         | 118984.2         | 197648.2         | 117836.1                 | 196500.1                 |
| Maintenance                                                               | 297.8          | 30862.1          | 51265.9          | 30564.3                  | 50968.1                  |
| Special Services                                                          | 0.0            | 0.0              | 0.0              | 0.0                      | 0.0                      |
| <b>Total</b>                                                              | <b>46822.4</b> | <b>4852532.1</b> | <b>8060684.6</b> | <b>4805709.7</b>         | <b>8013862.2</b>         |

**Figure (-- a,b) Scenarios for Visitors Management**

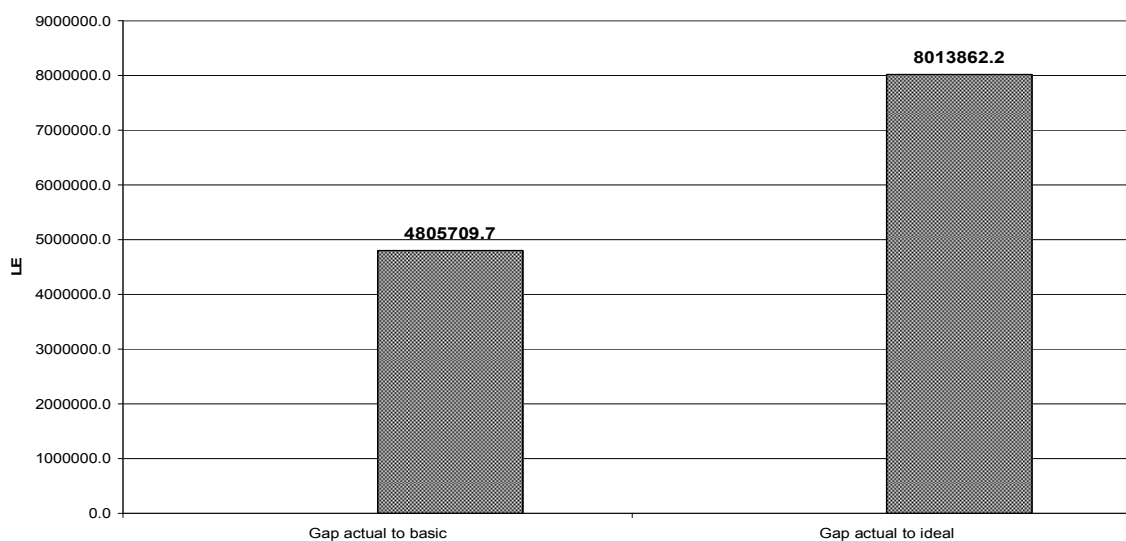
**(a)**

**Visitor Management Programme (scenarios)**



**(b)**

**Visitor Management gaps (total)**



The present total investments of both NCS and RMNP concerning Visitors Management equal to **3208152.6 LE**

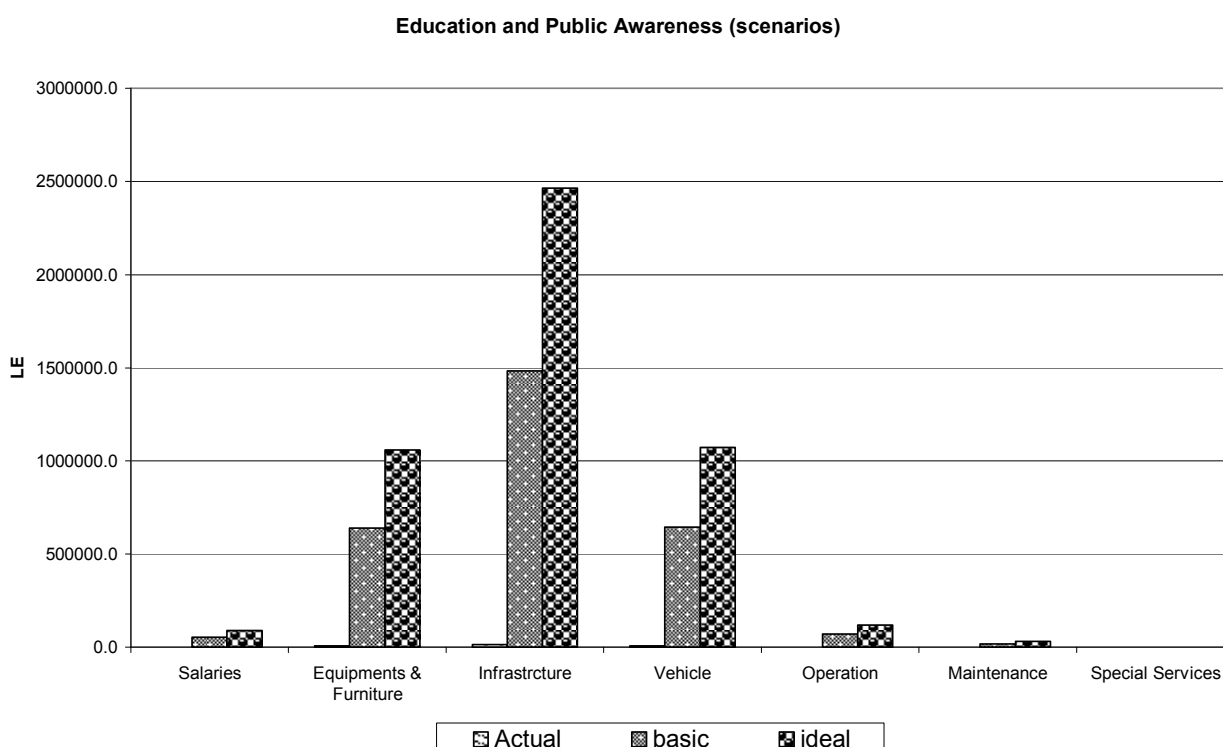
### B – 1. Education and Public Awareness (60%) (28093.4 LE):

The park's Education program serves the diverse population of Egyptian universities and reaches more than 20,000 students, teachers and professors each year through its visitor center. The park offers an extensive range of presentations, lectures, providing brochures and maps. These activities and products are aimed at introducing students to the NCS mission of preserving and protecting natural and cultural resources.

The expected amount of money needed to reach the basic state for visitor management was estimated as LE 2,911,519.3 while the expected amount to reach the ideal state was LE 4,836,410.8. Finally, the park faced a shortfall of LE 2,883,425.8 including 0.6 FTE for the basic state and a shortfall of LE 4,808,317.2 including 1.3 FTE for the ideal status.

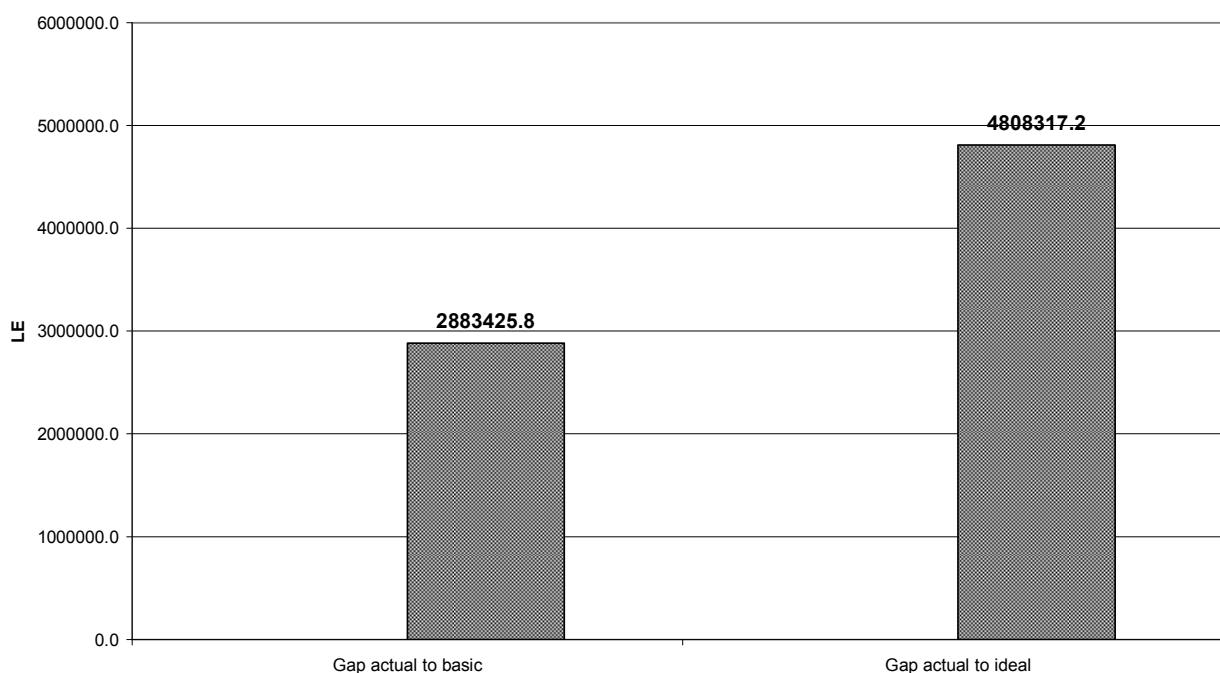
| Table ( ) : Show RMNP financial assessment of Education and Public Awareness |                |                  |                  |                          |                          |
|------------------------------------------------------------------------------|----------------|------------------|------------------|--------------------------|--------------------------|
| Resource protection budget                                                   | Actual (LE)    | Basic (LE)       | Ideal (LE)       | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                                     | 521.8          | 54080.5          | 89834.7          | 53558.7                  | 89312.9                  |
| Equipments & Furniture                                                       | 6155.4         | 637923.1         | 1059672.9        | 631767.7                 | 1053517.5                |
| Infrastructure                                                               | 14315.4        | 1483609.8        | 2464468.1        | 1469294.4                | 2450152.7                |
| Vehicle                                                                      | 6233.3         | 645998.0         | 1073086.5        | 639764.8                 | 1066853.2                |
| Operation                                                                    | 688.9          | 71390.5          | 118588.9         | 70701.7                  | 117900.0                 |
| Maintenance                                                                  | 178.7          | 18517.3          | 30759.6          | 18338.6                  | 30580.9                  |
| Special Services                                                             | 0.0            | 0.0              | 0.0              | 0.0                      | 0.0                      |
| <b>Total</b>                                                                 | <b>28093.4</b> | <b>2911519.3</b> | <b>4836410.8</b> | <b>2883425.8</b>         | <b>4808317.2</b>         |

**Figure (-- a,b) Scenarios for Education and Public Awareness**  
(a)



(b)

**Education and Public Awareness gaps (total)**



The present total investments of both NCS and RMNP concerning Education and Public Awareness equal to **96244.6 LE**

The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for education and public awareness in RMNP;

| Education and Public Awareness                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Actions Actual scenario</b>                                                                                                                                                           |
| Providing training for guides and tour operators                                                                                                                                         |
| Enhancing the public awareness and education program for the relevant stakeholders (dive centers, tour guides and operators)                                                             |
| Environmental education (skipper training + info distribution + certificates)                                                                                                            |
| Enhance public awareness and environmental education for diving centers and boat owners                                                                                                  |
|                                                                                                                                                                                          |
| <b>Actions Basic scenario</b>                                                                                                                                                            |
| Information and rules for beginner swimmers                                                                                                                                              |
| Create a hiking opportunities inside the park in order to gives visitors a chance to experience the spectacular scenes of the park.                                                      |
| Enhance on-site educational facilities.                                                                                                                                                  |
| Coordinate with the tourist companies in order to arrange with them continuous campaigns for clean up inside the park.                                                                   |
|                                                                                                                                                                                          |
| <b>Actions Ideal Scenario</b>                                                                                                                                                            |
| Provide information for the visitors and tourists about the area and include key messages (e.g. never stand on coral – they are living organisms – never collect natural objects – etc). |
| Implementing a long term public awareness program targeting the local community.                                                                                                         |
| A comprehensive plan for visitor management                                                                                                                                              |
| Provide training curriculum for stakeholders.                                                                                                                                            |
|                                                                                                                                                                                          |

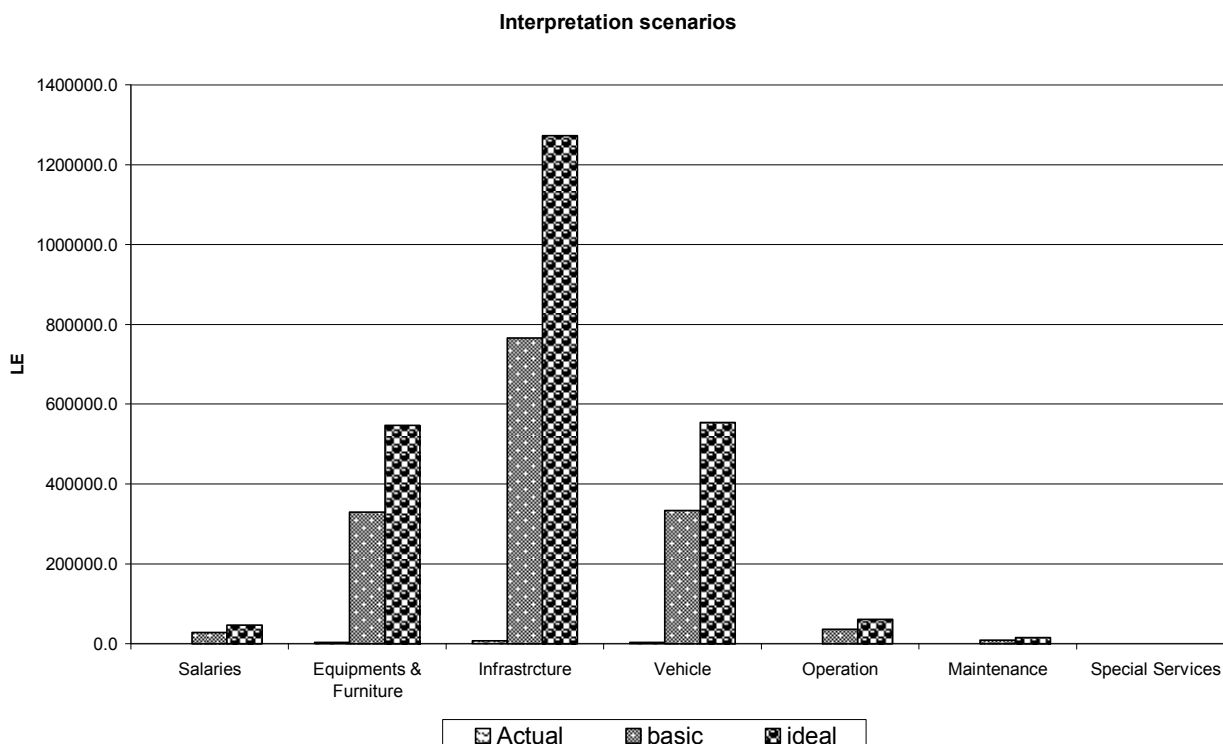
## B – 2. Interpretation (31%) (14514.9 LE):

The goal of interpretive programs and media is to foster public understanding and appreciation of the park's resources. Formal interpretive activities include talks at the visitor center, off-site community presentations, as well as orientations and guided walks. Informal interpretive activities include unscheduled regular contacts with visitors at critical resource sites, visitor centers, campsites, diving boats, and off-site community events. Interpretive media includes visitor center exhibit, waysides, publications, signs, videos, CD and photos.

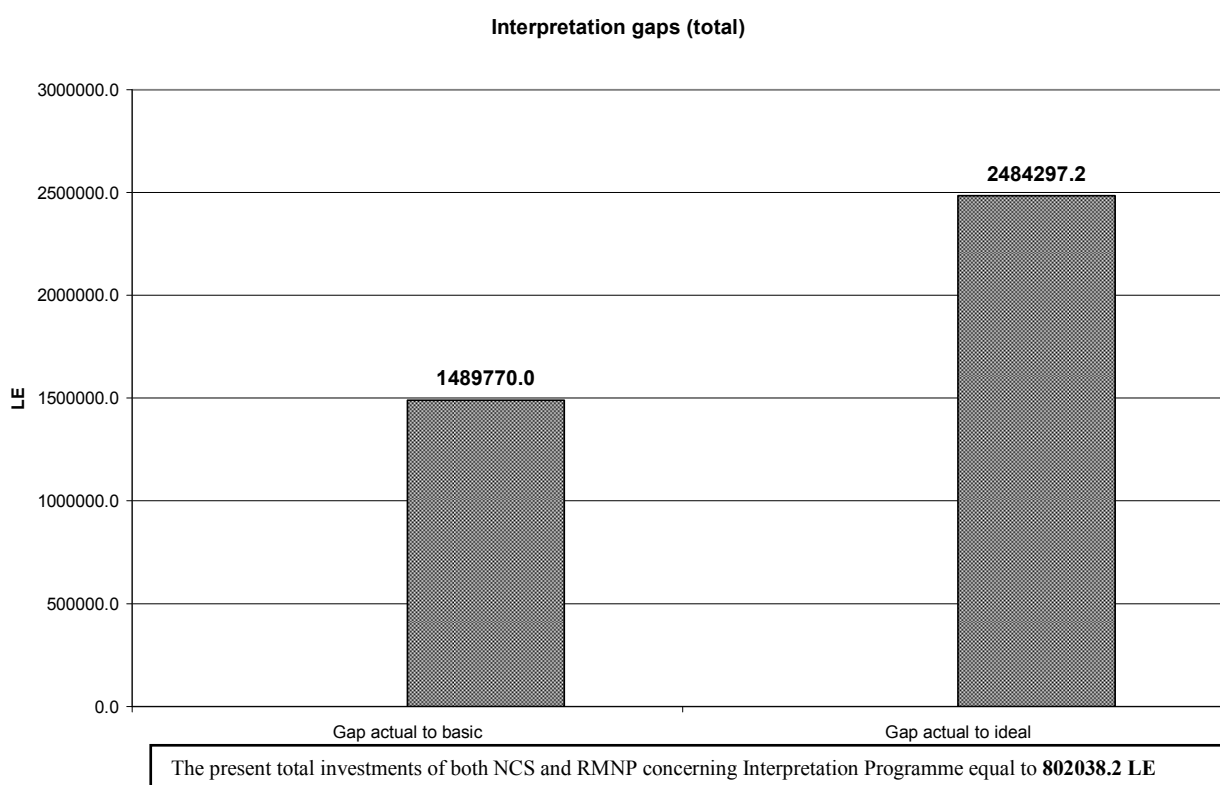
The expected amount of money needed to reach the basic state for visitor management was estimated as LE 1,504,285 while the expected amount to reach the ideal state was LE 2,498,812.2. Finally, the park faced a shortfall of LE 1,489,770 including 0.2 FTE for the basic state and a shortfall of LE 2,484,279.2 including 0.6 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment of Interpretation |                |                  |                  |                          |                          |
|-------------------------------------------------------------|----------------|------------------|------------------|--------------------------|--------------------------|
| Resource protection budget                                  | Actual (LE)    | Basic (LE)       | Ideal (LE)       | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                    | 269.6          | 27941.6          | 46414.6          | 27672                    | 46145                    |
| Equipments & Furniture                                      | 3180.3         | 329593.6         | 547497.6         | 326413.3                 | 544317.4                 |
| Infrastructure                                              | 7396.3         | 766531.7         | 1273308.5        | 759135.5                 | 1265912.2                |
| Vehicle                                                     | 3220.5         | 333765.7         | 554428.0         | 330545.1                 | 551207.5                 |
| Operation                                                   | 355.9          | 36885.1          | 61270.9          | 36529.2                  | 60915.0                  |
| Maintenance                                                 | 92.3           | 9567.2           | 15892.4          | 9474.9                   | 15800.1                  |
| Special Services                                            | 0.0            | 0.0              | 0.0              | 0.0                      | 0.0                      |
| <b>Total</b>                                                | <b>14514.9</b> | <b>1504285.0</b> | <b>2498812.2</b> | <b>1489770.0</b>         | <b>2484297.2</b>         |

**Figure (-- a,b) Scenarios for Interpretation**  
(a)



(b)



The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for interpretation in RMNP;

| Interpretation                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Actions Actual scenario</b>                                                                                                                                         |
| Brochures are distributed at RMNP gate for free for each group and old version.                                                                                        |
| Some signposts are installed containing some information and still some of them old.                                                                                   |
|                                                                                                                                                                        |
| <b>Actions Basic scenario</b>                                                                                                                                          |
| Interpretation plan will be prepared and implemented.                                                                                                                  |
| Open air events will be promoted.                                                                                                                                      |
| Brochures will upgrade and reprinted.                                                                                                                                  |
|                                                                                                                                                                        |
| <b>Actions Ideal Scenario</b>                                                                                                                                          |
| 60-minute audio tape is developed to interpret the natural and cultural history of the area through which visitors will travel.                                        |
| Initiate official website for RMNP for visitors to plan their vacations and recreation time.                                                                           |
| Develop newspaper which will produce once or twice a year (these 8-12 page newspapers) are able to offer visitors specific information on where to go and what to see. |
| Advertising in the proposed newspaper will offset the cost of printing and serves the local community by promoting their products that may be of interest to visitors. |
|                                                                                                                                                                        |

### **B – 3. Visitor Centre Operation (9%) (4214 LE):**

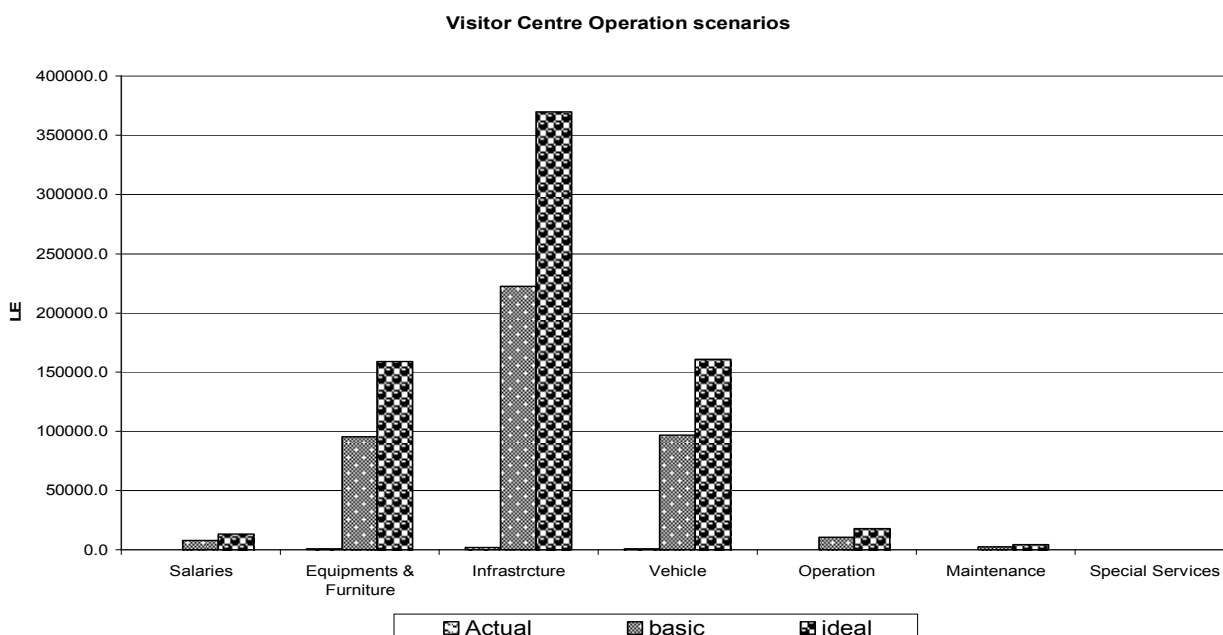
The park's rangers manage the visitor center at Marsa Ghozlany. The purpose of these facilities is to prepare visitors for their visit, enhance their park experience, and educate them about park themes and issues. As two thirds of park visitors never visit the RMNP visitor centre (they enter the park by diving boats), therefore the visitor center is a crucial point for bringing park resources to the public.

The expected amount of money needed to reach the basic state for visitor centre operation was estimated as LE 436,727.9 while the expected amount to reach the ideal state was LE 725,461.6. Finally, the park faced a shortfall of LE 432,513.9 including 0.2 FTE for the basic state and a shortfall of LE 721,247.6 including 0.3 FTE for the ideal status.

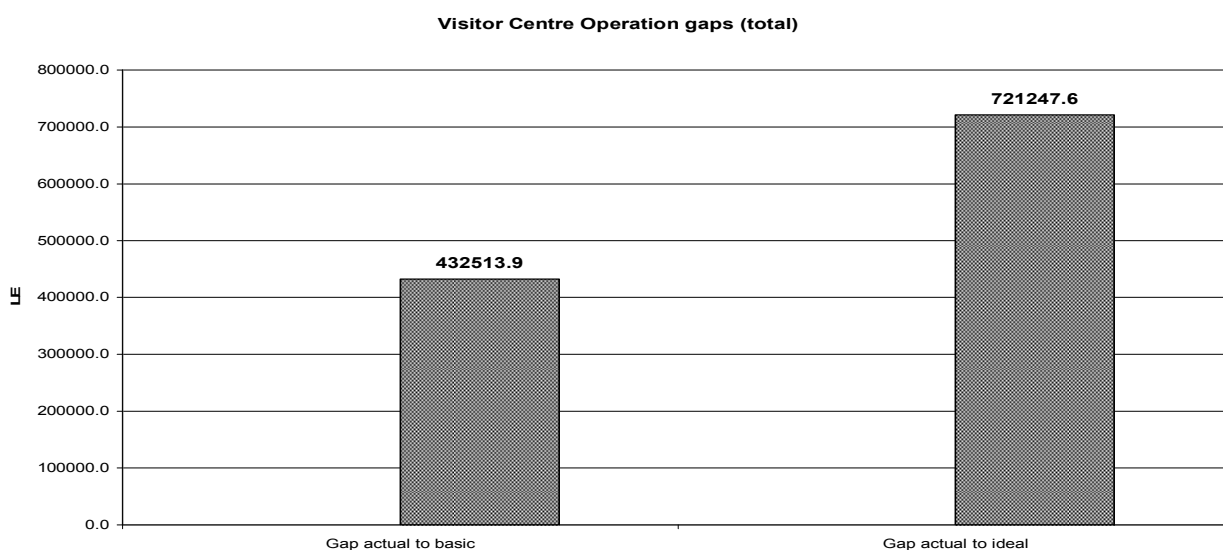
| Table ( ): Show RMNP financial assessment of visitor centre operation |               |                 |                 |                          |                          |
|-----------------------------------------------------------------------|---------------|-----------------|-----------------|--------------------------|--------------------------|
| Resource protection budget                                            | Actual (LE)   | Basic (LE)      | Ideal (LE)      | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                              | 78.3          | 8112.1          | 13475.2         | 8033.8                   | 13396.9                  |
| Equipments & Furniture                                                | 923.3         | 95688.5         | 158950.9        | 94765.2                  | 158027.6                 |
| Infrastructure                                                        | 2147.3        | 222541.5        | 369670.2        | 220394.2                 | 367522.9                 |
| Vehicle                                                               | 935.0         | 96899.7         | 160963.0        | 95964.7                  | 160028.0                 |
| Operation                                                             | 103.3         | 10708.6         | 17788.3         | 10605.2                  | 17685.0                  |
| Maintenance                                                           | 26.8          | 2777.6          | 4613.9          | 2750.8                   | 4587.1                   |
| Special Services                                                      | 0.0           | 0.0             | 0.0             | 0.0                      | 0.0                      |
| <b>Total</b>                                                          | <b>4214.0</b> | <b>436727.9</b> | <b>725461.6</b> | <b>432513.9</b>          | <b>721247.6</b>          |

**Figure (-- a,b) Scenarios for visitor centre operation**

**(a)**



**(b)**

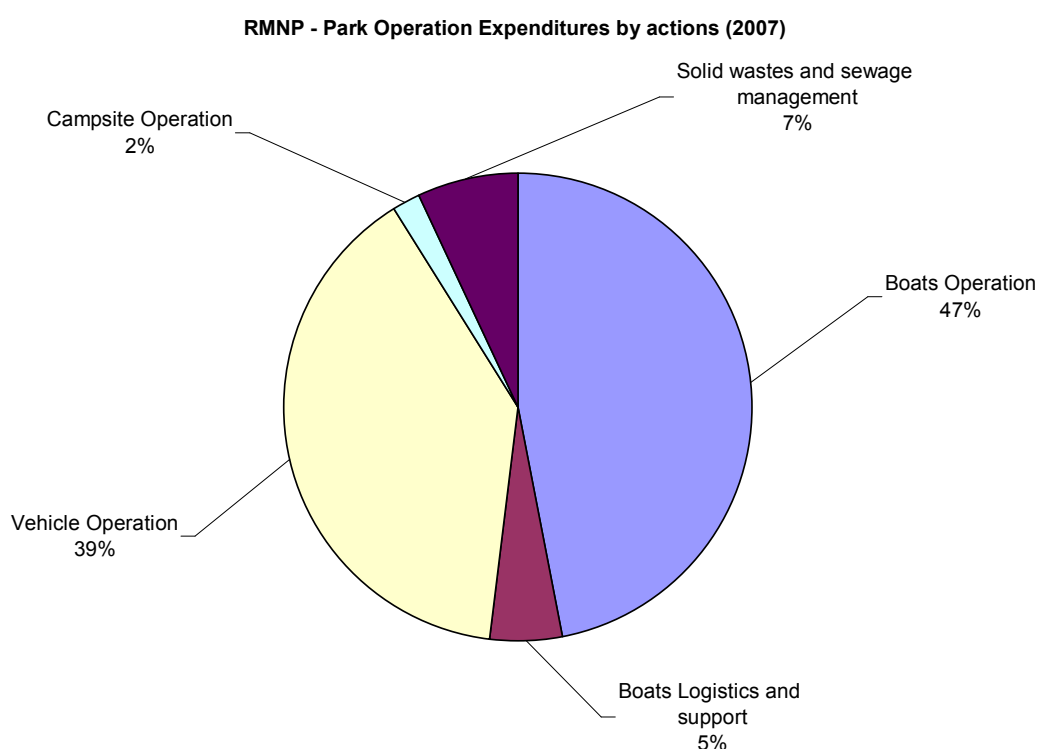


The present total investments of both NCS and RMNP concerning Visitor Centre Operation equal to **2309869.9 LE**

## C- Park Operation Programme:

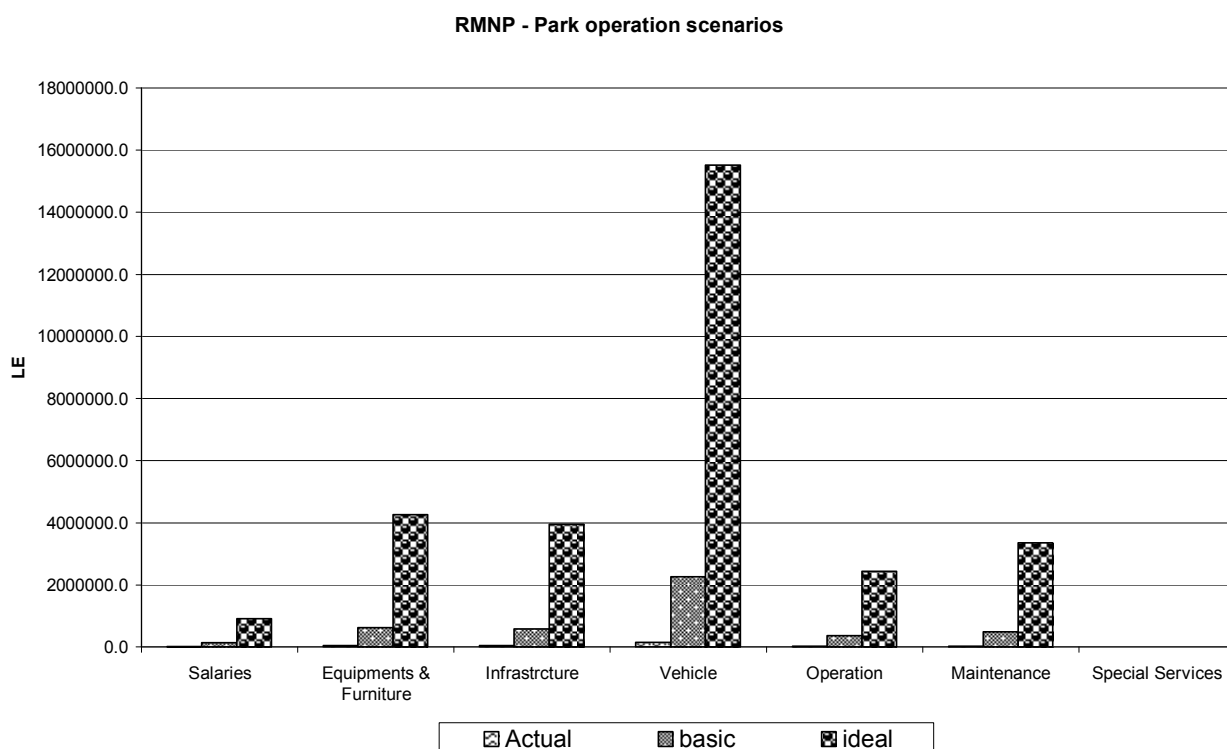
Ras Mohamed National Park's facilities and infrastructure are distributed across the park itself and the main headquarter in Sharm El-Sheikh city. Facilities Operations staff support the daily operation of buildings, campsite, tracks, trails, vehicles, boats, and utilities at all of these locations. RMNP have multiple staff with specific facilities operations and maintenance responsibilities. RMNP staffed by five employees, typically law enforcement rangers, who perform other tasks as a collateral duty.

During 2007, the park spent LE 296541.7 towards the operation of its facilities and infrastructure, representing 19% of the total expenditures of the park. Nonetheless, the park requires an additional LE 4149323.4 to fully support operations shortfalls and offset rising costs in fuel and utilities. By performing operations activities now, the park can reduce the need to do larger, more expensive repairs in the future.

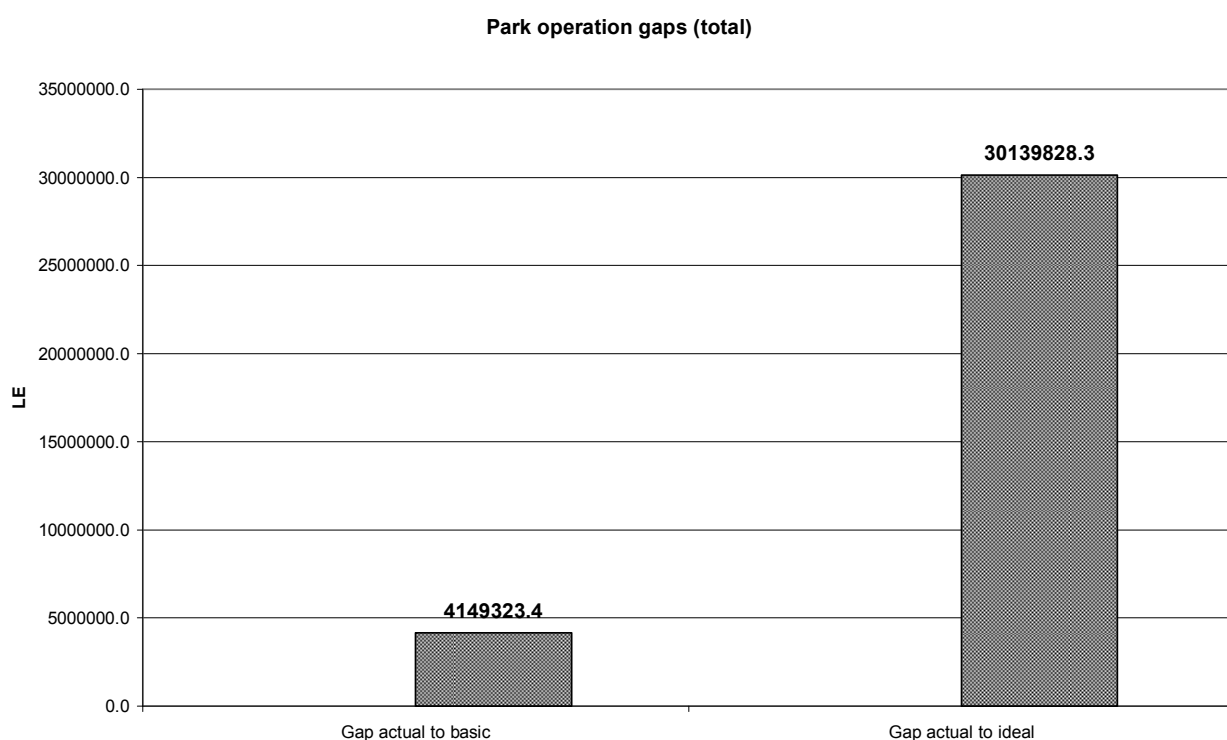


| Table ( ): Show RMNP financial assessment of park operation Programme |                 |                  |                   |                          |                          |
|-----------------------------------------------------------------------|-----------------|------------------|-------------------|--------------------------|--------------------------|
| Resource protection budget                                            | Actual (LE)     | Basic (LE)       | Ideal (LE)        | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                              | 8896.3          | 133376.0         | 913091.1          | 124479.7                 | 904194.8                 |
| Equipments & Furniture                                                | 41515.8         | 622421.1         | 4261091.8         | 580905.3                 | 4219576.0                |
| Infrastructure                                                        | 38550.4         | 577962.5         | 3956728.1         | 539412.0                 | 3918177.7                |
| Vehicle                                                               | 151236.3        | 2267391.2        | 15522548.7        | 2116154.9                | 15371312.4               |
| Operation                                                             | 23723.3         | 355669.2         | 2434909.6         | 331945.9                 | 2411186.3                |
| Maintenance                                                           | 32619.6         | 489045.2         | 3348000.7         | 456425.6                 | 3315381.1                |
| Special Services                                                      | 0.0             | 0.0              | 0.0               | 0.0                      | 0.0                      |
| <b>Total</b>                                                          | <b>296541.7</b> | <b>4445865.1</b> | <b>30436370.0</b> | <b>4149323.4</b>         | <b>30139828.3</b>        |

**Figure (-- a,b) Scenarios for Park operation**  
**(a)**



**(b)**



The present total investments of both NCS and RMNP concerning Park Operation equal to **2755460.7 LE**

The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for park operation programme in RMNP;

| Park operation programme                                                                                                                                                                      |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Actions Actual scenario</b>                                                                                                                                                                |  |
| Sea patrolling using 4 boats limited (6 sea patrols per month for the 4 boats) to the southern water of the park with unplanned (once per month) sea patrolling to Tiran and Sanafir Islands. |  |
| Inappropriate daily land patrolling covering the visitation areas.                                                                                                                            |  |
| Solid waste collection inside the park restricted to the visitation areas only                                                                                                                |  |
| <b>Actions Basic scenario</b>                                                                                                                                                                 |  |
| Sea patrolling using 6 boats to the park including Tiran and Sanafir Islands (20 sea patrols per month for the 6 boats).                                                                      |  |
| Daily land patrolling covering the visitation areas.                                                                                                                                          |  |
| Solid waste collection inside the park restricted to the inland part of the park.                                                                                                             |  |
| <b>Actions Ideal Scenario</b>                                                                                                                                                                 |  |
| Daily sea patrolling using 10 boats to the park including Tiran and Sanafir Islands.                                                                                                          |  |
| Daily land patrolling covering the inland part of the park                                                                                                                                    |  |
| Solid waste collection inside the park restricted to the inland part of the park in addition to underwater clean up campaigns each four months.                                               |  |
| Planned land and sea patrolling serving the monitoring activities of the park                                                                                                                 |  |

### C – 1. Boats Operation (47%) (139374.6 LE):

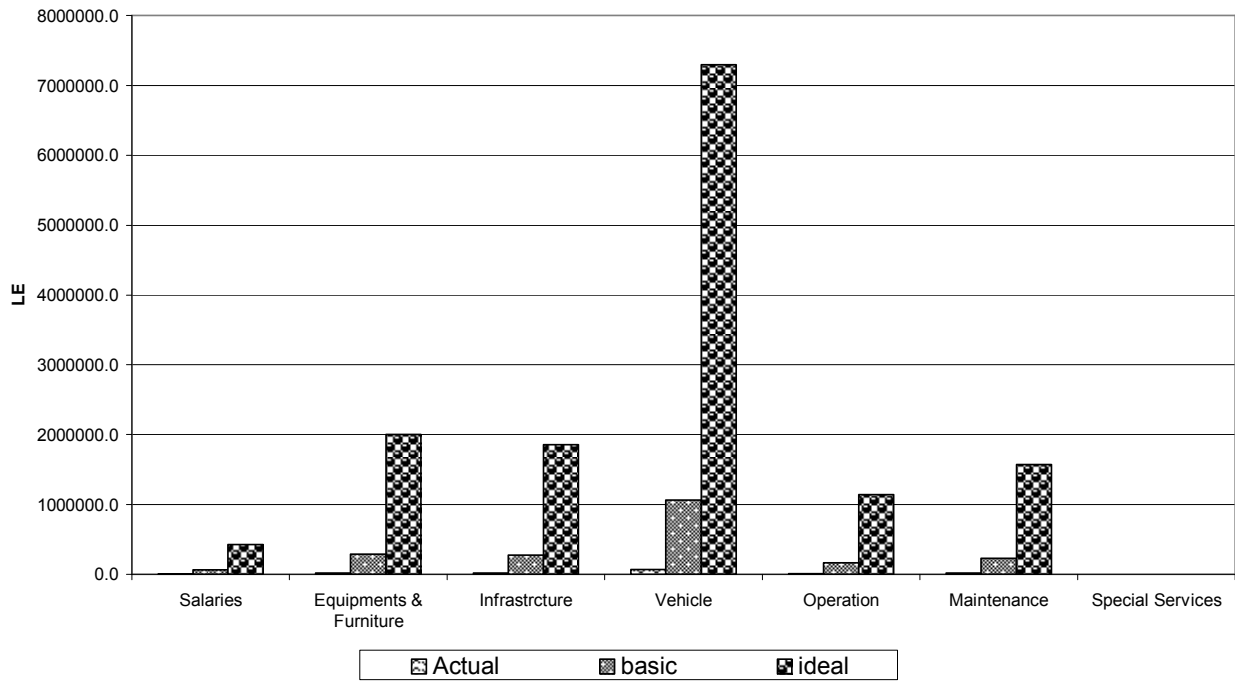
The park currently operates four boats to marine patrolling and researches. Boats Operation encompasses all activities related to the daily operation of these boats. NCS supporting the operation of these boats to some extent however, with the rising costs of fuel, RMNP still need financial support to cover these high values.

The expected amount of money needed to reach the basic state for the boats operation was estimated as LE 2,089,556.6 while the expected amount to reach the ideal state was LE 14,305,093.9. Finally, the park faced a shortfall of LE 1,950,182 including 2.9 FTE for the basic state and a shortfall of LE 14,165,719.32 including 6.4 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment Boats operation |                 |                  |                   |                          |                          |
|-----------------------------------------------------------|-----------------|------------------|-------------------|--------------------------|--------------------------|
| Resource protection budget                                | Actual (LE)     | Basic (LE)       | Ideal (LE)        | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                  | 4181.2          | 62686.7          | 429152.8          | 58505.5                  | 424971.6                 |
| Equipments & Furniture                                    | 19512.4         | 292537.9         | 2002713.1         | 273025.5                 | 1983200.7                |
| Infrastructure                                            | 18118.7         | 271642.4         | 1859662.2         | 253523.7                 | 1841543.5                |
| Vehicle                                                   | 71081.0         | 1065673.9        | 7295597.9         | 994592.8                 | 7224516.8                |
| Operation                                                 | 11150.0         | 167164.5         | 1144407.5         | 156014.6                 | 1133257.5                |
| Maintenance                                               | 15331.2         | 229851.2         | 1573560.3         | 214520.0                 | 1558229.1                |
| Special Services                                          | 0.0             | 0.0              | 0.0               | 0.0                      | 0.0                      |
| <b>Total</b>                                              | <b>139374.6</b> | <b>2089556.6</b> | <b>14305093.9</b> | <b>1950182.0</b>         | <b>14165719.3</b>        |

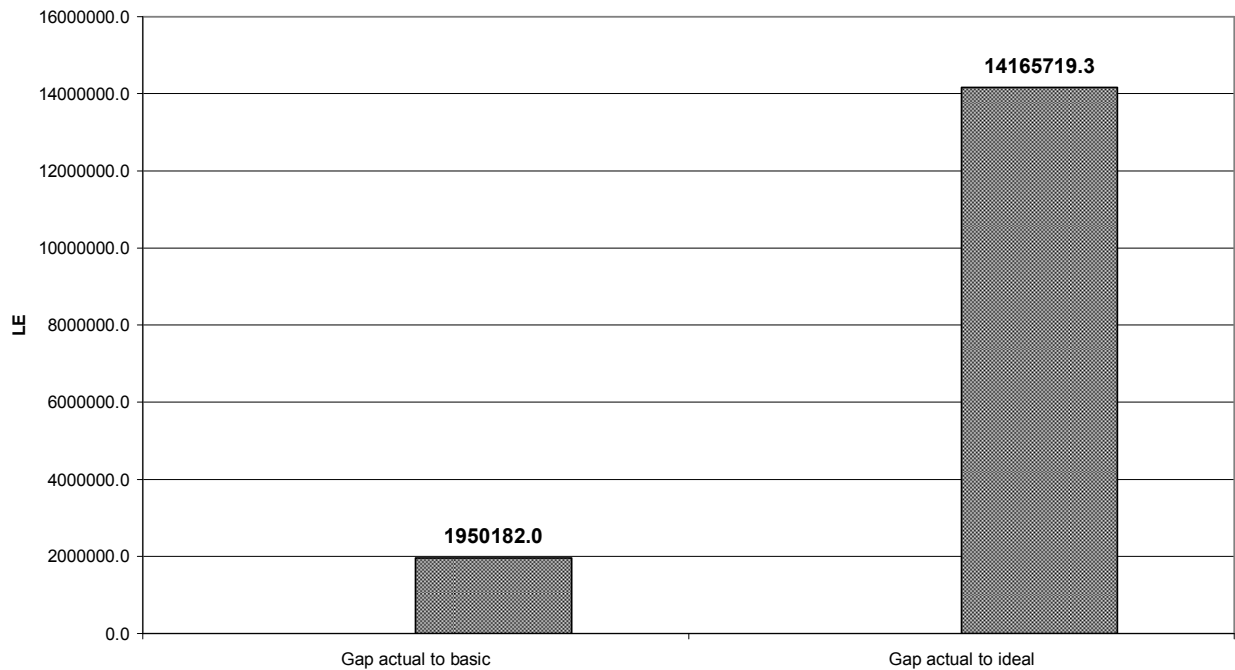
**Figure (-- a,b) Scenarios for boats operation**  
(a)

**Boats Operation scenarios**



**(b)**

**Boat Operation gaps (total)**



The present total investments of both NCS and RMNP concerning Boats Operation equal to **1295066.5 LE**

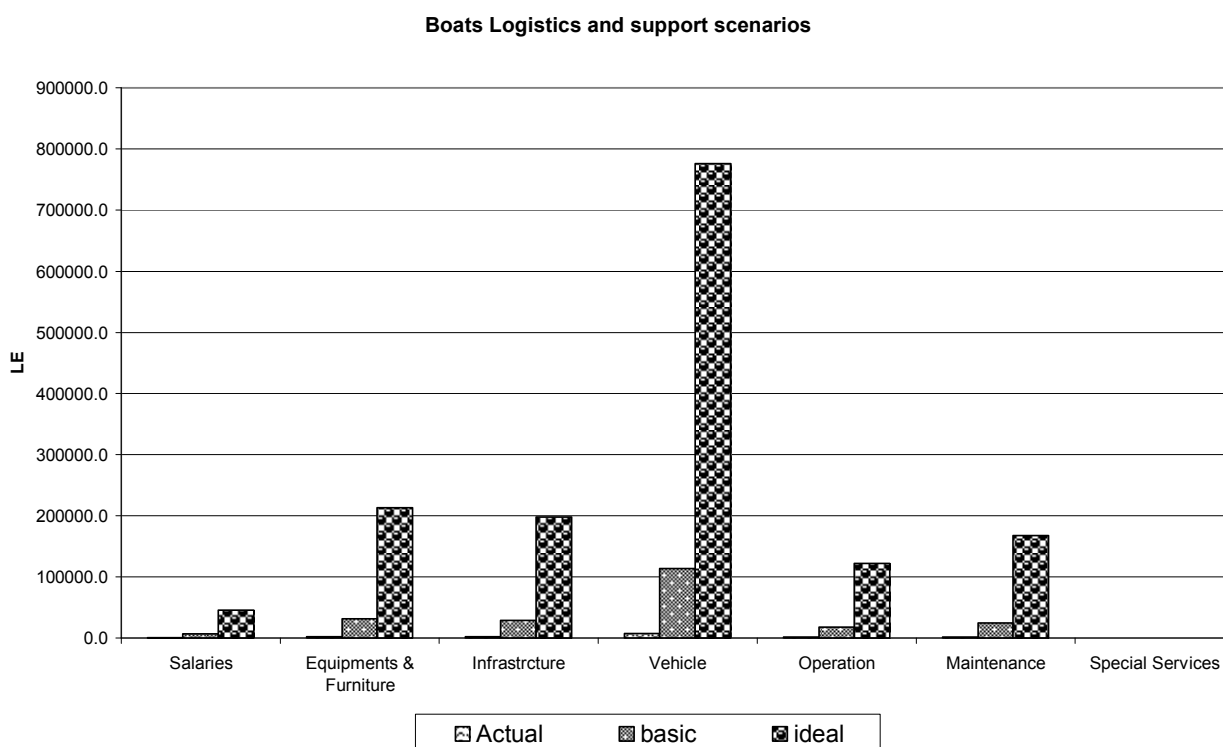
## C – 2. Boats Logistics and Support (5%) (14827.1 LE):

All Marine Unit staff spends time on logistics during each marine patrolling, including preparing and loading personal gear bags and bringing equipments on board. In addition, volunteers and researchers require assistance from park staff in coordinating these logistical needs. In the jetty area at Marsa Berika, park staff prepares patrolling boats on a daily basis. Before each trip for Gemnistar boat (modified bat for instillation of mooring lines in the diving sites), staff must load vessels with cranes, and balance loads and deck weight based on the boat specifications.

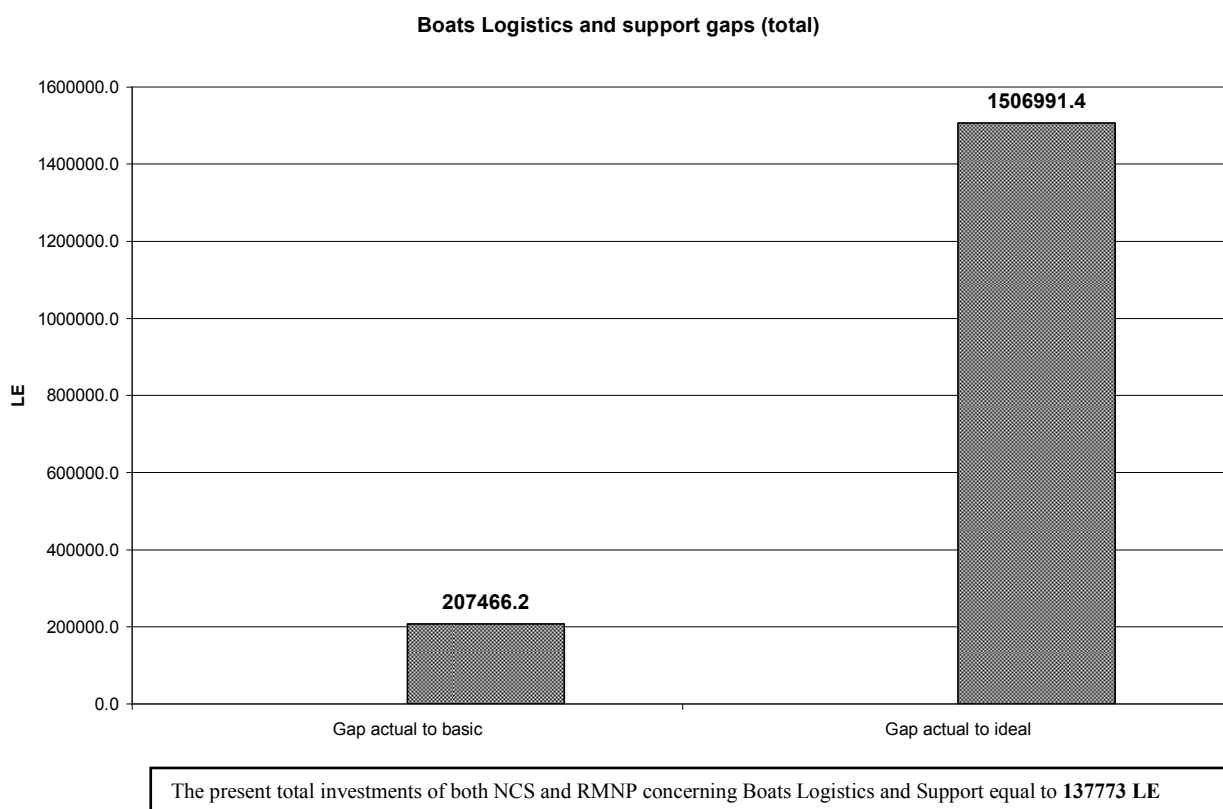
The expected amount of money needed to reach the basic state for the boats logistics and support was estimated as LE 222,293.3 while the expected amount to reach the ideal state was LE 1,521,818.5. Finally, the park faced a shortfall of LE 207,466.2 including 0.3 FTE for the basic state and a shortfall of LE 1,506,991.4 including 0.7 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment Boats Logistics and support |                |                 |                  |                          |                          |
|-----------------------------------------------------------------------|----------------|-----------------|------------------|--------------------------|--------------------------|
| Resource protection budget                                            | Actual (LE)    | Basic (LE)      | Ideal (LE)       | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                              | 444.8          | 6668.8          | 45654.6          | 6224.0                   | 45209.7                  |
| Equipments & Furniture                                                | 2075.8         | 31121.1         | 213054.6         | 29045.3                  | 210978.8                 |
| Infrastructure                                                        | 1927.5         | 28898.1         | 197836.4         | 26970.6                  | 195908.9                 |
| Vehicle                                                               | 7561.8         | 113369.6        | 776127.4         | 105807.8                 | 768565.6                 |
| Operation                                                             | 1186.2         | 17783.5         | 121745.5         | 16597.3                  | 120559.3                 |
| Maintenance                                                           | 1631.0         | 24452.3         | 167400.0         | 22821.3                  | 165769.1                 |
| Special Services                                                      | 0.0            | 0.0             | 0.0              | 0.0                      | 0.0                      |
| <b>Total</b>                                                          | <b>14827.1</b> | <b>222293.3</b> | <b>1521818.5</b> | <b>207466.2</b>          | <b>1506991.4</b>         |

**Figure (-- a,b) Scenarios for Boats Logistics and Support**  
(a)



(b)



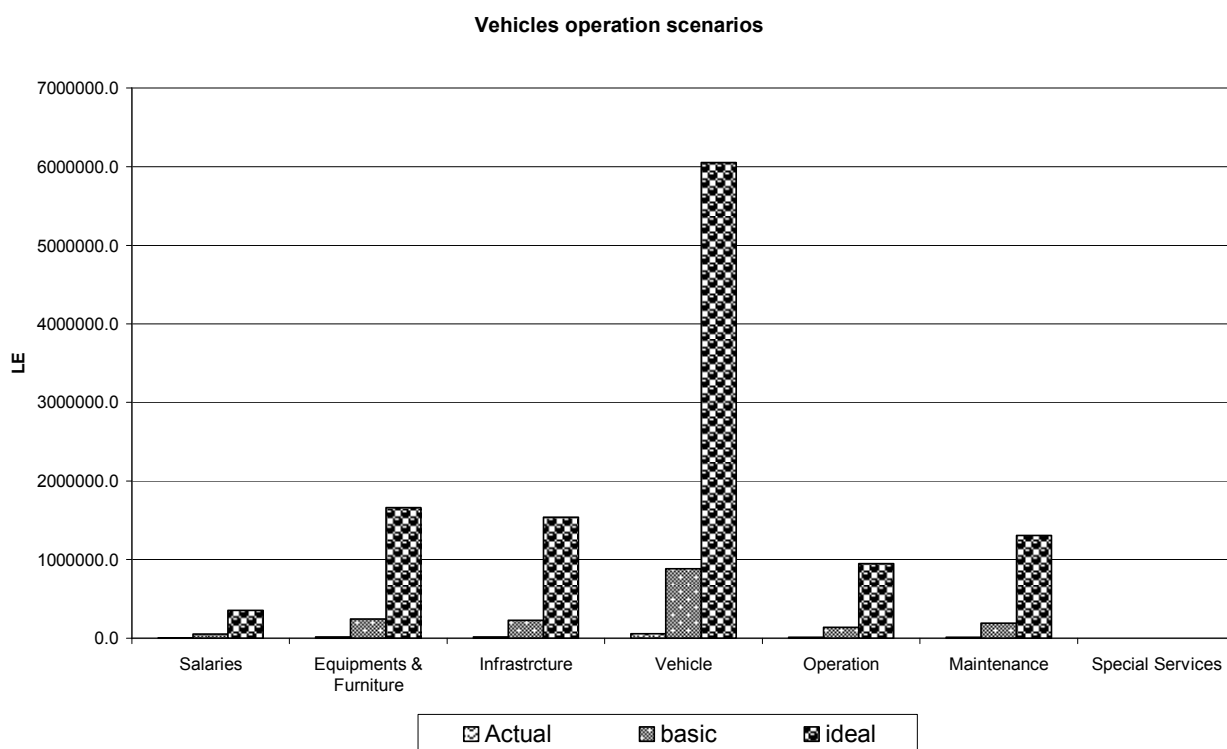
### **C – 3. Vehicle Operation (39%) (115651.3 LE):**

The park supports the daily operation, service, and inspections of twenty-two vehicles at headquarter in Sharm El-Sheikh, RMNP using almost two cars only of these and twenty-two. Combined, these vehicles and equipments ensure the mobility of staff and materials between Sharm El-Sheikh city and the park in a daily basis. Because it was difficult for both the Business Plan team and RMNP staff to accurately define the participation rate of the other vehicles belong to the headquarter into the daily activities of the park, so the following costs represent what is used for all vehicles of the headquarter.

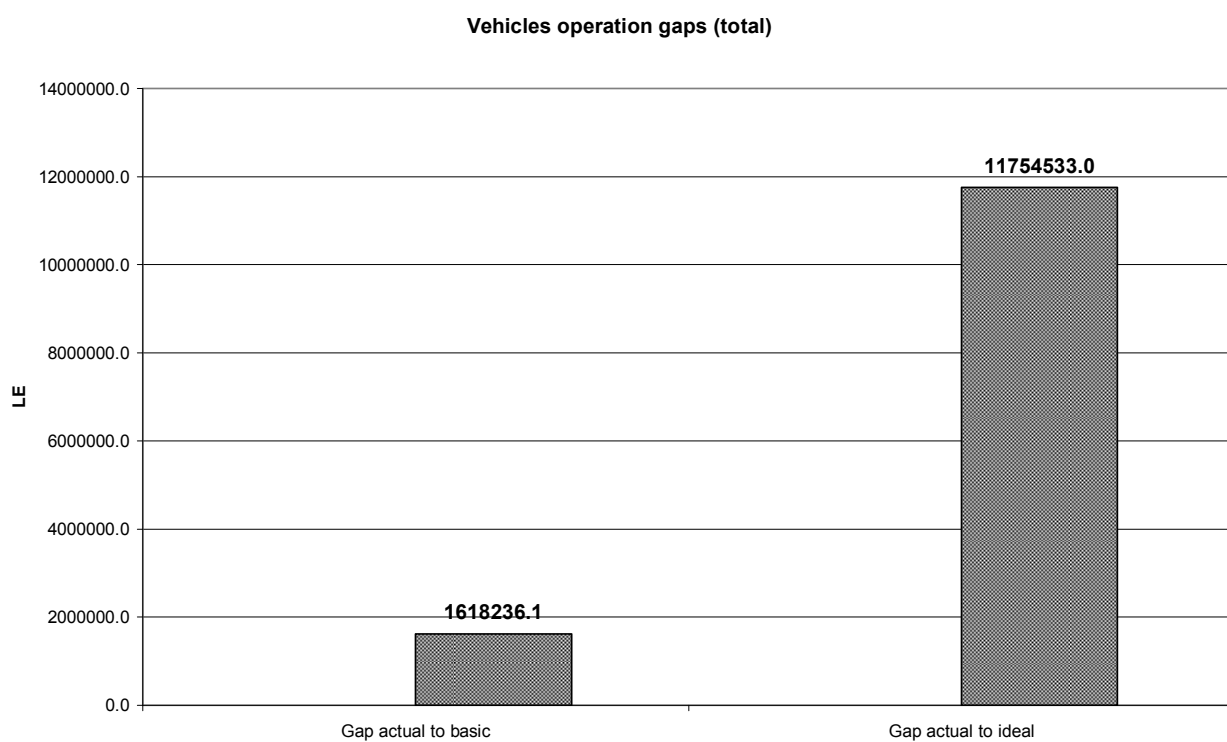
The expected amount of money needed to reach the basic state for the vehicle operation was estimated as LE 1,733,887.4 while the expected amount to reach the ideal state was LE 11,870,184.3. Finally, the park faced a shortfall of LE 1,618,236.1 including 2.4 FTE for the basic state and a shortfall of LE 11,754,533 including 6.2 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment vehicles operation |                 |                  |                   |                          |                          |
|--------------------------------------------------------------|-----------------|------------------|-------------------|--------------------------|--------------------------|
| Resource protection budget                                   | Actual (LE)     | Basic (LE)       | Ideal (LE)        | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                     | 3469.5          | 52016.6          | 356105.5          | 48547.1                  | 352636.0                 |
| Equipments & Furniture                                       | 16191.2         | 242744.2         | 1661825.8         | 226553.1                 | 1645634.6                |
| Infrastructure                                               | 15034.7         | 225405.4         | 1543124.0         | 210370.7                 | 1528089.3                |
| Vehicle                                                      | 58982.2         | 884282.6         | 6053794.0         | 825300.4                 | 5994811.8                |
| Operation                                                    | 9252.1          | 138711.0         | 949614.7          | 129458.9                 | 940362.6                 |
| Maintenance                                                  | 12721.6         | 190727.6         | 1305720.3         | 178006.0                 | 1292998.6                |
| Special Services                                             | 0.0             | 0.0              | 0.0               | 0.0                      | 0.0                      |
| <b>Total</b>                                                 | <b>115651.3</b> | <b>1733887.4</b> | <b>11870184.3</b> | <b>1618236.1</b>         | <b>11754533.0</b>        |

**Figure (-- a,b) Scenarios for Vehicle Operation  
(a)**



**(b)**



The present total investments of both NCS and RMNP concerning Vehicles Operation equal to **1074629.7 LE**

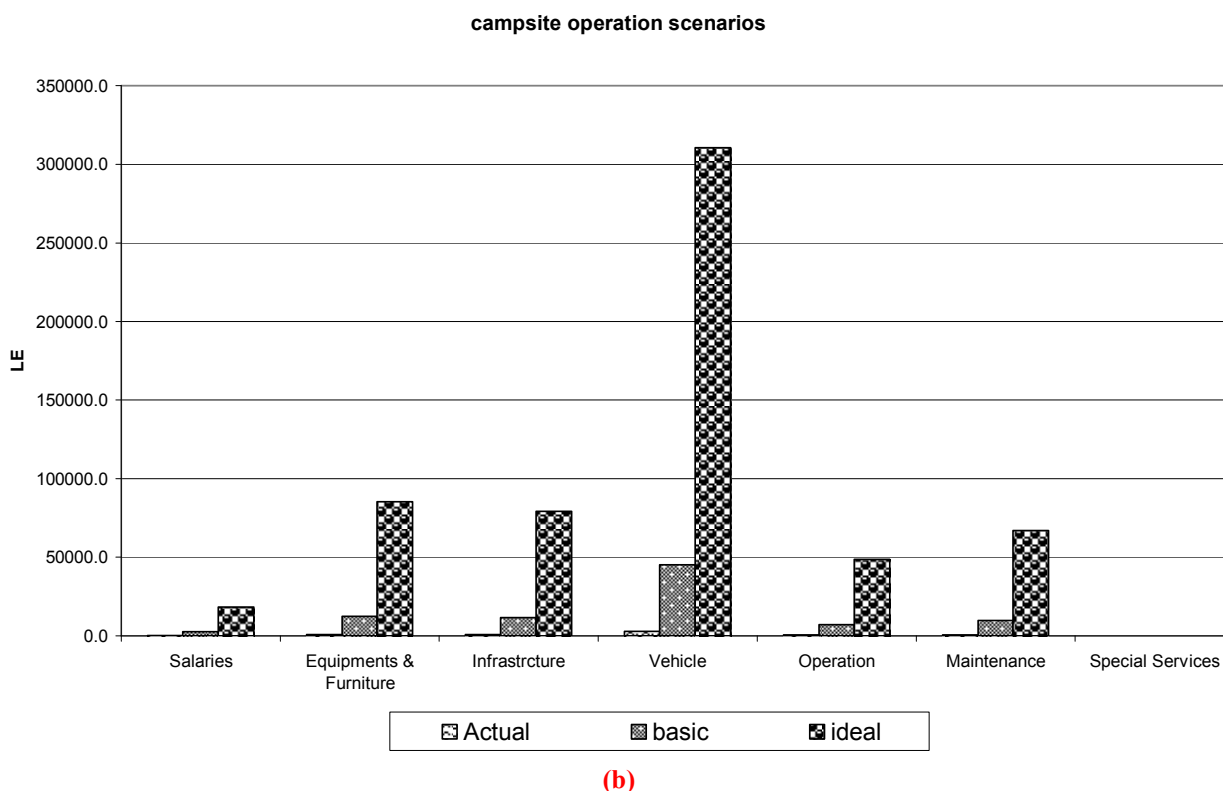
#### C – 4. Campsites Operation (2%) (5930.8 LE):

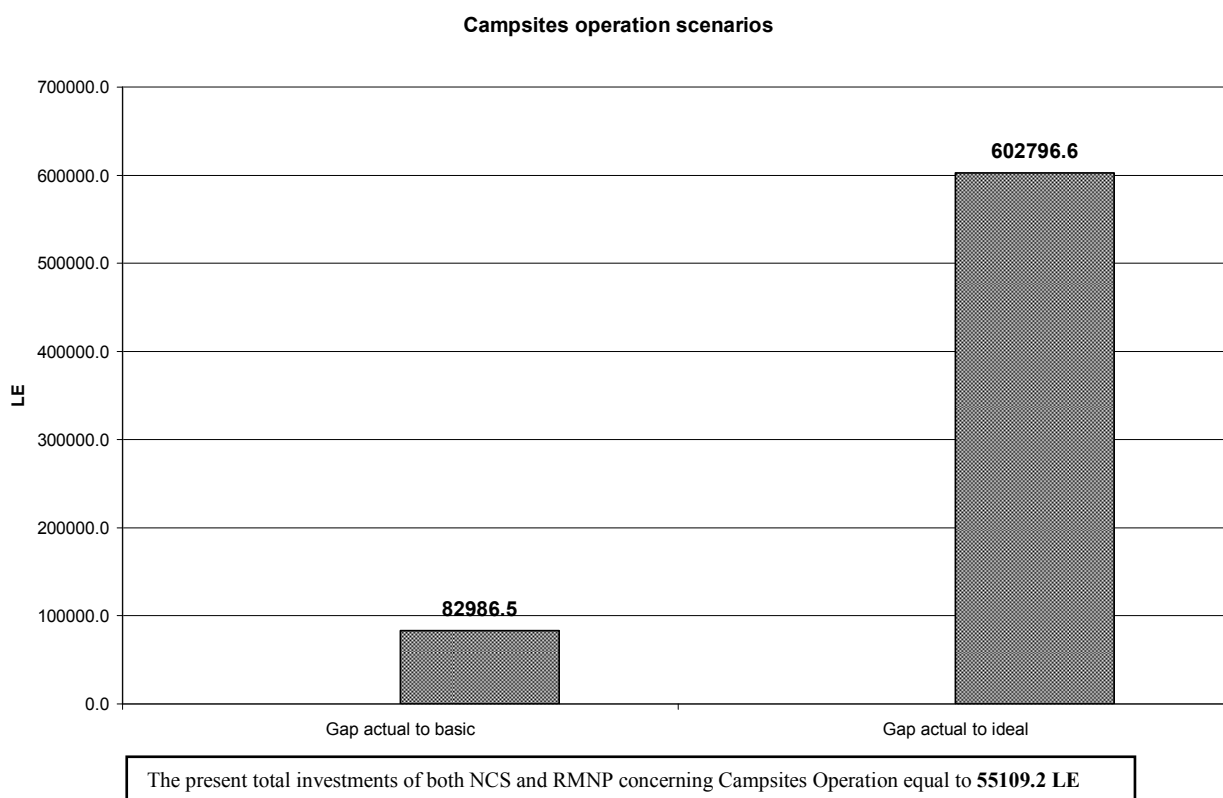
The park operates one campground including four camping sites in addition to small building for researchers. Ras Mohammed National Park works to ensure that these camping sites and their associated bathrooms, wind shelters, and grounds are kept safe, sanitary, and enjoyable. Due to the absence of drinking water in the four camp sites, the park provides to some extent water for every campsite.

The expected amount of money needed to reach the basic state for the campsite operation was estimated as LE 88,917.3 while the expected amount to reach the ideal state was LE 608,727.4. Finally, the park faced a shortfall of LE 82,986.5 including 0.1FTE for the basic state and a shortfall of LE 602,796.6 including 0.3 FTE for the ideal status.

| Table ( ) : Show RMNP financial assessment campsites operation |               |                |                 |                          |                          |
|----------------------------------------------------------------|---------------|----------------|-----------------|--------------------------|--------------------------|
| Resource protection budget                                     | Actual (LE)   | Basic (LE)     | Ideal (LE)      | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                       | 177.9         | 2667.5         | 18261.8         | 2489.6                   | 18083.9                  |
| Equipments & Furniture                                         | 830.3         | 12448.4        | 85221.8         | 11618.1                  | 84391.5                  |
| Infrastructure                                                 | 771.0         | 11559.2        | 79134.6         | 10788.2                  | 78363.6                  |
| Vehicle                                                        | 3024.7        | 45347.8        | 310451.0        | 42323.1                  | 307426.3                 |
| Operation                                                      | 474.5         | 7113.4         | 48698.2         | 6638.9                   | 48223.7                  |
| Maintenance                                                    | 652.4         | 9780.9         | 66960.0         | 9128.5                   | 66307.6                  |
| Special Services                                               | 0.0           | 0.0            | 0.0             | 0.0                      | 0.0                      |
| <b>Total</b>                                                   | <b>5930.8</b> | <b>88917.3</b> | <b>608727.4</b> | <b>82986.5</b>           | <b>602796.6</b>          |

Figure (-- a,b) Scenarios for campsites operation  
(a)





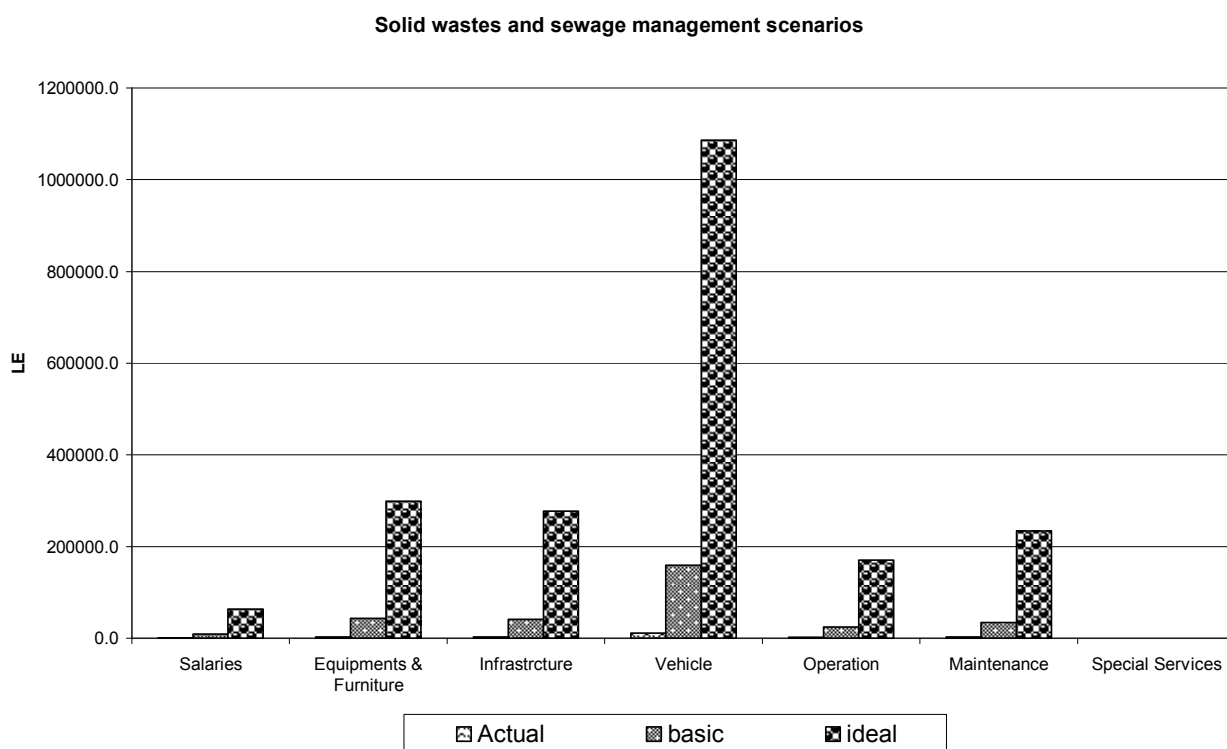
#### **C – 5. Solid wastes and sewage management (7%) (20757.9 LE):**

Solid wastes and sewage management expenditures provide daily sanitary services at the mainland of the park, including trash services, window washing, and dusting and vacuuming. On the beaches, the park supports ten toilets. Because all visitors are expected to pack out their trash, trash collection services are provided to the general public in the park.

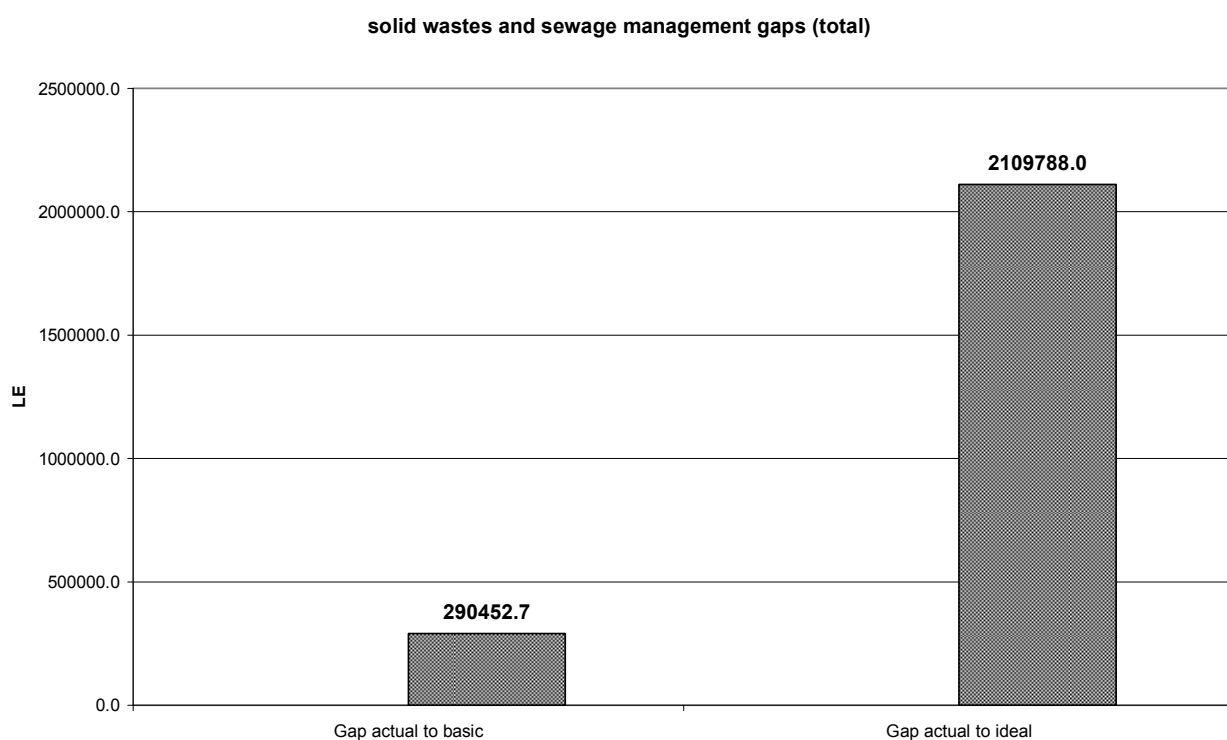
The expected amount of money needed to reach the basic state for the campsite operation was estimated as LE 311,210.6 while the expected amount to reach the ideal state was LE 2,130,545.9. Finally, the park faced a shortfall of LE 290,452.7 including 0.5FTE for the basic state and a shortfall of LE 2,109,788 including 1.0 FTE for the ideal status.

| <b>Table ( ) : Show RMNP financial assessment solid wastes and sewage management</b> |                    |                   |                   |                                 |                                 |
|--------------------------------------------------------------------------------------|--------------------|-------------------|-------------------|---------------------------------|---------------------------------|
| <b>Resource protection budget</b>                                                    | <b>Actual (LE)</b> | <b>Basic (LE)</b> | <b>Ideal (LE)</b> | <b>Gap actual to basic (LE)</b> | <b>Gap actual to ideal (LE)</b> |
| Salaries                                                                             | 622.7              | 9336.3            | 63916.4           | 8713.6                          | 63293.6                         |
| Equipments & Furniture                                                               | 2906.1             | 43569.5           | 298276.4          | 40663.4                         | 295370.3                        |
| Infrastructure                                                                       | 2698.5             | 40457.4           | 276971.0          | 37758.9                         | 274272.4                        |
| Vehicle                                                                              | 10586.5            | 158717.4          | 1086578.4         | 148130.9                        | 1075991.9                       |
| Operation                                                                            | 1660.6             | 24896.8           | 170443.7          | 23236.2                         | 168783.0                        |
| Maintenance                                                                          | 2283.4             | 34233.2           | 234360.0          | 31949.8                         | 232076.7                        |
| Special Services                                                                     | 0.0                | 0.0               | 0.0               | 0.0                             | 0.0                             |
| <b>Total</b>                                                                         | <b>20757.9</b>     | <b>311210.6</b>   | <b>2130545.9</b>  | <b>290452.7</b>                 | <b>2109788.0</b>                |

**Figure (-- a,b) Scenarios for solid wastes and sewage management  
(a)**



**(b)**



The present total investments of both NCS and RMNP concerning solid wastes and sewage management equal to **192882.2**

## D- Maintenance

Maintenance activities prolong the life of the park's assets through long-term rehabilitation and repair work, preventive maintenance, and equipment and infrastructure replacement. Maintenance expenditures accounted for 71408.9 LE or 7% of the park's total operating budget, during 2006/2207. In the absence of sufficient funding, maintenance is deferred year after year, creating backlogs and degrading the condition of facilities and infrastructure over time. To prevent these backlogs, maintenance activities require an additional 88398.6 LE annually to address the needs of park assets, primarily in boats, vehicles, and building maintenance. This funding is above and beyond the investment funds required to cover cyclic maintenance and major repairs. These funds are available on a central level (EEAA) and are not included in this analysis. Despite significant increases in the infrastructure happen in the last five years, maintenance has received few funding increases for supporting park investments. These investments include staff housing and visitor facilities.

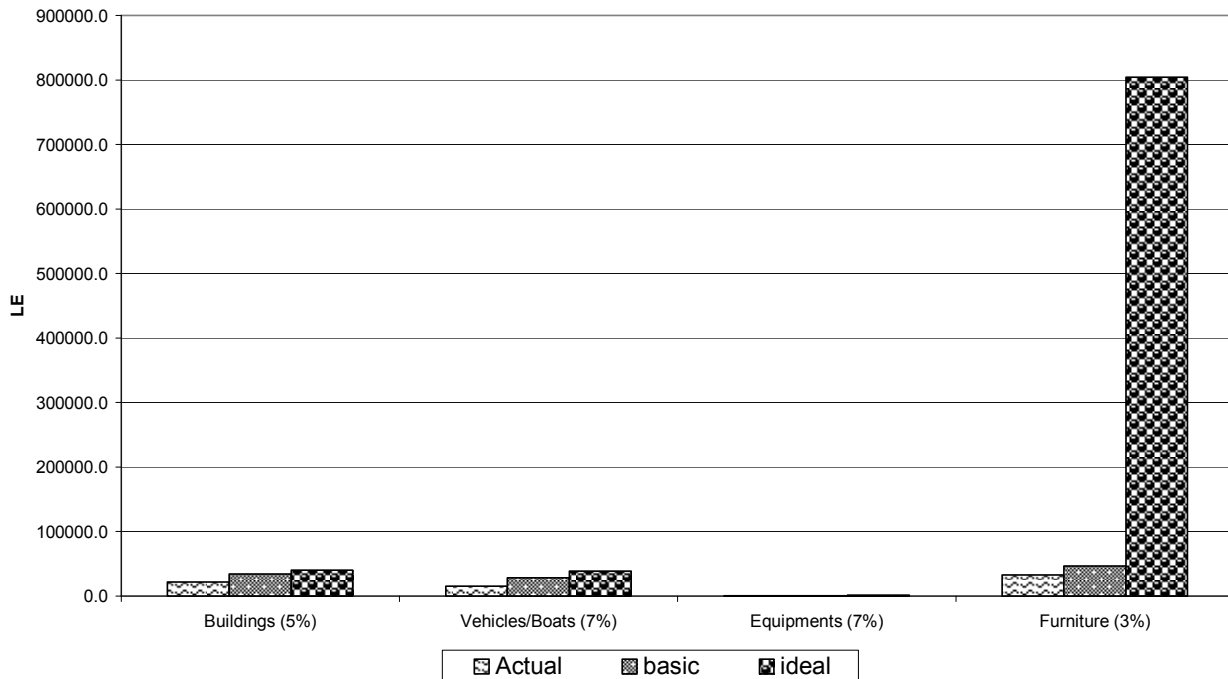
Regular maintenance activities ensure that each of the park's boats can perform its daily duties and respond to critical park needs. The park performs the routine service and repair of all boats. Additionally, each boat must receive periodic haul-out inspection and rehabilitation. The park requires an engineer to better complete preventative maintenance on the boats and manage logistics. The park's buoys and moorings require biannual overhaul, including chain replacement, repainting and resetting. The twenty-three kilometers of tracks inside RMNP require continual operational and regular maintenance support to ensure their safe condition. Components of each park building, particularly roofs and exteriors, must receive periodic maintenance and repairs. It was difficult to both the RMNP staff and BP National Team to identify exactly the financial assessment of the activities under this programme, so it agreed to do financial assessment for the whole administration programme.

The expected amount of money needed to reach the basic state for the maintenance programme was estimated as LE 109,231.0 while the expected amount to reach the ideal state was LE 883,986.4. Finally, the park faced a shortfall of LE 37,822.1 including 2.3 FTE for the basic state and a shortfall of LE 812,577.5 including 5.0 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment maintenance programme |                |                 |                 |                          |                          |
|-----------------------------------------------------------------|----------------|-----------------|-----------------|--------------------------|--------------------------|
| Resource protection budget                                      | Actual (LE)    | Basic (LE)      | Ideal (LE)      | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Buildings (5%)                                                  | 21831.3        | 34160.0         | 40005.0         | 12328.8                  | 18173.8                  |
| Vehicles/Boats (7%)                                             | 15792.7        | 28073.6         | 38474.8         | 12280.9                  | 22682.1                  |
| Equipments (7%)                                                 | 630.0          | 840.0           | 1050.0          | 210.0                    | 420.0                    |
| Furniture (3%)                                                  | 33155.0        | 46157.4         | 804456.6        | 13002.5                  | 771301.7                 |
| <b>Total</b>                                                    | <b>71408.9</b> | <b>109231.0</b> | <b>883986.4</b> | <b>37822.1</b>           | <b>812577.5</b>          |

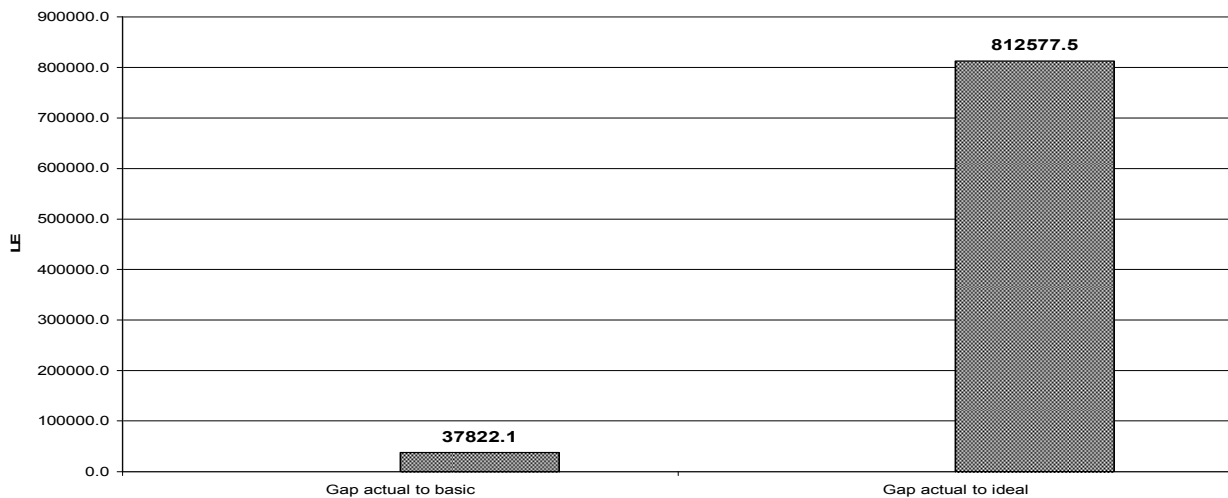
**Figure (-- a,b) Scenarios for maintenance programme**  
(a)

**Maintenance programme scenarios**



**(b)**

**Maintenance programme gaps (total)**



The present total investments of both NCS and RMNP concerning Maintenance Programme equal to **1776400.7 LE**

## **E- Administration**

Managing Ras Mohamed National Park requires the coordination of daily internal operations while simultaneously working with numerous external agencies and organizations. The administrative staff provides essential services that enable park employees to focus on their own functional duties. Administration programme' expenses accounted for approximately 28% of total park expenditures in 2006/2007, employing nearly 15.4 FTE at a cost of 474852.2 LE.

The highly dispersed nature of the park makes Communications a major component of park management, requiring fiscal resources in the administration programme. The park employs its own dispatch operations, handling 5 mobile radios and one base radios, all utilizing one microwave system to facilitate radio and wireless communication among park staff,

headquarter and emergency services. For the moment of this study, there is no park staff deal with relations regarding park programs, management and other issues. The park has recognized the deficiency in this area as one of its most critical needs. The addition of a dedicated Public Information Officer would allow for better contact with park stakeholders and communication with the general public.

Administration refers to those activities the park completes in the areas of recruitment, hiring, employee relations, procurement, contracting, property management, and clerical tasks such as mail. The park is deficient with regard to property management and requires additional personnel resources to meet its operational standards. It was difficult to both the RMNP staff and BP National Team to identify exactly the financial assessment of the activities under this programme, so it agreed to do financial assessment for the whole administration programme.

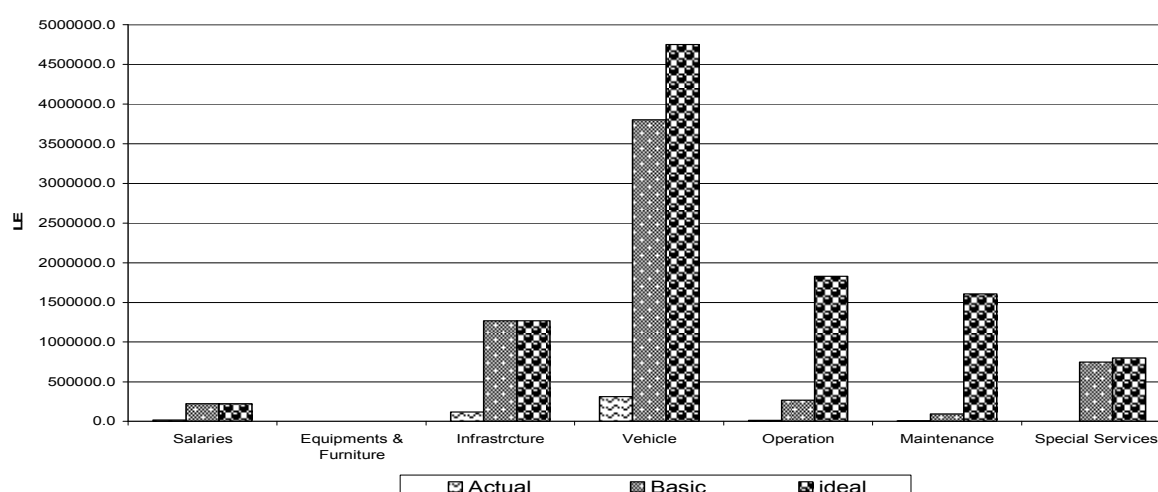
The expected amount of money needed to reach the basic state for the administration programme was estimated as LE 6,402,894.8 while the expected amount to reach the ideal state was LE 10,478,923.4. Finally, the park faced a shortfall of LE 5,928,042.6 including 9.2 FTE for the basic state and a shortfall of LE 10,004,071.2 including 20.2 FTE for the ideal status.

| Table ( ): Show RMNP financial assessment Administration Programme |                 |                  |                   |                          |                          |
|--------------------------------------------------------------------|-----------------|------------------|-------------------|--------------------------|--------------------------|
| Resource protection budget                                         | Actual (LE)     | Basic (LE)       | Ideal (LE)        | Gap actual to basic (LE) | Gap actual to ideal (LE) |
| Salaries                                                           | 19586.0         | 223200.0         | 223200.0          | 203614.0                 | 203614.0                 |
| Equipments & Furniture                                             | 0.0             | 0.0              | 0.0               | 0.0                      | 0.0                      |
| Infrastructure                                                     | 120324.8        | 1270628.0        | 1270628.0         | 1150303.2                | 1150303.2                |
| Vehicle                                                            | 312831.9        | 3800000.0        | 4750000.0         | 3487168.1                | 4437168.1                |
| Operation                                                          | 15780.2         | 266751.9         | 1826182.2         | 250971.7                 | 1810402.0                |
| Maintenance                                                        | 6329.2          | 92314.9          | 1608913.2         | 85985.7                  | 1602584.1                |
| Special Services                                                   | 0.0             | 750000.0         | 800000.0          | 750000.0                 | 800000.0                 |
| <b>Total</b>                                                       | <b>474852.2</b> | <b>6402894.8</b> | <b>10478923.4</b> | <b>5928042.6</b>         | <b>10004071.2</b>        |

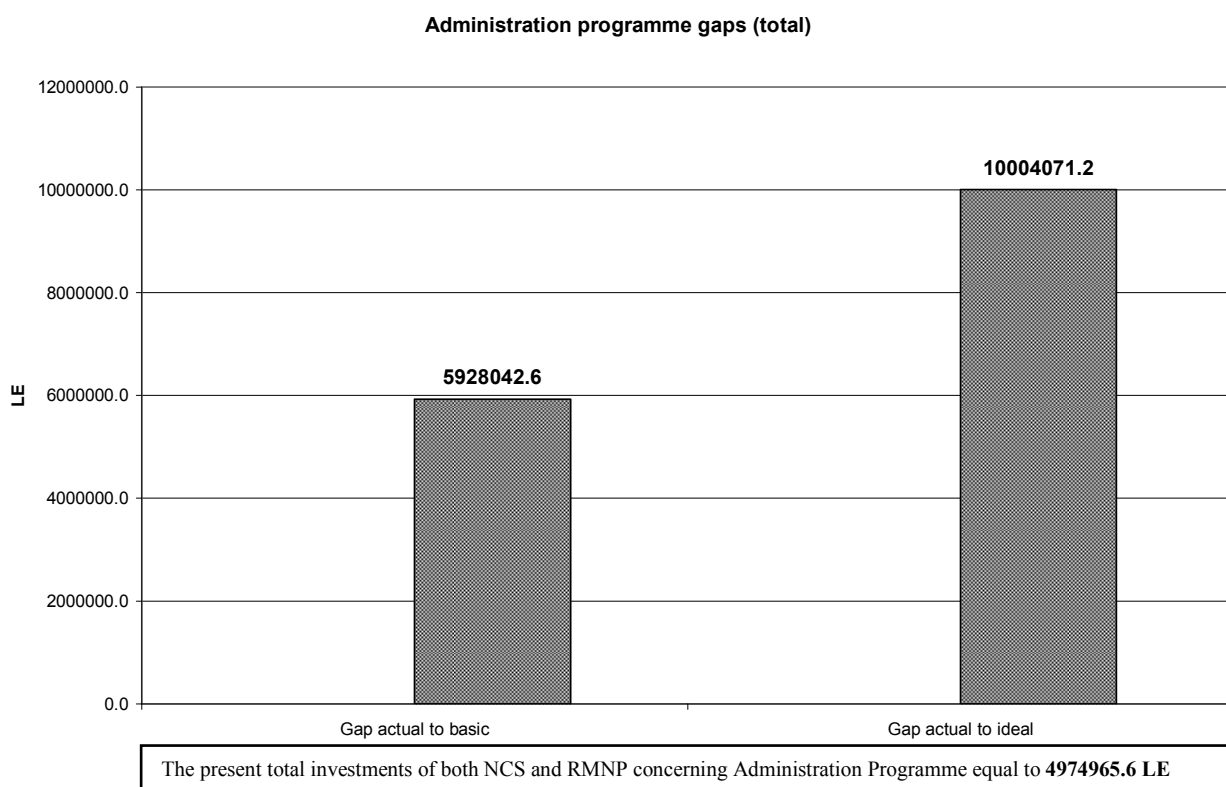
**Figure (-- a,b) Scenarios for Marine Protection**

(a)

**Administration Programme (scenarios)**



(b)



The next table shows activities that currently applied in the actual status and the actions that should be taken in the basic and ideal status for the administration programme in RMNP;

| Administration Programme                                 |  |
|----------------------------------------------------------|--|
| <b>Actions Actual scenario</b>                           |  |
| Ticket collection                                        |  |
| Training center management                               |  |
| Financial management                                     |  |
| Maintenance                                              |  |
| Administrative support                                   |  |
| Legal support                                            |  |
| Management Effectiveness Procedure                       |  |
| <b>Actions Basic scenario</b>                            |  |
| Training for Administrative, legal and maintenance staff |  |
| Ticket collection                                        |  |
| Training center management                               |  |
| Financial management                                     |  |
| Administrative support                                   |  |
| Maintenance                                              |  |
| Legal support                                            |  |
| Management plan                                          |  |
| <b>Actions Ideal scenario</b>                            |  |
| Ticket collection                                        |  |
| Training center management                               |  |
| Financial management                                     |  |
| Maintenance                                              |  |
| Legal support                                            |  |
| Management plan                                          |  |
| Administrative support                                   |  |

|                                                                   |
|-------------------------------------------------------------------|
| Management Effectiveness Procedure                                |
| Advanced training for administrative, legal and maintenance staff |
|                                                                   |

The following table serves as the operating statement for the park's five programmes and twenty three actions. From left to right, the first four columns indicate the required staff and funds needed in to meet the operational needs of each programme at each situation; basic and ideal status. The next two columns indicate the staff and funds that were actually available in 2006/2007, broken out by fund source. Finally, the last four columns compute the difference between what the park required to meet primary responsibilities in the basic (this amount is needed within the next five years)/ideal situations (this amount is needed within the next ten years) and what financial resources were actually provided.

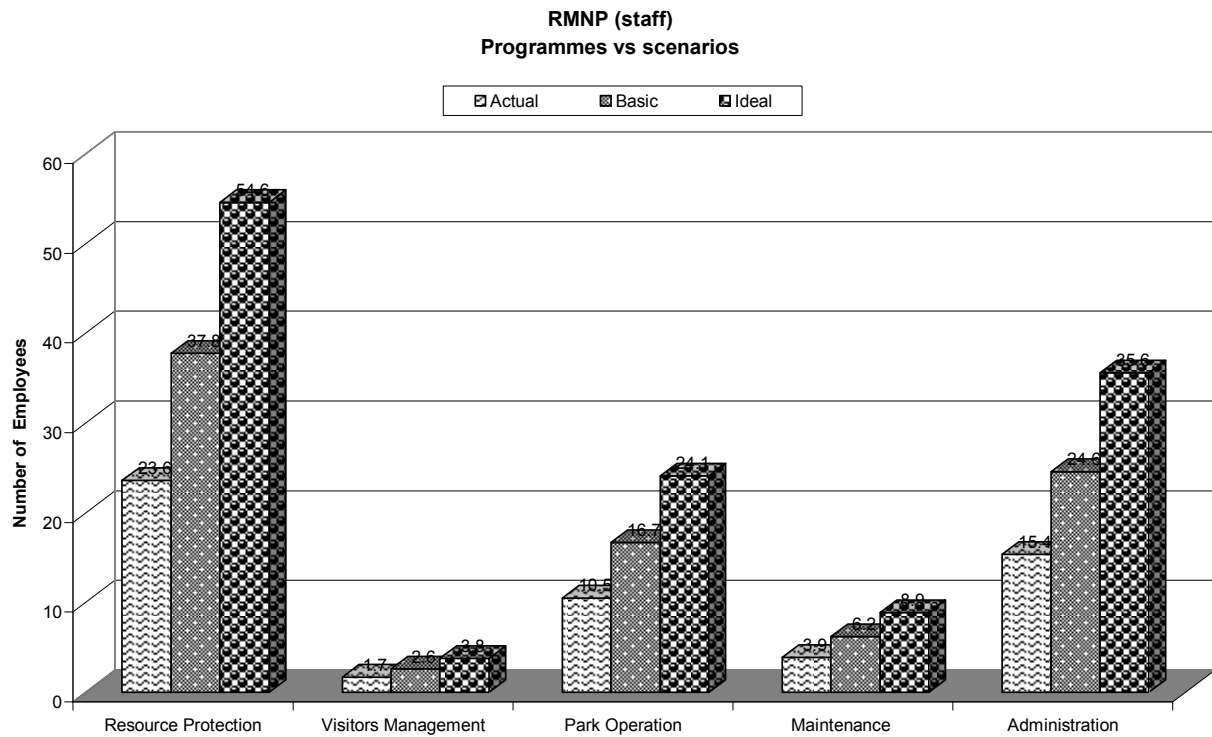
Resource Protection, which accounted for over 43% of expenses for the park in 2006/2007, has the largest shortfall, with a deficit of approximately LE 19498952.2 in the basic situation and LE 32931942.2 in the ideal situation. The administration Programme was the second most under-funded functional area in terms of LE, requiring a funding increase of nearly LE 10004071.2. This shortfall was driven by the need for additional communication, planning, etc. Maintenance deficits did not rank high compared to the other programmes. The lack of resources in these programmes contributed to the inability of the park to take advantage of a number of other partnership opportunities.

Note: the Summary Financial Needs deals directly with estimated deficits over the next five years in the basic situation and estimated deficits over the next ten years in the ideal situation.

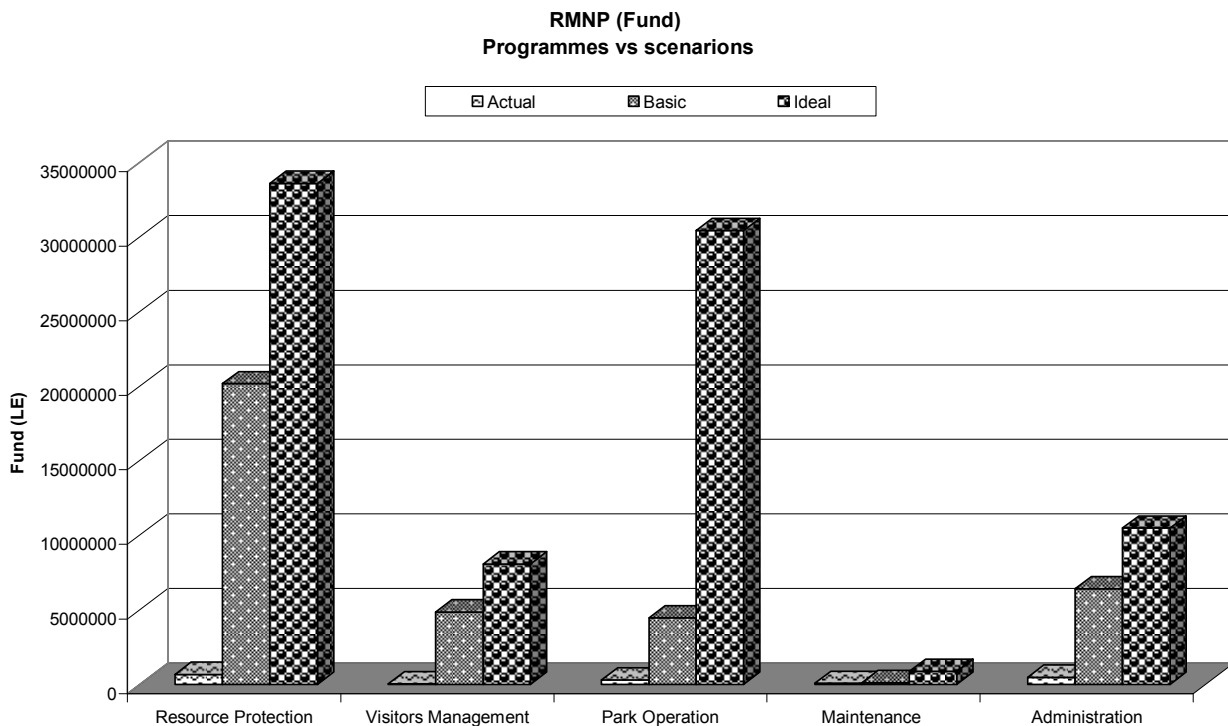
**Table ( ):** Financial Need Assessment of Ras Mohamed National Park's programmes and actions (total).

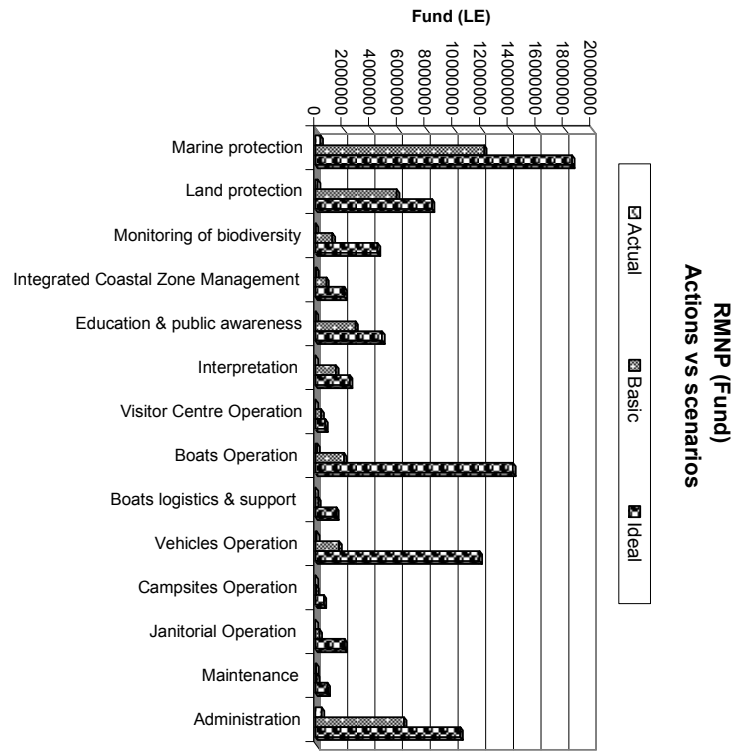
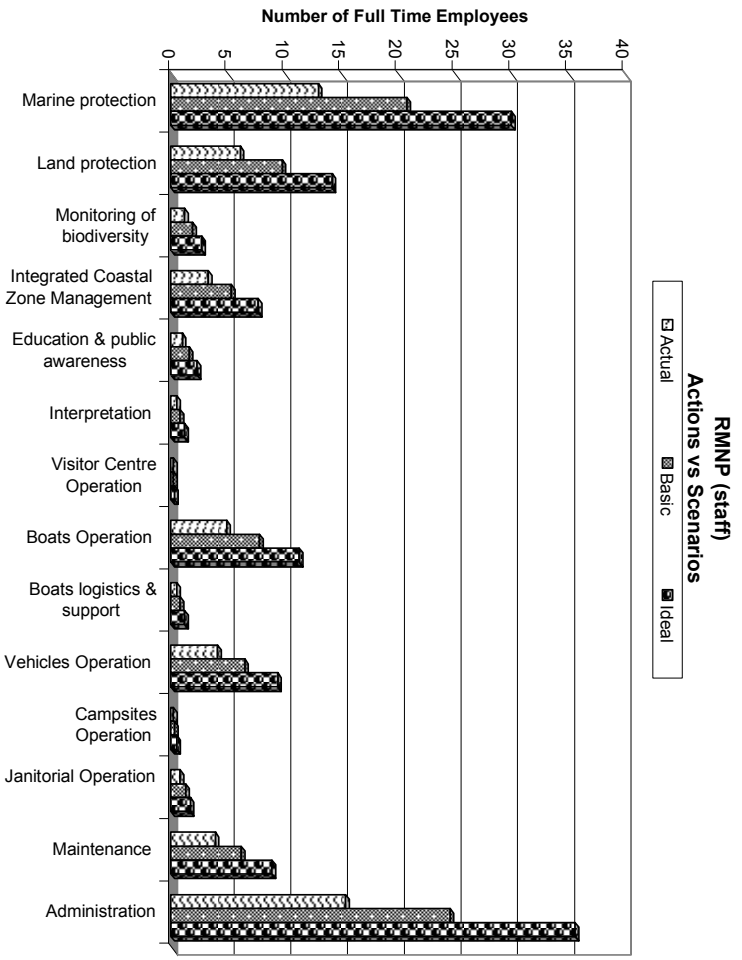
| Functional Areas and Programmes    | Required (total) |            |       |            | Actual (total) |            | Gaps (total) |            |       |            |
|------------------------------------|------------------|------------|-------|------------|----------------|------------|--------------|------------|-------|------------|
|                                    | Basic            |            | Ideal |            |                |            | Basic        |            | Ideal |            |
|                                    | FTE              | Funds (LE) | FTE   | Funds (LE) | FTE            | Funds (LE) | FTE          | Funds (LE) | FTE   | Funds (LE) |
| A-Resource Protection              |                  |            |       |            |                |            |              |            |       |            |
| Marine protection                  | 20.8             | 12213450.1 | 30    | 18559560.8 | 13             | 369116.4   | 7.8          | 11844333.7 | 17    | 18190444.4 |
| Land protection                    | 9.8              | 5905922.4  | 14.2  | 8435581.1  | 6.1            | 174491.4   | 3.7          | 5731431    | 8.1   | 8261089.7  |
| Monitoring of biodiversity         | 1.9              | 1240350.1  | 2.7   | 4495760.8  | 1.2            | 33556      | 0.7          | 1206794.1  | 1.5   | 4462204.8  |
| Integrated Coastal Zone Management | 5.3              | 810350.4   | 7.7   | 2112160.3  | 3.3            | 93957      | 2            | 716393.4   | 4.4   | 2018203.3  |
| Subtotal                           | 37.8             | 20170073   | 54.6  | 33603063   | 23.6           | 671120.8   | 14.2         | 19498952.2 | 31    | 32931942.2 |
| B- Visitors Management             |                  |            |       |            |                |            |              |            |       |            |
| Education and public awareness     | 1.6              | 2911519.3  | 2.3   | 4836410.8  | 1              | 28093.4    | 0.6          | 2883425.9  | 1.3   | 4808317.4  |
| Interpretation programme           | 0.8              | 1504285    | 1.2   | 2498812.2  | 0.5            | 14514.9    | 0.2          | 1489770.1  | 0.6   | 2484297.3  |
| Visitor Centre Operation           | 0.2              | 436727.8   | 0.3   | 725461.6   | 0.2            | 4214.1     | 0.1          | 432513.7   | 0.2   | 721247.5   |
| Subtotal                           | 2.6              | 4852532.1  | 3.8   | 8060684.6  | 1.7            | 46822.4    | 0.9          | 4805709.7  | 2.1   | 8013862.2  |
| C- Park Operation                  |                  |            |       |            |                |            |              |            |       |            |
| Boats Operation                    | 7.8              | 2089556.6  | 11.3  | 14305093.9 | 4.9            | 139374.6   | 2.9          | 1950182    | 6.4   | 14165719.3 |
| Boats logistics & support          | 0.8              | 222293.3   | 1.2   | 1521818.5  | 0.5            | 14827.1    | 0.3          | 207466.2   | 0.7   | 1506991.4  |
| Vehicles Operation                 | 6.5              | 1733887.4  | 9.4   | 11870184.3 | 4.1            | 115651.3   | 2.4          | 1618236.1  | 6.2   | 11754533   |
| Campsites Operation                | 0.3              | 88917.3    | 0.5   | 608727.4   | 0.2            | 5930.8     | 0.1          | 82986.5    | 0.3   | 602796.6   |
| Solid wastes and sewage management | 1.3              | 311210.5   | 1.7   | 2130545.9  | 0.8            | 20757.9    | 0.5          | 290452.6   | 1     | 2109788    |
| Subtotal                           | 16.7             | 4445865.1  | 24.1  | 30436370   | 10.5           | 296541.7   | 6.2          | 4149323.4  | 13.6  | 30139828.3 |
| D- Maintenance                     |                  |            |       |            |                |            |              |            |       |            |
| Subtotal                           | 6.2              | 109231     | 8.9   | 883986.4   | 3.9            | 71408.9    | 2.3          | 37822.1    | 5     | 812577.5   |
| E- Administration                  |                  |            |       |            |                |            |              |            |       |            |
| Subtotal                           | 24.6             | 6402894.8  | 35.6  | 10478923.4 | 15.4           | 474852.2   | 9.2          | 5928042.6  | 20.2  | 10004071.2 |
| Grand Total                        | 87.9             | 35980596   | 127   | 83463027   | 55             | 1560746    | 32.8         | 34419850   | 71.9  | 81902281.4 |

**Fig. (10):** Ras Mohamed N P staff – Programmes vs scenarios



**Fig. (8):** Ras Mohamed N P staff – Programmes vs scenarios





### 3. Financial strategy of Ras Mohamed National Park

The achievement of financial stability will remain a key priority for Ras Mohamed National Park. The key principles supporting the financial strategy of RMNP are shown below;

1. The Park authority will continue its policy of financial management to support its work. Examples of prudent financial management include: One-off resources will not be used to fund ongoing spending without a clear strategy for continuation funding.
2. Ras Mohamed National Park will take a medium and long term approaches managing financial reserves, ensuring sufficient (but not excessive) reserves to meet exceptional cost pressures and to mitigate financial risks.
3. All bids for service growth will be targeted to meet the priorities of RMNP Business Plan. Priority may be given to those bids which will provide further ongoing revenue savings for the park.
4. Both EEAA and NCS will seek to maximize income generating opportunities through grants, sponsorship and appropriate trading.
5. RMNP should resist funding additional posts on the establishment unless they will directly deliver the park's Business Plan and are supported by cost reductions elsewhere or additional ongoing income. Externally funded posts will be permitted provided they deliver the park's Business Plan and have a fully developed exit strategy.
6. Financial Manager of RMNP will prepare forecasts of financial spending for the park on a quarterly basis to improve budget management and control. These will become a prime tool for managing financial performance.
7. RMNP will seek to minimize duplication of effort between itself and other agencies operating in partnership with the National Parks of Egypt. This will ensure the park makes the most effective use of its own limited resources.
8. Building a diverse funding portfolio, going beyond governmental mechanisms and including multiple funding sources, is a key element of RMNP financial stability and sustainability.
9. The financial sustainability of RMNP requires that funds are managed and administered in a way that promotes cost efficiency and management effectiveness, allows for long-term planning and security, and provides incentives and opportunities for the park manager to generate and retain funds at the park area level.
10. Identifying and overcoming the broader market, price, policy and institutional distortions that acts as obstacles to the park funding and its financial sustainability.
11. Factoring finance into protected area planning and management processes, and ensuring that there is sufficient human capacity to use financial tools for improving the financial sustainability of RMNP.

#### 3.1. Portfolio of alternatives and priorities

Besides the Egyptian Environmental Affairs Agency (EEAA) there are a number of direct and indirect stakeholders and participants in the park's activities. The following table the governmental stakeholders presents on the left column while non governmental actors that present opportunities for in kind and financial support, are represented in the right column.

**Table (2) Ras Mohamed National Park Stakeholders matrix**

|                        | <b>High influence</b>                                                                                                                                                                                                                                              | <b>Low influence</b>                                                                                                                                                                                                                                                                                                 |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>High importance</b> | <ul style="list-style-type: none"> <li>▪ Egyptian Environmental Affairs Agency</li> <li>▪ South Sinai Governorate</li> <li>▪ Tourism Development Authority</li> <li>▪ Ministry of Interior</li> <li>▪ Ministry of Defense</li> <li>▪ Ministry of Health</li> </ul> | <ul style="list-style-type: none"> <li>▪ Sharm El-Sheikh City Council</li> <li>▪ Fisheries Authority</li> <li>▪ South Sinai Regional Development Programme</li> <li>▪ Local/National NGOs</li> <li>▪ International NGOs</li> <li>▪ National/International Universities</li> <li>▪ Hotels and Boats Owners</li> </ul> |
| <b>Low importance</b>  | <ul style="list-style-type: none"> <li>▪ National/International Donors</li> <li>▪ General Organization for Roads and Bridges</li> <li>▪ Media</li> </ul>                                                                                                           | <ul style="list-style-type: none"> <li>▪ Petroleum Companies</li> <li>▪ Tourism Operators</li> <li>▪ Tourist Guides</li> <li>▪ Fishermen Association</li> </ul>                                                                                                                                                      |

Entrance fees are the main source of income to RMNP. It is however crucial that those fees collected will be plowed back into the management of the park for additional staff, office building and equipment, boats and vehicles in order to provide for effective management. Ras Mohammed National Park is operating with very limited resources. It is recommended that the funds generated from the park fees of Ras Mohammed and deposited to the Environment Protection Fund should be plowed back for the operations of the park and the environmental protection.

In order to improve the financial stability of Ras Mohamed National Park, the Park Management Unit will give high priority to the development of low cost products aimed at increasing visitation and income to the Park. Income from these activities could then be used to finance more capital intensive activities according to its business and management plan elaborated by Park Management Unit. Initial activities could be financed from the Environmental Protection Fund of the EEAA as separate projects on the basis of the business plan. The visibility studies for these projects should clearly identify the expected payback period and propose a re-investment/activity development strategy.

RMNP will develop capital intensive products and activities to be financed through sponsorship, partnership or through concessions seeking to develop a “green” image could be encouraged to participate actively in the development of specific products in return for advertising rights. Park Management Unit could also consider product development through the issuance of time limited concessions to private investors willing to benefit directly from the tourism and recreational opportunities existing in the Park.

As a first step RMNP will introduce income generating activities requiring reduced capital investment thereby benefiting from higher income generation opportunities and then re-invest income to complete development of selected products. The park could opt to offer concessions for the development of certain capital intensive products and derive income from concession fees on an annual basis. Concessions would reduce the financial burden but would severely reduce the income generation potential of products proposed. RMNP must carefully consider which product types it wishes to introduce to the Park. These products must provide enjoyment, nature appreciation or an educational experience, excitement, adventure and escape. Products developed must be exposed through well designed advertising campaigns and regular media coverage. Table (3) details the principal tourism products proposed by the staff.

**Table (3):** Principal tourism products for Ras Mohamed National Park

### RM financial menu

|                                             |                                                      |                                                            |
|---------------------------------------------|------------------------------------------------------|------------------------------------------------------------|
| <u>Improve ticket collection:</u>           | <u>Create new concessions:</u>                       | <u>Special programs:</u>                                   |
| Local and Tiran sector                      | Cafeteria                                            | Corporate social responsibility program                    |
| Increase visitor fees                       | Gift shop)                                           | Partnerships with universities for monitoring and research |
| Increase antennas concession                | Corporate sponsorship programs                       | Diving centers monitoring support                          |
|                                             | Tourist donation program                             | Eco challenges                                             |
|                                             | Diving center                                        | Adopt a coral reef                                         |
| <u>Create new fees:</u>                     | Ecologde                                             | Tourist donations program                                  |
| Auction for visitation sites in high season | Underwater tunnel                                    | Coral and shore line garbage collection                    |
| Create camping fee                          | Beduin camp                                          | Online donations                                           |
| Tourist guides and fishermen                | Aquarium                                             |                                                            |
| EIA monitoring and supervision              | <u>Products:</u>                                     |                                                            |
| Bird watching fees                          | RM T- shirts, hats, etc                              |                                                            |
| Rent of laboratories and facilities         | Research information, maps, specialized publications |                                                            |
| Sport fishing (catch & release)             | Divers batch/ bracelet                               |                                                            |

An improved control of ticket sales and a computerized accounting system of revenue should be put in place. Invoicing should be based on the Coast Guard stamped crew lists. The accounting system should be computerized, such that invoicing and payment are integrated in the accounting system. Minimum safety controls such as bank check payments should be introduced. Annual independent (external) audits should be institutionalized and recommendations followed up. Spot checks that divers receive their tickets should be done randomly to show the divers and dive shops that there is controlled system in place. Also at the gate spot checks of number of persons in the bus should be done.

The Ras Mohammed National Park Brochure: This brochure is very attractive and educative and an important instrument in the environmental awareness of the tourists. It has been prepared in Arab and English and is not systematically distributed to all, which purchases the ticket. The tour operators' report that people quarrel to get the few copies handed out. Some recommendations would include: translation into other languages (Italian – French – Russian – etc). Tour operators can help the park to do the translation which could later on be checked and verified with a professional translator. If affordable, one should be given to each purchaser of a ticket.

| Ras Mohamed National Park barriers and opportunities                      |                                                                        |
|---------------------------------------------------------------------------|------------------------------------------------------------------------|
| Barriers                                                                  | Opportunities                                                          |
| Reinvestment and revenue retention                                        | Number of stakeholders directly benefiting from PA services and goods. |
| Concessions and fees not technically determined                           | International recognition of RMNP's biodiversity                       |
| RMNP subsidies tourism activities                                         | Future UNESCO Natural Heritage                                         |
| Low sense of service for the visitor fee                                  | EU project and others (GEF)                                            |
| Low collaboration from other governmental bodies                          | Existing NGO's and committed stakeholders                              |
| No management plan                                                        | World's top ten diving destination                                     |
| Perception of low presence from PA personal                               | Integrated management with other PA's                                  |
| No clear responsible for BP preparation and implementation                | RM recognition among stakeholders, and leadership to mobilize them.    |
| No mechanism in place to receive donations directly                       | Excellent human capital and infrastructure                             |
| Governmental bureaucracy; There is no NGO available for RM at the moment; | Creation of NGO for RM                                                 |

## 3.2. Product analysis

### 3.2.1. Market assessment

Tourism in Egypt occupies an important place in the national economy, accounting for over 11% of GDP, directly employing 1.2 million persons (157,941 persons in South Sinai) and, perhaps most importantly, supplying Egypt with a substantial portion of its foreign exchange needs (SSRDP, Programme Concept, 2001, p. 9.). South Sinai had 279 tourist establishments, 37,429 rooms, and a total of 4,449,000 guest nights. This gives South Sinai 7.1% of all establishments in Egypt, 15.7% of rooms, and 17.2% of guest nights. In addition, South Sinai accounted for 17.4% of workers in tourist establishments and 19.1% of total revenues. If only four and five star establishments are considered this shares would be considerably higher. For example, South Sinai's share of total rooms would rise to 21% and share of total guest nights to 23%. This reflects the more up market nature of tourism in South Sinai, where 77% of establishments are classified three, four, or five stars. (CAPMAS, Economic Census of 2000/2001, Statistics on the Elements of Activities of Hotels, Tourist Villages, and Pensions in the Public and Private Sectors, April 2003). The number of tourist arrivals to South Sinai in 2007, (based on figures from hotel registered tourists), was 2.14 million, of which 590,000 were Egyptian (SSRDP website).

Tourism in South Sinai is overwhelmingly sea resort tourism and largely mass (or package) tourism, which is very price sensitive. It is also overwhelmingly international in character. For example, in 2006/2007, 86% of tourists were foreign and only 14% Egyptian. Individual and small group tourists are a small segment of the market. South Sinai is a major and growing destination for European holidaymakers. South Sinai and the Egyptian Red Sea Coast is the closest destination to Europe with a climate warm enough for year round beach and sea holidays, and can offer over 90% days of sunshine. With hundreds of kilometers of coastline, world-famous coral reefs, an unspoiled and largely uninhabited desert hinterland, and good basic tourism infrastructure, South Sinai is very well positioned in the huge European market for sun and sea getaways.

With few exceptions, guests will be on organized package tours (in groups of 20-50 persons), which have been arranged from their countries of origin. Guests are most likely to be Italians, British, Germans, or Russians. Egyptians appear in large numbers only at local holiday peak times. The hoteliers' strategy is to offer guests everything they need (and everything they purchase) within the resort itself, with diving and other excursions arranged through the hotel. Half and full board accommodation is very common.

The aim of tourists remains to enjoy the sun and beaches and partake in sea-based activities. Scuba diving in South Sinai has an international reputation, and the rapid growth in South Sinai can be partly attributed to this diving reputation. A very small amount of cultural tourism (St. Katherine Monastery and Mount Sinai), desert safaris and other nature or ethnic adventures are being promoted, although in numbers terms, such non-resort tourism activities are insignificant.

The most important players in marketing South Sinai tourism are the large European tour airlines. These tour companies usually offer a wide range of resort holiday schemes to any number of countries, with pricing carefully pegged to the highly competitive nature of the market. The single most important factor in customer purchasing is, simply, the price. The industry standard today is US\$450-500 for 6-7 days in a beach resort at half board, including air travel and transfers. This pegged standard cannot be easily raised because of the stiff competition.

From an investment point of view, the most important player in South Sinai tourism is the Egyptian resort developers. The developers may be a private individual or an incorporated firm,

but with few exceptions will be Egyptian. Typically equity is invested in land purchased from the government, with as much development as possible financed through Egyptian currency denominated bank loans from Egyptian public or private banks. A few Gulf Arab investment companies operate as developers in South Sinai, but most resort establishments, whatever the size or category, rely on local capital.

A key player in South Sinai tourism is the resort management company. These are usually multinational management companies such as Hilton, Sheraton, Marriott, Sonesta, etc., at least for the three, four, and five star hotels. Typically an agreement is reached between the resort developer and the management company before site development begins, so that the design requirements of the management company can be incorporated, (though switching management companies after completion also occurs). The management pays the developer either a set annual fee or some formula based on occupancy and / or net revenues. The management company markets the rooms with tour operators and negotiates room rates for groups. Due to the normally excess room capacity in the resort sector, and because management companies are faced with considerable fixed operating costs, room rates must be quite competitive. A package arrangement of US\$20-25 (per room per night) is currently prevalent for off-peak five star establishments, whereas the walk-in individual rate may exceed US\$100. The hope is that guests will spend a lot on food, beverages, and special attractions and services offered inside the resort.

Another player in South Sinai tourism is the local travel agency or “local handler”. These are Egyptian companies that arrange transportation, transfers, and culture and nature side trips (including to Cairo and to Upper Egypt). It is said that these local handlers are gaining more importance, as they can sometimes negotiate better deals with individual hotels and resorts. It is not uncommon for the local handler to switch resorts after a package tour has been advertised. There are a number of other secondary private sector agents, including the airlines, the ground transport companies, local travel agents, car rentals, etc. To these must be added the dive centre operators, boat operators, and a host of taxi drivers, restaurant and café operators, tourist shop operators, etc. In addition, associational institutions are prominent in the tourist sector in South Sinai. The Egyptian Hotels Association has a very active branch in Sharm el Sheikh, with committees on environment, human resource development, etc. which meet on a regular basis. There is also an active South Sinai Investors Association and an Association of South Sinai Diving Centers.

Sharm el Sheikh has the only functioning international airport in the Governorate, and has reached the critical mass required to support a large range of secondary tourist activities and services. For example, almost all tourist agencies, car rental agencies, banks, and medical services catering to tourists are found in Sharm el Sheikh. Special recreational establishments (safari trips, water sports, amusement parks, horse riding centers, golf centers, sports and fitness centers, cinemas, etc.), are almost exclusively located in and around Sharm el Sheikh. Most diving centres are found in Sharm el Sheikh and almost all boat-based diving is based there. Another phenomenon has made Sharm el Sheikh unique in South Sinai is the large and rapidly growing number of private villas and “tourist housing” complexes. Foreigners, expatriates resident in Egypt, and Egyptians themselves are occupying apartments and small villas located within landscaped enclaves in many parts of Sharm el Sheikh. These enclaves developed by Egyptian entrepreneurs are either sold to Egyptians and foreigners or rented either directly or under timeshare arrangements. The existence and rapid growth of this phenomenon is proof that Sharm el Sheikh has reached the status of a large resort town, one which can offer enough leisure, sport, beach, and recreational amusements to attract individuals who are not part of the typical package tourist system.

Tourists visiting South Sinai can be broken down by nationality for the year 2006. Western Europeans dominate with 37 % of both total guests and total guest nights; Egyptians account for 23 % and East Europeans for 40 %. It is understood that Eastern European visitors, mainly

Russians, are becoming a much more important share of total guests in South Sinai (Ministry of Tourism, Tourism in Figures, 2006).

There is a reasonably even distribution throughout the year, with two identifiable peaks: one is in March-April and the other in August-September. Conversely, the lowest month is November followed by October.

With the exception of Ras Sudr and El Tur, all water sports and diving activities are located in the cities of the Gulf of Aqaba, with the highest concentration of water sports and diving centers in Sharm el Sheikh. Dahab is the only other location with a notable diving industry. Most hotels are affiliated with a water sports centre offering tourist activities such as snorkeling, glass bottom boat trips, water skiing, etc. Although figures are not available, most of the 3, 4 and 5 stars hotels are affiliated with a water sports centre, thus there may be more than 120 water sports centers excluding the independent centers. Among the range of activities offered, snorkeling trips are by far the most common choice.

Diving centers are mostly owned, managed and operated by non-Egyptians and generally cater to a non-Egyptian clientele. The majority of diving centers and sites are concentrated in Sharm el Sheikh. There are currently approximately 255 diving boats operating in the Sharm el Sheikh area, most of which operate under contract to dive and water sport operators. In 1999 the Governor issued a decree banning the licensing of new boats in Sharm el Sheikh. The diving industry is very aware of the importance of safety due to the risk of decompression sickness associated with diving. Since Sharm el Sheikh has the largest diving industry there are various support services in the area, including the Hyperbaric Medical Centre, the Sharm el Sheikh Search and Rescue (SSSAR) and the Sharm el Sheikh International Hospital within which sits another Hyperbaric Medical Centre.

It is estimated that the total capacity for South Sinai will be approximately 139,000 rooms in 797 projects, with 27% already operating, 34% under construction (or stalled), and 39% planned (sites allocated). Sharm el Sheikh itself will double in size to 43,600 rooms. If Nabq-Monteza is added, the Sharm area will have a total capacity of 65,000 rooms or 47% of the total in South Sinai (down from 73% at present) (South Sinai Environment and Development Profile 2005).

### **3.2.2. Tourism Survey**

The Egyptian Environmental Affairs Agency with coordination with the South Sinai governorate, through SEAM Programme in 2004 conducted a tourism survey to be used as one of the main components of South Sinai Environment and Development Profile which can be summarized as follow:

#### **3.2.2.1. Survey objectives and methodology**

The purpose of the tourism survey was to understand the views of tourists visiting South Sinai through a quick and simple quantitative survey. The questionnaire focused on the following key issues:

- Motivation for travel to South Sinai, and to identify the indirect and direct relationship to environment;
- Identification of any environmental priorities and / or issues in relation to their visit;
- Awareness of and visits undertaken to Protectorates;
- Willingness to pay for conservation of natural resources; and
- Willingness to return to South Sinai and recommend it as a destination.

In total 453 surveys were undertaken through tour operators and hotels, focusing primarily on international tourists visiting the Gulf of Aqaba, including Sharm el Sheikh, Dahab, Nuweiba and Taba.

The survey was brief and to be self-completed. The survey was made available in 6 languages and distributed by tour operators and hotels at the end of the stay, either at the airport or on checking out of the hotel. Key informant interviews were also carried out with tour operators and hotels to verify the trends indicated in the surveys. The focus of the survey was primarily in the Gulf of Aqaba. Sharm el Sheikh was the dominant tourism centre, with 83% of the surveys being conducted there. The surveys were also carried out through hotels in Dahab (9%), Nuweiba (4%) and Taba (4%). This distribution broadly reflects the proportion of international tourists visiting these destinations. The survey also focused primarily on those staying in 3 to 5 star accommodation (87%), which accounts for the major portion of the bed capacity available in South Sinai. In Dahab, the tourism survey also attempted to capture the views, to a limited extent, of budget and independent travelers.

The timing of the survey, in March and April 2004 (European winter/spring), is reflected in some of the responses provided i.e. climate being a main motivation for travel. Also, external factors such as the expansion and renovation of the airport had a bearing and bias of certain responses i.e. what people least enjoyed about their stay. The nature of the survey (self – completed) also has raised some issues about the accuracy of the data gathered, as there was no opportunity to clarify responses.

### **3.2.2.2. Survey results**

#### **3.2.2.2. 1. South Sinai as a Tourism Destination**

92% of those respondents surveyed stayed in South Sinai for less than two weeks, with the majority staying for one week (51%). 35% stayed for between 1-2 weeks. Only 8% of those surveyed stayed for more than 2 weeks. An overwhelming 89% of respondents stayed only in South Sinai, the majority of whom stayed in one location for the duration of the holiday (54%), with only 35% staying in multiple locations in South Sinai. Only 8% visited locations outside of South Sinai as part of their holiday.

#### **3.2.2.2. 2. Motivation for travel to South Sinai**

The reason for choosing South Sinai as a holiday destination was climate (82%) and beaches (44%). The other factors motivating tourists to choose South Sinai as a destination were snorkeling and water sports (33%); ‘good value for money’ (27%); short travel time (23%) and diving (22%). Issues relating to natural resources (beaches, coral reefs (snorkeling/diving)), are featured highly as motivations for choosing South Sinai as a tourism destination.

#### **3.2.2.2. 3. Excursions**

An overwhelming 78% of visitors had undertaken excursions, ranging from snorkeling and diving trips and desert safaris to Bedouin Dinners. The most popular excursions were boat trips, followed by visits to St. Katherine’s Monastery and the desert, followed by snorkeling and diving trips.

#### **3.2.2.2. 4. Most and Least Enjoyed About South Sinai**

The vast majority of visitors (73%) to all the South Sinai destinations felt that the aspect that they most enjoyed was the Red Sea and more specifically the coral reefs. This was closely followed by other aspects such as the climate / weather (58%), the beauty of the landscape (35%) of South Sinai and its’ beaches (31%). Other aspects that featured were accommodation, service and food (26%), water sports (17%), local culture (17%) and value for money (17%).

It is worth noting that 32% of tourists could not identify any issues as those that they “least enjoyed” during their stay in South Sinai. However, 32% of respondents said that the airport

was what they least enjoyed about their visit. (The airport in Sharm el Sheikh is currently undergoing expansion and renovation and it receives arrivals for both Sharm and Dahab. Once complete this is unlikely to be a major factor affecting the stay of visitors). Other factors highlighted were: accommodation and food (18%), waste and rubbish (15%), quality of service (14%), noise (9%), sea and beach pollution (8%), value for money (6%) and finally the overcrowding of dive sites (4%).

Visitors to Nuweiba and Dahab ranked waste including sea and beach pollution as the factor they least enjoyed about their stay. Waste was less of an issue in Sharm el Sheikh and Taba, where tourists were more concerned about the standard of accommodation and food.

#### **3.2.2.2. 5. Environmental issues**

The majority of visitors to South Sinai did not identify any environmental problems during their stay. Only 17% of respondents identified environmental problems, these included waste and rubbish disposal in tourist sites and around hotels, overcrowding at dive and snorkeling sites, noise levels from hotels, the frequency of washing hotel linens and toxic spraying of insects.

#### **3.2.2.2.6. Protected Areas and Natural Resource**

The majority of the tourists surveyed (97%) felt that the protection of natural resources in South Sinai is important for attracting tourists. 38% of those surveyed said they would be willing to pay for a small surcharge to ensure the continued conservation of the environment in South Sinai.

Of those surveyed, 59% had visited and were aware that they had visited a Protectorate area in South Sinai. The most popular protected areas visited were Ras Mohamed and St. Katherine. Other protected areas that were also visited included Abu Galum, Nabaq and Taba.

#### **3.2.2.2.7. Returns and Recommendations**

The vast majority of tourist surveyed, (95%), said they would recommend South Sinai as a holiday destination to others. 93% of those surveyed said they would consider coming back for another holiday.

In Dahab and Nuweiba, all of those surveyed said that they would both recommend South Sinai and consider returning. In Taba, only 6% of people interviewed said they would not recommend South Sinai as a destination to others, however, they would consider coming back themselves. 97% of visitors to Sharm el Sheikh said they would recommend South Sinai and 95% would consider returning. Those that would not return or recommend South Sinai (3%) highlighted the need to improve nightlife, food, service and the language skills of staff.

### **3.2.3. Connecting the park to the people**

Although tourism is most important to the future of South Sinai, its development has the potential to degrade the very things that tourists seek - pristine marine and desert ecosystems. One of the most significant challenges is the need to maintain tourist related activities within environmental carrying capacities; this applies to both marine and terrestrial recreation. This needs to be addressed through the development of sophisticated management strategies in order to ensure sustainability. Such strategies should include the development of capacity for better monitoring of reef health and access by tourist operators, more sophisticated assessments of carrying capacities, and the development of management tools to increase the carrying capacities of dive sites. This should encourage equal usage of sites, by moving visitors away from the most intensively visited sites towards under-used areas, and needs to be done in a way that is sensitive to the needs of operators, and is realistic about the possibility of implementation and enforcement. The development of new areas should not be undertaken lightly but opening new areas would allow closure of sites in need of recovery.

One major concern is the damage to desert flora from off-track driving. Tourist safaris, hiking and off road driving should be undertaken in managed areas if the delicate balance of the desert ecosystem is to be maintained. There is a need to regularly maintain tracks.

In ensuring the sustainability of recreational use of both marine and desert ecosystems, engaging with snorkeling, SCUBA, and desert safari guides in order to develop their environmental awareness, and to encourage control of their guests' behavior will be a key factor.

Efforts to provide a greater diversity of tourist attractions in RMNP, such as developing desert destinations and nature walks, plus encouraging eco-lodges and health tourism, should be promoted. Non crowded, clean, and equipped beaches with easy entry to the sea for swimming are a basic requirement of resort tourism.

### **3.3. Marketing plan**

Interviews were conducted with some staff of the protected areas in South Sinai Sector such as, Dr. Mohammed Salem, Mr. Isam Saadallah, Saied Abu Bakr, Yasser Awadallah, Hany Elshaer, Magdy Abdelhay, as well as Khaled Allam Harhash. Also, interviews were made with stakeholders such as tour operators, diving centre owners, Bedouin camps owners, as well as staff of the Sustainable Tourism in South Sinai Project under the Umbrella of the South Sinai Regional Planning Project. All ideas were collected together and relevant analysis and calculations were made using MS Excel to analyze and display results.

The Park products must be targeted to meet existing and evolving market demand. This requires identification of the types of tourists who are potentially interested in visiting the park and an analysis of their specific interests, time and money budgets and level of physical ability or fitness. Markets change and so there will be a need to regularly monitor visitation trends to adapt and develop products to meet market demand. Further surveys are required to map the full range of natural, cultural and historical attractions/sites in the park which have the potential for inclusion in the business planning process.

The PAMU is unlikely to have the financial or technical capacity alone to develop the Ras Mohamed National Park business plan to its full potential or to provide the prolonged support that local communities will require to participate effectively in the process. Building partnerships with ethically sound private sector companies and with local Non-Governmental Organizations (NGOs) will be necessary to meet this shortfall. Formalized private sector partnerships will be essential for marketing the park's products and for providing the necessary resources to expand and diversify the park programmes.

#### **3.3.1. Market options for Ras Mohammed National Park**

##### **3.3.1.1. Improved Ticket Collection**

- Collect fees from the visitors of the Local and Tiran Sector, which will guarantee more equal distribution of diving pressure on the different sectors as it will eliminate the preference factor of unpaid sites over the paid ones. This is also justifiable by the fact that NCS pay to conserve this area more than it pays for the conservation of Ras Mohammed Peninsula.

- If implemented a number of 900,000 visitors annually will pay to be able to access the Local and Tiran Sector, which will roughly generate USD 4.5 million per year if ever visitor pays the existing fees (USD \$5) to visit the area.
- To implement this plan the NCS will need to hire 4 ticket collectors, 2 accountants, one boat assigned for checking if boats have paid the tickets, one vehicle assigned for ticket collection and to coordinate with diving centres.

### **3.3.1.2 Increase the existing visitor's fees**

- It is not logical that fees of Ras Mohammed NP have stayed the same since 1991 when the fee of USD \$5 was first introduced. Given the rates of inflation, and the high cost of managing the area and carrying out tourism impacts minimization techniques such as mooring, patrolling and other, the park definitely need to increase its fees.
- Increase of visitor entrance fees may improve the quality of visitors into the area as people generally would value something they would pay for.
- Increased visitor fees of Ras Mohammed NP from USD \$5 to USD \$7 will roughly generate an additional USD \$5.8 million annually.

### **3.3.1.3 Increase Cell Phone Antennas Concessions**

- Currently the two cell phone operators pay only USD \$3,500 to install their antennas inside Ras Mohammed NP. The cost of concession was based solely on the actual area visited to install the site, which is normally very small area. The logical framework would be to estimate the concession based on the full coverage area of the antenna as they do in the Galapagos NP, or at least make a special formula that takes into account the benefits these cell phone companies gain from installing this site using the visitor number of the area as means of estimation.
- It is not logical to pay that much while cell phone companies have to pay more than USD \$7000 per year in some major streets in Cairo. If implemented, the plan will double the EEAA's revenues from the installation of cell phone sites in Ras Mohammed NP, and the revenue from this concession for the three cell phone sites of the three cell phone operators could be increased by about USD 10,500 per annum.
- In other countries such as in Ecuador, cell phone companies gave all the staff of the Galapagos Island free mobile communication. If such deal is implemented here, or at least if every cell phone company gave 5 open lines for the RMNP, the park will solve the problem of communication altogether and will also achieve a lot of savings on its huge telephone bill.

## **3.3.2. Create New Fees:**

### **3.3.2.1 Auction for visitation sites in high season:**

- Monitoring programs of the NCS show clearly that the ecological carrying capacities of some of the major diving sites have been exceeded. Creation of higher fees to be able to dive in these areas would be a way to conserve these areas as well as to increase RMNP revenues.
- It is estimated that a 50% of 56,000 visitors who are currently the visitors of the pristine sites would be prepared to pay an additional USD \$20 to be able to dive in these pristine

areas in high season during the four high season months of visiting the park. If implemented this can easily generate USD \$182,500 per year.

#### **3.3.2.2 Create camping fees**

- Currently visitors do not pay to camp in Ras Mohammed other than the normal fee.
- If RMNP start to collect fees for camping, the number of 7300 camping visitors would generate over USD \$146,000 per year if the park would be able to collect only USD \$20 per night per camping person.
- The cost of additional infrastructure, which is 10 more shelters, 4 more toilets with shower facilities, cost of fresh water for the toilets, and 4 camping facilities maintenance and cleaning staff. The cost was roughly added up to USD 33,800 which will sustain the area for 5 years which means that the cost per year would be USD 6,760.

#### **3.3.2.3 Bird watching fees**

- Ras Mohammed is a famous international bird area station (bottle neck). One possible alternative for the increase of RMNP revenue and in the mean time minimize tourism impacts on migratory birds through using some of the money generated from the introduction of a bird watching fee to create bird watching hides.
- It is estimated that about 3 % of the visitors of Ras Mohammed would be interested in doing some bird watching activities in Ras Mohammed if the facilities are available.
- If a special fee was introduced for bird watching in Ras Mohammed of only USD \$20, the park revenues will be increased by an estimated 10,000 LE per year.
- The cost of establishing 2 hides, with 16 binoculars is roughly USD 4,600, which means annual cost will be around USD 1,000.

#### **3.3.2.4 Rent of laboratories facilities**

- Laboratories facilities could be rented particularly to the relatively big number of research students from European Universities. Such fee could generate up to USD 2,000 a year if implemented. (Lab use fee per day (USD 100) for 20 days per year).

### **3.3.3. Create New Concessions**

#### **3.3.3.1 Cafeteria**

- The Ras Mohammed visitor centre was established with a sea view huge cafeteria that overlooks the Ras Mohammed Peninsula, the majestic island of Tiran and the Sharm El-Sheikh area. The huge cafeteria was meant to be given through a concession mechanism to some investor. For some reason this happened for a very short while and stopped.
- The area of the cafeteria could be rented to one of the big hotels in the area who will use it to dine some of their terrestrial visitors for at least USD \$3,000 per month according to the current rates of Sharm El-Sheikh standards, which means that such plan could generate a USD \$36,000 of increased RMNP revenues per year if implemented. Such additional

resources can be mainly used to improve the quality of the visitor centre that is closed currently until its standards are raised.

#### **3.3.3.2 Gift shops**

- The Ras Mohammed visitor centre was established with four embedded shops in place, non of these shops are currently operating despite their great economic potential as they can be used as gift shops for the visitors of the internationally renowned Ras Mohammed NP.
- The rent of everyone of these shops can be agreed upon according to the Sharm El-Sheikh standards with at least USD \$1,000 a month which means an additional USD 56,000 per month as increased RMNP revenues which could also be used to improve and maintain the currently closed visitor centre.

#### **3.3.3.3 Diving centre**

- The area of the Ras Mohammed Accommodation, overlooking the exclusive area of Marsa Brika, was equipped by a huge diving centre. The centre that is currently used to serve the diving needs of the RMNP staff only can share in rising the revenues of the park significantly meanwhile still serve the park staff diving needs if rented to one of the major diving centres in the area of Sharm El-Sheikh.
- By implementing such option, the diving centre could be rented for at least USD \$2,000 per month which means additional RMNP revenues of 24,000 per annum.

#### **3.3.3.5 Bedouin camp**

- There is currently a temporary Bedouin camp in Marsa Beraika which basically serves the needs of the scientific research students who visit Ras Mohammed.
- Such camp could be rented through concession for USD 2,000 per month which means that it could generate an additional USD \$24,000 per year in addition to the camping fees paid by those who use the camp who were estimated to be 7500 visitors per year.

#### **3.3.3.6 Underwater observatory and aquarium**

- The establishment of an underwater observatory and aquarium was proposed by the NCS and there is an Italian Project overlooking the possibility of establishing such project near the current visitor centre area of Ras Mohammed NP.
- The initial cost of establishing such project was huge, as high as 42 million Euros.
- It is estimated that at least one forth of the visitors of Ras Mohammed will visit an underwater observatory if one was established.
- Fees for visiting the observatory was calculated as 25 \$Euros per person for 2008/2009, with a 5 Euros increase every two years to cope with inflation rates.
- If implemented, it is estimated that in a period of 10 years the underwater observatory could generate 51.5 million Euros till the year 2017, which means that the net profit is going to almost 10 million Euros which means 1 million Euros per year which means that this could be the revenue generated from the establishment of this underwater observatory.

### 3.3.4. Preliminary market options for Ras Mohammed National Park

**Table (4):** Net Annual Profit of Investment Opportunities Each under Sub category

| Investment Opportunities                        | Annual Revenue in USD \$ | Annual Cost in USD \$ | Net Annual Profit in USD \$ |
|-------------------------------------------------|--------------------------|-----------------------|-----------------------------|
| <b>1.0 Improved Ticket Collection</b>           |                          |                       |                             |
| 1.1 Local and Tiran Sector                      | 6,300,000                | 212,000               | 6,088,000                   |
| 1.2 Increase visitor's fees                     | 580,000                  | 0                     | 580,000                     |
| 1.3 Increase antennas concession                | 10,500                   | 0                     | 10,500                      |
| <b>2.0 Create New Fees:</b>                     |                          |                       |                             |
| 2.1 Auction for visitation sites in high season | 182,500                  | 0                     | 10,500                      |
| 2.2 Create camping fees                         | 146,000                  | 6,760                 | 139,240                     |
| 2.3 Bird watching fees                          | 10,000                   | 1,000                 | 9,000                       |
| 2.4 Rent of laboratories and facilities         | 2,000                    | 0                     | 2,000                       |
| <b>3.0 Create New Concessions:</b>              |                          |                       |                             |
| 3.1 Cafeteria                                   | 36,000                   | 0                     | 36,000                      |
| 3.2 Gift shops                                  | 56,000                   | 0                     | 56,000                      |
| 3.3 Diving centre                               | 42,000                   | 0                     | 42,000                      |
| 3.4 Bedouin camp                                | 24,000                   | 0                     | 24,000                      |
| 3.5 Underwater observatory and aquarium:        | 6,180,000                | 5,040,000             | 1,140,000                   |
| <b>Total</b>                                    |                          |                       | <b>8,302,240</b>            |

**Table (5):** Prioritized Investment Opportunities According to Net Annual Income

| Priority Number | Investment Opportunities                    | Net Annual Profit in USD |
|-----------------|---------------------------------------------|--------------------------|
| 1               | Local and Tiran Sector                      | 6,088,000                |
| 2               | Underwater observatory and aquarium         | 1,140,000                |
| 3               | Increase visitor's fees                     | 580,000                  |
| 4               | Create camping fees                         | 139,240                  |
| 6               | Gift shops                                  | 56,000                   |
| 8               | Diving centre                               | 42,000                   |
| 9               | Cafeteria                                   | 36,000                   |
| 10              | Bedouin camp                                | 24,000                   |
| 11              | Increase antennas concession                | 10,500                   |
| 12              | Auction for visitation sites in high season | 10,500                   |
| 13              | Bird watching fees                          | 9,000                    |
| 14              | Rent of laboratories and facilities         | 2,000                    |

## 4. Business plan implementation

The business plan team has developed different implementation options to the Business plan of Ras Mohamed National Park and the implementation of these options will proceed through three levels (EEAA – NCS – RMNP). These options are elaborated and presented below as follow:

### A. RMNP level:

| Activities                                                   | Implementation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Collect fees from the visitors of the Local and Tiran Sector | The monitoring unit in the park should carry out full comprehensive, scientific study on the diving sites within the two sectors. This study should clearly identify the threats, the quantitative and qualitative human pressure on marine life; in addition it should also contain long term indicators for the monitoring of the quality of coral reefs in the different diving sites.                                                                                                                                                                                                                                                                                                      |
|                                                              | RMNP will conduct surveys by distributing questionnaire for all stakeholders in the region asking them the best mechanisms to apply the process of collection of the fees and also, the range of the fees in term of money.                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Increasing the existing visitor entrance fees                | The park authority should conduct survey by distributing questionnaire for visitors to both RMNP and Sharm El-Sheikh city asking them about their opinions about the park infrastructures and services and how to improve them, other infrastructures and services they would like to see in the park and their willing to pay for the existing park service and for other future services.                                                                                                                                                                                                                                                                                                    |
| Cell phone antennas concessions                              | Prepare guidelines for the standards of installing cell phone antennas within the park.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Create new fees for RMNP                                     | Carry out carrying capacity study for the famous diving sites within the park (Shark reefs – Yolanda reefs – etc) that allow the park staff to determine the sensitivity of each diving site and accordingly the new proposed fees for using these diving sites in the higher tourism seasons.                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                              | Prepare a list of the equipments needed for the laboratories that allow a high quality services provided for the universities that want to use the labs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Create new concessions for RMNP                              | PAMU should write a proposal for both the Nature Conservation Sector and Egyptian Environmental Affairs Agency on the mechanisms and prices for renting the existing cafeteria, gift shops in the visitor centre and the diving centre.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                              | Preparing guidelines and regulations for the design of the Bedouin camp buildings and facilities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Other activities                                             | <p>The park also, will seek for design products for tourists and visitors. These products must be subjected to rigorous analysis and internal discussion before any investment or implementation can be considered. The analysis should included but not be limited to:</p> <ul style="list-style-type: none"> <li>○ Does the product fit the conservation objectives of the National Park?</li> <li>○ Will the product disrupt sensitive areas or fragment the ecological integrity of the National Park?</li> <li>○ Will the product negatively influence the image the Park is attempting to develop?</li> <li>○ Will the product lead to behavioral changes in protected Fauna?</li> </ul> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>○ Does the product contribute positively, negatively or is it neutral to Park Management objectives?</li> <li>○ What will be the cumulative consequences of the product when considered together with other products or activities already accepted by RMNP Management?</li> <li>○ If product monitoring procedures identify unacceptable changes due to product, can the activity be terminated, financial outlays absorbed, and impacts reversed?</li> </ul> |
|  | Conduct annual visitor profile surveys in the region and use this information together with regional visitation statistics and the park's visitor feedback data to monitor changes in market demand.                                                                                                                                                                                                                                                                                                  |
|  | Seek partnership opportunities with conservation NGOs to support ecotourism development linked to wildlife conservation and research initiatives in and around Ras Mohamed National Park.                                                                                                                                                                                                                                                                                                             |
|  | Use discounting arrangements with reputable private sector companies in Sharm El-Sheikh and elsewhere in the region as an incentive to include and market the park's products in their tour programmes.                                                                                                                                                                                                                                                                                               |
|  | Promote the park products to the growing resident foreigner market in Sharm El-Sheikh through posters in restaurants, local tourism guide books and expatriate public notice boards and newsletters.                                                                                                                                                                                                                                                                                                  |
|  | Use periodic random surveys of tourists in South Sinai to monitor changing visitor profiles and market demand to inform ongoing product development planning and marketing strategies.                                                                                                                                                                                                                                                                                                                |

#### **B. NCS level:**

| <b>Activities</b>                                            | <b>Implementation</b>                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Collect fees from the visitors of the Local and Tiran Sector | Nature Conservation Sector prepare proposal for mechanisms, limitations, mitigation measures and prices for the collection of fees from Local and Tiran sectors.                                                                                                                                                                                                                |
| Increasing the existing visitor entrance fees                | NCS in cooperation with both Tourism Development Authority and South Sinai Governorate carry out a comparative study of prices within the region during the last 15 years. This study will help the PAMU to do projection of the existing entrance fees and how it should be according to the increase of prices in the market.                                                 |
| Cell phone antennas concessions                              | NCS negotiate through several meetings with the three operating cell phone companies in Egypt in order to estimate the concession based on the full coverage area of the antenna or at least make a special formula that takes into account the benefits these cell phone companies gain from installing this site using the visitor number of the area as means of estimation. |
| Create new fees for RMNP                                     | Preparing guidelines and regulations for the design of the infrastructures needed within the park (including camp sites area and bird watching sites).                                                                                                                                                                                                                          |
| Create new concessions for RMNP                              | NCS will seek for donations for the establishment of an underwater observatory and aquarium by using the study that already prepared by the NCS and the Italian Project.                                                                                                                                                                                                        |
| Other activities                                             | Engage suitable NGO partners (especially in South Sinai) to provide long term capacity building and support to the park's staff on management, service provision, impact monitoring, revenue management and benefit sharing.                                                                                                                                                    |
|                                                              | Develop mutually beneficial marketing relationships with suitable local tour operators, lodges and hotels by promoting their services and programmes in the park's Visitor Center in return for                                                                                                                                                                                 |

|  |                                                                                                                                                                                                                                                                                                              |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | agreements to promote the park products through their establishments.                                                                                                                                                                                                                                        |
|  | Review pricing for products and services annually in consultation with communities, local private sector stakeholders and based on Visitor Feedback questionnaires, the pricing trends of similar products offered elsewhere in the region, increases in operational costs and “willingness to pay” surveys. |

### C. EEAA level:

| Activities                                                   | Implementation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Collect fees from the visitors of the Local and Tiran Sector | Egyptian Environmental Affairs Agency coordinate with other related organizations to set mechanisms and prices for the collection of fees from Local and Tiran sectors, and finally issue a decree.<br>Offers the necessary infrastructures, equipments and staff that will manage and implement the collection of the fees.                                                                                                                                                                                                                                            |
| Increasing the existing visitor entrance fees                | Take the necessary procedures for issue a decree about the new entrance fees.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Cell phone antennas concessions                              | EEAA sign protocols with the three operating cell phone companies in Egypt dealing with concession of the cell phone antennas inside the Egyptian protected areas network.                                                                                                                                                                                                                                                                                                                                                                                              |
| Create new fees for RMNP                                     | Allocate the necessary fund for developing the services within the park.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Create new concessions for RMNP                              | EEAA provide the financial support for the inland buildings of both the underwater observatory and aquarium.                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Other activities                                             | Develop partnership agreements with NGOs that clearly outline roles, responsibilities, guidelines and regulations associated with participating in the park’s marketing and which are in accordance with the EEAA strategy.<br>Maintain regularly updated information in international travel guides as a key marketing tool – for example “Horus magazine” in Egypt Air.<br>Develop policy on the use of income generated by the park products to contribute to park management and conservation objectives and for financially sustaining the operations of the park. |

This business plan is envisaged as an integral component of the RMNP management/ operational plan. Thus, it is intimately linked to the activities and budgets and is not presented as an independent or stand-alone document. It then sets out the strategy for meeting the financial needs of the park for implementing the management/ operational plan. The RMNP business plan should be subject to the same periodic review and revision process as the management/ operational plan of the park for it to remain relevant and consistent with the management and financial needs. It should also be built into the annual budgeting and financial reporting process. Such a linkage would make it possible to clearly show at the beginning of the year how much of the budget is to be raised from which source, including the new and non-traditional sources recommended by this plan. At the same time, the success of implementing the financing measures recommended in the business plan should be reported at the end of the year, through the financial report that is an essential part of the annual progress report of the national park. This integration with the annual budgeting and reporting process will enable an ongoing review of performance, including identification of constraints, on the basis of which it would be possible to make adaptive changes to the manner in which each of the financing mechanism is implemented. Ideally, the financing plan should be included as a chapter within the management plan/ operational plan of the national park to enable the above-mentioned integration to take place.

## 5. References

Barry Spergel (2001) – Raising Revenues for Protected Areas, A Menu of Options – World Wildlife Fund, Washington DC, USA.

Buckley, R., 2002 Surf Tourism and Sustainable Development in Indo-Pacific Islands. II. Recreational Capacity Management and Case Study. Journal of Sustainable Tourism Volume: 10 Number: 5 : 425 – 442

CAPMAS, Economic Census of 2000/2001, Statistics on the Elements of Activities of Hotels, Tourist Villages, and Pensions in the Public and Private Sectors, April 2003.

Davis D. and C. Tisdell, 1995 Recreational scuba-diving and carrying capacity in marine protected areas. Ocean & Coastal Management. 26(1): 19-40.

Fouda, Moustafa, John Grainger, Waheed Salama, Sherif Baha El Din, Dan Paleczny, Samy Zalut, Francis Gilbert (2006). *Management Effectiveness Evaluation of Egypt's Protected Area System*. Nature Conservation Sector, Egyptian Environmental Affairs Agency, Cairo.

Khaled Allam Harhash, Dan Paleczny (2007). *Management Effectiveness Evaluation of Ras Mohamed National Park*, Nature Conservation Sector, Egyptian Environmental Affairs Agency, Cairo, Egypt.

Galindo, J. (2007) Model and prepare manual – How to prepare a business plan, deliverable 2 & 6 prepared for Nature Conservation Sector Capacity Building Project, Italian Cooperation and Nature Conservation Sector, Egyptian Environmental Affairs Agency, Cairo, Egypt.

IUCN (1998) Financing Protected Areas – Guidelines for Protected Areas Managers – IUCN, Cambridge, UK and Gland, Switzerland.

IUCN (2006) Sustainable Financing Protected Areas – A global review of challenges and options – IUCN, Cambridge, UK and Gland, Switzerland.

Head, S.M. (1987). Corals and coral reefs in the Red Sea, In: Red Sea, Key Environments, (Edwards, A.J. & Head, S.M., eds.), Pergamon Press. London. pp.441

Kotb, M., M. Abdulaziz, Z. Al-Agwan, K. Alshaikh, H. Al-Yami, A. Banajah, L. Devantier, M. Eisinger, M. Eltayeb, M. Hassan, G. Heiss, S. Howe, J. Kemp, R. Klaus, F. Krupp, N. Mohamed, T. Roupheal, J. Turner and U. Zajonz, 2004 Status of Coral Reefs in the Red Sea and Gulf of Aden in 2004. p: 137-154 in C. Wilkinson (ed.). Status of coral reefs of the world: 2004. Volume 1. Australian Institute of Marine Science, Townsville, Queensland, Australia. 301 p.

South Sinai Regional Development Programme, Programme Concept, 2001, p. 9.

South Sinai Environment and Development profile (2004). South Sinai Regional Development Programme.

الاستدامة المالية للمحميات الطبيعية بمصر – دراسة تطبيقية علي محمية رأس محمد ، مشروع بناء القدرات لقطاع حماية الطبيعة ، ٢٠٠٦

| <b>Ras Mohamed National Park inventory list</b> |    |
|-------------------------------------------------|----|
| <b>Equipments and Furniture</b>                 |    |
| Desk Top Computer                               | 6  |
| VHP Radios (portable)                           | 2  |
| VHP Radios (fixed)                              | 2  |
| Touch Screen Computer                           | 1  |
| Multimedia Projector                            | 1  |
| Data Show                                       | 1  |
| TV 36 inches                                    | 1  |
| Video                                           | 1  |
| Camera+ under water housing + Battery           | 2  |
| GPS Garmin 12                                   | 1  |
| Compressor + Drill                              | 4  |
| Digital Camera                                  | 1  |
| Air Cylinder                                    | 7  |
| Hummer                                          | 1  |
| Drill                                           | 1  |
| Current Metter                                  | 4  |
| Under water Digital Camera                      | 1  |
| Under Water Communication Systems               | 2  |
| Under Water Remotely Operated Vehicle           | 1  |
| Lifting Bags                                    | 5  |
| Diving Sets                                     | 20 |
| Binoculars                                      | 1  |
| Night Vision Device                             | 1  |
| Eco-Sounder                                     | 1  |
| Lap Equipment ( 4 set )                         | 4  |
| <b>Infrastructure</b>                           |    |
| Visitor Center                                  | 1  |
| Accommodation                                   | 1  |
| Labs, Diving Center                             | 1  |
| Jetty                                           | 1  |
| Office                                          | 4  |
| Entrance Gate                                   | 1  |
| Stone Gate                                      | 1  |
| Work Shop                                       | 1  |
| Shelter                                         | 5  |
| Garbage Bins                                    | 10 |
| Camp Toilets                                    | 1  |
| Mooring                                         | 82 |
| <b>Vehicles and boats</b>                       |    |
| Car                                             | 21 |
| Boat                                            | 3  |
| Working Boat                                    | 1  |
| Loader                                          | 1  |
| Truck                                           | 1  |