

ECOTOURISM AND PROTECTED AREAS SUSTAINABLE FINANCING: A CASE STUDY OF WADI EL GEMAL VISITOR CENTER

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ABSTRACT

Ecotourism has the potential to support protected areas (PAs) financing where PAs' visitor centers (VCs) are mechanisms for raising public awareness, and revenue generation. Park agencies must shift from a sole emphasis on preservation to include management approaches that increase the benefits of ecotourism and promote partnerships, collaboration, and integration of tourist activities into protected areas core business. A strategy is needed for Wadi El Gemal National Park (WGNP) to enhance tourism practices in a manner that will protect ecosystems, benefit the local community, and promote sustainability. Visitor centers contribution to the development and sustainability of PAs and ecotourism is rarely investigated. This article sheds the light on PAs' visitor centers and their role in ecotourism, conservation, and PAs financial sustainability. It defines the potential ecotourism products and services in WGNP and its Visitor Center, elucidates the impacts of COVID-19 on the park and the local community, and identifies the necessary tools and resources to implement a sustainable business and management model for WGNP Visitor Center. The results of the VC's probability analysis and the financial indicators suggest that the Visitor Center is financially feasible and could present a model of sustainable revenue generation and ecotourism development in WGNP.

Keywords: COVID-19, Ecotourism, Financial Sustainability, Protected Areas, Visitor Centers, Wadi El Gemal National Park.

JEL Classification: Z32, Z33

1. INTRODUCTION

Tourism is a universal industry that creates employment and remunerations, playing an important role in the economies of several countries (Balmford et al., 2015). Tourism can present principal drivers for creating employment, rising foreign exchange, improving infrastructure, and financing the management of protected areas to accomplish preservation goals (Cervený et al., 2020). Well-planned tourism offers fiscal and political incentives for management and preservation and may create supplementary benefits to local communities and economies (Agardy, 1993). Protected areas tourism donates to gross domestic product (GDP), serves as a significant source of economic returns, supports local livelihoods, and assists raise funds for biodiversity conservation in developing countries that are gifted with natural resources (Bhammar et al., 2021). Tourism and recreation have long been a key driver for protected areas economic development (Blair et al., 2019). The planning

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and management of tourism development can assist to safeguard a destination's natural and cultural heritage and accelerate long-term economic prospect (Cervený et al., 2020). Sustainability and environment protection became relevant topics in tourism research and fundamental for consistent destination development and business continuity. The Stakeholder Theory and the Resource-Based View can present theoretical frameworks in the context of sustainability in tourism addressing users and destinations (Cavalcante et al., 2021). Sustainable tourism considers the existing and forthcoming economic, social, and environmental influences, addressing the requirements of tourists and visitors, the industry, the ecosystem and host communities (Aktsoğlu & Gaidajis, 2020). The negative impacts of mass tourism and conventional/traditional tourism induced the emergence of alternative tourism (Gohar & Kondolf, 2020) such as nature tourism, ecotourism, rural tourism, community-based tourism, agrotourism, voluntary tourism, responsible tourism, geotourism, adventure tourism, soft tourism, sustainable tourism, small-scale tourism, green tourism, integrated tourism, cultural tourism, and creative tourism (Medeiros et al., 2021). Ecotourism and nature-based can be encouraged in protected areas intended at attaining sustainability.

Ecotourism emerged in the eighties with the advent of sustainable development, to address tourism revenues into preservation (Stronza et al., 2019). It is a combination of two words ecology and tourism (Bashar, 2018). Many studies have attempted to define ecotourism since the term was coined (Björk, 2000; Buckley, 2000). It was first defined as "travelling to relatively undisturbed or uncontaminated natural areas with the specific object of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural aspects found in these areas" (Ceballos-Lascurain, 1987: 13). Blangy and Wood (1992) defined it as responsible travel to natural areas that conserves the environment and sustains the well-being of local people. Nelson (1994) defined it as a subset of tourism that relies on natural resources. Weaver (2001) defined it as a form of nature-based tourism that strives to be ecologically, socioculturally, and economically sustainable. Pröbstl and Haider (2013) regarded nature-based tourism as a cultural ecosystem service. The International Union for the Conservation of Nature (IUCN) and the Ecotourism Society (TES) elucidated some characteristics that should be demonstrated in an activity to qualify it as ecotourism such as promoting positive environmental ethics, concentrating on intrinsic values, benefiting the wildlife, and environment, educating tourists, and involving the local communities in the tourism process (Pasape et al., 2012). Fennell (2001) listed the variables most frequently cited in the ecotourism definitions as (i) location or natural areas; (ii) conservation; (iii) culture; (iv) benefits to locals; and (v) education. Goebel et al. (2019) explored the Participatory Action Research (PAR) as a driver for sustainable tourism and a tool for tourism-affected communities' involvement in the decision-making. With its intercorrelated three basic parts: participation (life in society), action (engagement with experience), and research (growth of knowledge), the PAR can support community development and sustainable livelihoods. De Lucia et al. (2020) found that the social, economic, and environmental factors have positive impacts on residents' perception of sustainable tourism. Bernini et al. (2002) distinguished different perceptions and priorities within different tourist clusters regarding environmental sustainability. Nunes et al. (2020) illustrated that the behavioral approach can sustain actions that promote sustainability and environmental protection. Oviedo-García et al. (2017) elucidated that tourist satisfaction incorporates a significant influence on tourism sustainability and the ecotourism knowledge positively affects ecotourist satisfaction when the site is of high perceived value.

Protected areas are valuable assets that can be highly productive if appropriately managed (Fouda, 2002). Direct reinvestment in the conservation effort is essential for long-term sustainability (Balmford et al., 2015). Without sustainable and stable sources of funding

the long-term management objectives of the PA can be jeopardized (Colby, 2003). The WG Visitor Center could be a catalyst that activates ecotourism opportunities at the Park presenting a model of sustainable revenue generation and a partnership between the Park and the private sector (Buckley, 2002; Bodin, 2017). In this capacity, the article aims to develop a sustainable business and management model for the Visitor Center of WGNP. Concerning this objective, the article intends to define the potential ecotourism products and services in WGNP and its Visitor Center and the goals for creating a sustainable business and management model for the VC, identify the necessary tools and resources needed to support and implement the sustainable business and management model and the major issues that may hinder the implementation of the model, consult with locals and relevant stakeholders to gather their opinions and concerns, and define key messages for different target groups and stakeholders. This helps to integrate tourism development with the conservation of the unique and sensitive natural and cultural resources of the WGNP. To achieve the above-mentioned objectives, data on site and from many sources was used to extrapolate the overall situation. Documentation about WGNP were reviewed including technical reports about WGNP, tourism reports, and ecotourism best management practices. A selection of stakeholders were interviewed (e.g. Southern Sector of Red Sea Marine Parks manger, a group of Egyptian Environmental Affairs Agency and park staff, resort owners, tour operators, tourism guides, peoples belonging to the Ababda Tribe and other local communities). WGNP was visited to judge its visitor center and commercial potentials as the basis for developing sound best-practice management and business model. The field survey tools were employed during the visit were semi-structured interviews, focus group discussions, oral histories, observation, taking notes of meetings and interviews, writing up discussions, and content analysis.

2. MATERIALS AND METHODS

2.1 Study Area

The Wadi El Gemal National Park is an extensive area of land and coastal water lying to the south of Marsa Alam in Egypt. WGNP was officially declared in 2003 (Elhalawani, 2013). The Park covers an area of approximately 7,000 km² (4,770 km² of land and 2,000 km² of the sea) stretching from the Red Sea coast (about 70 km of coastline) to about 50 km (Baha Eddin, 2003). It includes many diverse ecological habitats (e.g. coral reefs, mangroves, desert valleys, and their associated vegetation) and a rich variety of animal and bird species including several of which are endangered (Patrick, 2012). The area is inhabited by local pastoral peoples belonging to the Ababda Tribe, who still practice a traditional lifestyle largely in harmony with their environment (Bos-Seldenthuis, 2007). WGNP is designated primarily as a National Park: Protected Area managed mainly for ecosystem protection and recreation, IUCN PA management category II. As large, all-inclusive resorts have developed along the Red Sea, beaches in WGNP remain some of the few places that tourists can enjoy unspoiled coastal landscapes and an area of extraordinary beauty, ecological richness, and cultural heritage (Baha Eddin, 2003).

The WGNP Visitors' Center (VC) is located at the Park's northern entrance situated as a focal point, on the top of a hill, along the western side of the Suez/Bir Shalateen seashore highway. The story building of the VC is about 250m². It was built by using local building materials (e.g. local basalt stones). The jury of the Hassan Fathi Award for Architecture 2009 decided to award it an honorary prize because the building is very simple and in harmony with its surroundings. The design of the VC was inspired by the acacia tree. For the Ababda tribes, the acacia is viewed as the reference point in the open wide desert; offering the

much-needed landmark, shade for gathering, and a source of nutritious pods, branches for construction, and firewood. Similarly, the VC was intended to offer shade and shelter where various activities can occur (ArchDaily, 2011). The facility could serve several functions such as disseminating essential information about WGNP, educating and orienting visitors and increasing their appreciation of the unique natural and cultural resources of the area, welcoming pit-stop and serving basic visitors' needs (e.g. refreshments and local crafts), and, offering ecotourism services to tourism establishments along the Red Sea coastline (USAID, 2008; KON-TIKI, 2015).

2.2 Participants and Data Collection

Data collection is fundamental in research, as the data are expected to improve the understanding of the investigated phenomenon (Aberdeen, 2013). Hence, data must be obtained using sound judgments, particularly as a thorough analysis still cannot compensate for inadequately collected data. The interviews involved participants that represent the key stakeholders in the study area. Participants were the manager of Southern Sector of Red Sea Marine Parks, a group of Egyptian Environmental Affairs Agency and park staff, resort owners, tour operators, tourism guides, peoples belonging to the Ababda Tribe and other local communities. This selection was based on the relationship with or proximity to the park or the business share in the region. The main methods used to collect data were semi-structured interviews to eighteen individuals (7 park staff, 2 resort owners, 4 tour operators and guides, 5 Bedouins) and stakeholders' discussions meeting to five individuals (Southern Sector of Red Sea Marine Parks manager, WGNP deputy manager, resort owner, tour operator, tribe representative), in addition to oral histories of local people, observation during the field visit, taking notes of meetings and interviews, writing up discussions, and content analysis. A combination of purposive and snowball sampling was employed to determine, approach, and recruit relevant participants (Noy, 2008). Purposive sampling assisted in recruiting participants that are particularly informative, relevant, possess knowledge, have experience, and engaged in the research topics. The snowballing sampling method was beneficial in recruiting relevant participants based on a referral by participants from the purposive sample. The main topics were addressed in the interviews were the potential ecotourism products and services in WGNP and its Visitor Center, the associated expenditures and revenues, the beneficiaries, the impact of COVID-19 on the park, and the challenges to develop a sustainable business and management model for the Visitor Center of WGNP. The interview questions were developed based on the study objectives, the outcome of the literature review and the stakeholder's consultation process. The questions were tested in a pilot phase prior to the interview phase. An interview guide used to shape the discussion with the participants, guarantee reliability and to validate that all anticipated topics were investigated. A responsive interviewing procedure was utilised to allow the researchers to adjust to new information and conversion of direction during the interview when necessary in order to gain a deeper understanding on unpredicted perceptions. Three business development scenarios for the Visitor Center were presented in the stakeholders meeting. The main issues and concerns were highlighted. The discussions were registered and the content was transcribed.

2.3 Data Analysis

Data collected during the field visit to WGNP and in the semi-structured interviews and in the stakeholders meeting were examined using an inductive approach to build a sustainable business and management model for WGNP Visitor Center including the message, the target audience, the marketing mix, the financial feasibility, the business plan and the profitability

analysis. The data analysis followed four steps: data preparation; data exploration; data reduction; and interpretation. Relevant criteria were chosen to assess the feasibility of WGNP Visitor Center. Calculations were done with care and included different aspects that need to be considered. Several assumptions used in the calculations were made to fill data gaps and to simplify the analysis and were conservative in estimating revenues and liberal in estimating expenses. Moreover, the deducted profitability indicators were calculated by using a discount rate 10% which is higher than the interest rate of the Central Bank of Egypt (the overnight deposit rate, overnight lending rate, and the rate of the main operation remained unchanged at 8.25 percent, 9.25 percent, and 8.75 percent, respectively at its April 29th, 2021 meeting).

3. THE POTENTIAL ECOTOURISM PRODUCTS AND SERVICES IN WGNP

Key questions must be answered to develop sustainable tourism for the WGNP: how much and what type of tourism is appropriate? where should tourism occur and what infrastructure is appropriate? how will tourist infrastructure and resource protection be paid for? The next sections will present some answers to the preceding questions.

WGNP has excellent potential for ecotourism development given its unique natural and cultural heritage resources. Sillence (2015) suggested three of the Wadi el Gemal's Unique Selling Points (USPs) that can be assumed to be the basis of the activities that will be developed to attract visitors to the area: desert landscapes (e.g. deltas, mountains, and night skies); fauna and flora (e.g. esp. sooty gull, Nubian ibex, dugong, coral reefs, sea turtles); and ancient archaeological sites (e.g. roman ruins and sapphire mines and trade routes). From the uniqueness of these physical attributes of the Park, the author highlights a list of activities as proposed tourism attractions: beach visits, snorkeling, diving, turtle conservation, horse riding, camel rides, yoga and meditation, desert technology demonstration, archaeological site visits, desert walks, mountain biking, trekking with the Ababda, Astro-tourism, and nautical tourism. Also, Patrick (2012) mapped some potential ecotourism opportunities at WGNP as:

- overnight use in the Park could occur with an “eco-lodge” or could be camping allowed at designated locations away from the sensitive coast by permit only.
- developing two to three “swim” beach sites at less sensitive locations that can accommodate buses, vans, and larger numbers of people.
- identifying other sites that can accommodate small groups, primarily guided and by permit, for nature watching, interpretation, and education (e.g. Hamata Mangrove, Ras Baghdadi/Wadi Gemal, Tourfat Al Masheikh, Sharm el Luli, Umm Al-Abbas, and the point at Qulaan).
- identifying and developing several locations for authentic Bedouin craft and food outlets (e.g. Qulan Village, Abu Ghosoun Village, WGNP Visitor Center, and Museum).

These activities need to be packaged up to provide the basis of the products and services that will produce visitor flows into the Park.

4. VISITOR MANAGEMENT STRATEGY

WGNP was designated a Protected Area in 2003. Since that time, very little has been done in Park's service development. To date, few visitor facilities, guides, or information currently exist. Tourism use in the Park has been generally unplanned and opportunistic (USAID, 2008; USFS, 2008). Ecotourism can contribute to preserving and improving natural resources and quality of life while providing jobs, increasing local revenues, generating

business opportunities, and enhancing community cohesion and pride (Björk, 2000; Coren & Gray, 2012). The enhancement of natural resources and promotion of the sustainable utilization of resources such as ecotourism are proactive measures that seek to improve the future utility of the natural resources of the Park (Holden & Sparrowhawk, 2002; Ospina, 2006). WGNP has a high potential for leisure, recreation, adventure, beach tourism, safari, and cultural heritage tourism. However, tourism of any kind has the potential to impact negatively or positively on the destination. Rangers at WGNP face challenges in balancing visitor access, services, and facilities with the protection of the remarkable Park. Visitor centers assist in using, controlling, managing, protecting, and developing tourist attraction resources (Pearce, 2004). They serve many different functions, from education, information, and services, to reducing visitor pressure and generating economic development in declining or undeveloped areas.

Visitor management is a significant tool and one of the main jobs within the protected area management. It comprises many different tasks such as getting knowledge about the visitors and their needs and providing education and services to satisfy their expectations and enhance the visiting experience. Thus, successful visitor management requires quantitative and qualitative knowledge of visitor numbers and activities undertaken in the protected area as well as accurate information on visitors' needs and wishes (Thapa & Parent, 2019). Comprehensive knowledge and accurate information on visitors to protected areas are essential not only for the planning and managing of visitor services and tourism infrastructure but also for the sustainable protection of natural and cultural heritage.

Figure 1. Visitor Management Strategy



Source: Own Elaboration

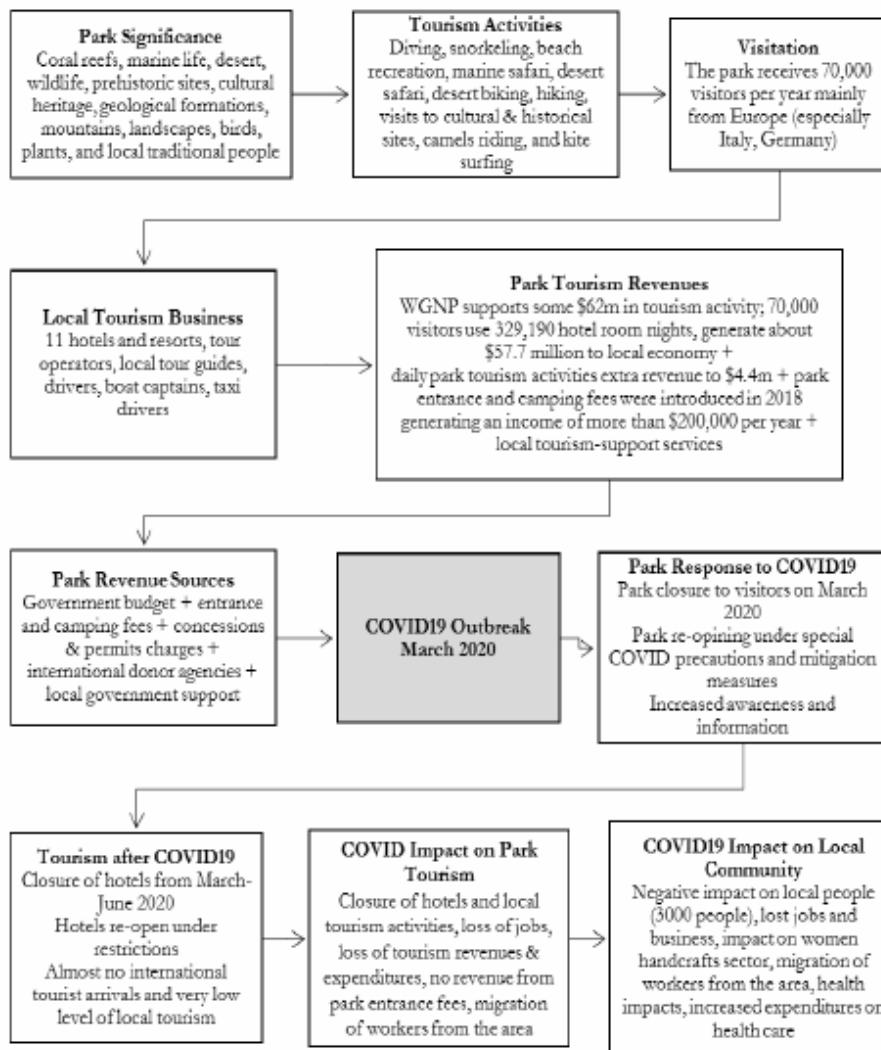
5. THE IMPACT OF COVID-19 ON TOURISM AND VISITATION IN WGNP

Protected areas tourism was a strong-growing segment in the international travel and tourism business prior the economic repercussions of the COVID-19. It created foreign exchange for nations endowed with natural resources, added to conservation incomes, and delivered benefits for communities. Though, the COVID-19 outbreak and the travel restrictions hit it hard (Bhammar et al., 2021). WGNP is a tremendous destination for tourism given its remarkable natural and cultural resources. Such nature-tourism destinations are rare in the present time and pursued by tourists willing to pay a premium for the experience. However, likewise, in almost all protected areas in the world, the park's tourism and visitation have been significantly affected by the COVID-19 outbreak. As of March 2020, all visitation, recreation, and tourism activities to protected areas of Egypt, including WGNP, were put on hold by the Egyptian Ministry of Environment. Priority was given to human health safety

therefore all human undertakings within PAs were temporality suspended. In June 2020, the park was re-opened to visitors under strict precautions and measures to minimize the potential impact of COVID-19 on park visitors. However, visitation and tourism rates, hit by the pandemic, become very low. International tourism arrivals to Egypt stopped since the outbreak and local tourism is very slow as well. Some projections suggest that tourism in the park will not recover before 2022.

COVID-19 outbreak impact on tourism and recreation in WGNP is potentially high. From an economic perspective, the pandemic harms park tourism. The entrance and camping fee revenues, as a major contributor to the park budget, were lost. Millions of dollars of tourism activities and tourists' expenditures were lost as well. Hundreds of people who work in tourism (local tour guides, drivers, hotel staff, boat captains, etc.) have lost their jobs and main sources of income. The pandemic harms the local community in the area. Tourism is the main source of income for more than 3000 people of Ababda people who live in the park for centuries. Tourism supports jobs, local handcraft business, and numerous local tourism services, all lost due to the pandemic. Hundreds of Egyptian workers (none WGNP local people) migrated temporarily from the area to other locations looking for jobs and alternative sources of income. Local women who produce local handcrafts and sell to tourists have also lost their income.

Figure 2. Impacts of CPVID19 on Tourism and the Local Community in WGNP



Source: Own Elaboration

6. SUSTAINABLE BUSINESS AND MANAGEMENT MODEL FOR WGNP VISITOR CENTER

6.1 Message

WGNP Visitor Center will work to get visitors at some point of their holidays out of the regular hotel situation and to bring them in touch with the Parkland, its people, plant and animal life and considering the site rather as a springboard into the Park rather than one top exhibition offers new dimensions to the interpretive planning of the site (KON-TIKI, 2015). The center will support the following activities: encourage a better understanding of the environmental and cultural issues in the region, promote visits to other sites within the region thus distributing the economic impacts of tourism, offer the foreign and receptive tour operator an important attraction for their clients, provide a cluster of services that can generate revenues such as handcraft sales, food and beverage, day trip sales and books/CD's, DVD's, etc.

6.2 Target Audience

Tourism development has increased rapidly along the Red Sea Coast (Eddin, 2003). There are now numerous large-scale hotels, diving operations, and bus tours operating on the Red Sea coast north and south of the Park. Resorts are scattered along the Red Sea from El Gouna 35 km north of Hurghada to Wadi Lahmi some 100 km south of Marsa Alam. Tourists to WGNP are primarily interested in visiting the Park's beaches to sunbathe, snorkel, and swim, as well as visit the Park's reefs for diving (Chemonics, 2008b). Other natural and cultural values of the Park are gaining attention and interest. The value of WGNP will become increasingly apparent when large stretches of the Red Sea coastline are occupied with manmade structures, and visitors seek to experience the natural setting of the Red Sea. In 2003, there were 30,150 rooms on the Red Sea coast, with some 87,301 under construction between Hurghada and Marsa Alam (Eddin, 2003). According to Child (2009) there were 11 hotels in the direct vicinity of WGNP in 2008. An estimated 70,604 guests (about 75% foreigners (largely from Europe) and 25% Egyptians) utilised 329,190 room nights (45% occupancy) which generated about \$57.7 million. He suggested that daily park tourism activities generate extra revenue for local tourism of \$4.4m and the economic contribution of WGNP to the local tourism industry is some of \$62m. Park entrance and camping fees, introduced in 2018, generate direct income of about \$200,000 per year (WGNP Accounting department). By 2017, the executive capacity was 93,247 (74%) out of 126,404 the approved capacity (104,506 hotel capacity and 21,898 tourist housing capacity) in the Red Sea Tourist Area (TDA, 2017). Half of this capacity is located at Hurghada where 16% in Marsa Alam (TDA, 2017). Germans are one of the most numerous nationalities in the southern Red Sea, mainly coming for diving, in addition to the Italians who mostly engage in leisure or beach tourism (Chemonics, 2008a). The other nationalities reported visiting the area are the French, Russians, Americans, and Scandinavians (Cesar, 2003). The Visitor Center would appeal to a general audience, which is mainly the WGNP visitors both national and international and serve the needs of awareness and education for schools and universities.

6.3 Marketing Mix (4P'S)

Marketing is defined as 'putting the right product in the right place, at the right price, at the right time (Singh, 2012). To effectively market a product or service there are four elements, known as the marketing mix, which should be viewed as one unit and structured to support each other. The following section describes the marketing mix of the WGNP visitor center:

Product: The Visitor Center will provide several educational, informational, entertaining, and ecotourism opportunities for its visitors. It will offer an exhibition, demonstration, and hands-on areas, local and site-specific merchandise offers, and a choice of food and drinks. It is assumed that this means approximately 1 hour for a visit plus the actual excursions (KONTIKI, 2015). The experiences consist of: a multilingual (English, Arabic, Italian, German) partly interactive exhibition with demonstration and hands-on areas; opportunities for excursions into the Park on various levels (e.g. 1h hands-on introduction into various topics, half-day excursion, one-day excursions, overnight excursions with star gazing, etc.) with preparation for outside experiences in the center (orientation, equipment); a merchandise and culinary offer strongly related to the content of the site (Ababda-souvenirs from natural materials and regional or national available materials, polished stones, post cards/posters, alabaster animals such as coral/turtles/birds/camels etc., eatable (candy) stones cake with the shape of the WGNP area, biscuits in the shape of various animals, Bedouins sun-bread); staffed self-service counter and vending machine; a small animal enclosure presenting typical animals of the land the visitor is not very likely to see otherwise even during excursions (e.g. Dorcas gazelle, Nubian Ibex); and Junior Ranger activities (e.g. puzzles, drawing boards and activity magazines for children).

Price: a detailed financial analysis is presented in the next section.

Place: The site is located close to the coastal road to be easily accessible for the mass of visitors. There is a good road network linking WGNP with major tourism centers along the Red Sea (Hurghada, Quseir, and Marsa Alam) and the Nile Valley. The main Red Sea coast road between Suez and the Sudanese border through the WGNP. The Park is also accessible from the Edfu-Marsa Alam Road via the asphalt road to Sheikh Shazli, which passes through the western section of the PA. The building is constructed to blend in with the natural and cultural features of the Park. The major components include: Reception/information desk staffed by a multilingual informed staff, seating area for relaxing and observing the view of the sea, large panels and displays demonstrating the major theme and visual images of the resource base, craft production demonstration area, display racks with brochures from the region and beyond, connected thematic 'pods' demonstrating the various marine, desert and cultural messages, small amphitheater for a variety of video presentations, the retail outlet features local crafts, dried medicinal plants, etc., outdoor terrace and beverage service, equipment rental outlet, observation towers, interpretation kiosks, and parking area.

Promotion: A successful promotion process should make the VC a world leader in demonstrating desert technology as well as using WGNP natural unique selling points (USPs) in innovative ecotourism packages to attract visitors. The premises need to be developed as a state-of-the-art visitor center with accompanying quality ecotourism services. For advertising of the Visitor Center and its excursions, a large map of the National Park featuring the main attractions plus the excursion option could be developed for the information areas of the hotels in addition to introductory videos, flyers, guidebooks, posters, display boards, and electronic advertising via the internet and operator websites. Other effective mechanisms include establishing a regional identity based on a stakeholder branding workshop, designing and launching a commercial website and database, attending trade shows and tourism events, organizing a familiarization tour, producing electronic and print brochures, and producing a Group Tour Planner for the travel trade. It will be also necessary to access the intermediaries who will reach the client markets such as tour operators and adventure travel companies (e.g. Tribes Travel, Overseas Adventure Travel, Forum Andersreisen, TravelMotion), booking and search engines (e.g. Google Ads, Tripadvisor, Expedia, Book Different, eDreams,

Orbitz, KAYAK, Travelocity, Skyscanner, Green Hotel World), and Media organizations (e.g. National Geographic, Travelmole's Vision on Sustainable Tourism, Planeterra, The International Ecotourism Society, National travel magazines/journals).

6.4 Financial Feasibility and Business Plan

The Business Plan intends to provide the financial basis for effectively managing the Visitor Center's operations and its likely expansion in subsequent years. It assesses the financial and economic implications of potential revenue-generating scenarios including innovative revenue-generating activities and the investments needed to fully activate these revenue-generating activities. The plan provides the structure and direction for developing more targeted one-year operational plans whose activities fall within the parameters of the business plan. The business plan identifies three business development scenarios for the Visitor Center. In each scenario, the plan specifies current operational costs and current revenue sources. The business plan does not intend to be the "final word" regarding current and future programs and their associated costs, or current and future revenue sources. Nor does it attempt to quantify with specificity the costs associated with future activities, or the amount of revenue that might be gained from potential future sources. The numbers provided are reasonable estimates based on the analysis of projected future needs. They serve as an informed and reliable starting point from which programmatic discussions and decisions can proceed. Once programmatic decisions are taken, detailed financial planning will be necessary. This plan assumes that the Visitor Center will be operated by a third party, i.e., private sector or non-governmental organization, and through a partnership between this party, the park's authority, and the local community.

Table 1 provides a summary of costs and revenue sources for each of the three business plan scenarios. The three scenarios are differentiated as follows:

- Scenario 1: Number of visitors who buy the packages per year is 2,600 visitors (Scenario 2 X 50%).
- Scenario 2: Number of visitors who buy the packages per year is 5,200 visitors (25 visitors X 4 days per week X 52 weeks).
- Scenario 3: Number of visitors who buy the packages per year is 7,800 visitors (Scenario 2 X 150%).

For this analysis, data were gathered from discussions with relevant stakeholders. Additionally, several assumptions were made to fill data gaps and to simplify the analysis. All assumptions are based on conservative estimates.

Table 1. Projected Revenues & Expenses (€)

	Scenario 1	Scenario 2	Scenario 3
<u>Revenues</u>			
Revenues from the Gift Shop	5,200	10,400	15,600
Revenues from the Cafeteria	2,600	5,200	7,800
Revenues from the Ecotourism Packages	91,000	182,000	273,000
Subtotal	98,800	197,600	296,400
<u>Operation Costs</u>			
Rent	50,000	50,000	50,000
Salaries & Wages	45,000	45,000	45,000
Training	4,000	4,000	4,000
Electricity & Water	3,000	3,000	3,000
Repairs & Maintenance	7,000	7,000	7,000
Transportation	3,000	3,000	3,000
Communications and Internet	2,000	2,000	2,000
Uniforms	2,000	2,000	2,000
The Cafeteria running costs	5,000	5,000	5,000
Goods for the Gift Shop	6,000	6,000	6,000
Certification	3,000	3,000	3,000
Advertising & Marketing	30,000	30,000	30,000
Depreciation	5,000	5,000	5,000
Other	5,000	5,000	5,000
Subtotal	170,000	170,000	170,000
Net Operating Income	-71,200	27,600	126,400
<u>Capital Development Costs</u>			
Renovation of Visitors Center	115,000	115,000	115,000
Furniture & Equipment	100,000	100,000	100,000
Interior design (e.g. exhibition area)	60,000	60,000	60,000
Signage system	25,000	25,000	25,000
Consulting, Legal and Professional Fees	30,000	30,000	30,000
Subtotal	330,000	330,000	330,000

Source: Own Elaboration

Table 2. Revenues from the Ecotourism Packages (€)

	Scenario 1	Scenario 2	Scenario 3
Number of visitors who buy the packages per year	2,600	5,200	7,800
package price per visitor	70	70	70
the international marketing company (30 percent)	21	21	21
cost of package per visitor	14	14	14
net revenue from package per person	35	35	35
Total	91,000	182,000	273,000

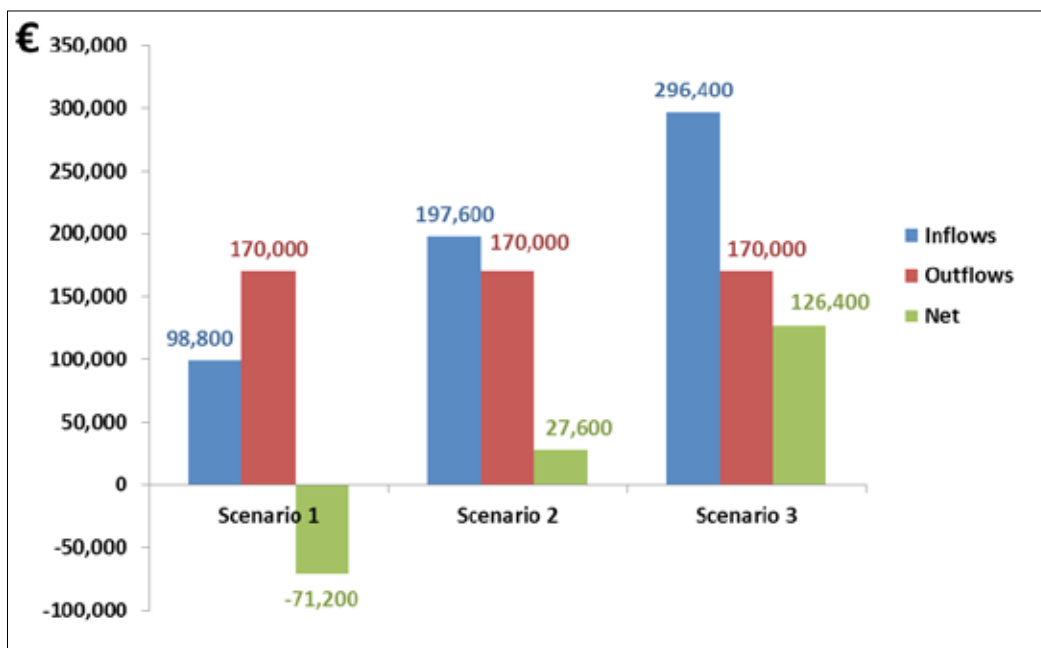
Source: Own Elaboration

Table 3. Staff and Salaries (€)

Staff	Number	€/Month	€/Year
Manager	1	1,300	15,600
Guide	2	600	14,400
Admin	1	350	4,200
Visitor Center Specialist	2	350	8,400
Cleaning Staff	1	200	2,400
Total	7		45,000

Source: Own Elaboration

Figure 3. The Business Situation Over the Different Scenarios



Source: Own Elaboration

6.5 Profitability Analysis

Profitability analysis is the first step in the economic appraisal of a project. It is concerned with assessing the feasibility of a new project for its financial results. This analysis is applied to appraise the soundness and acceptability of the project. Profitability is defined as the ability to earn a return over and above the cost of capital with consideration of the risks involved. Any or a combination of the indicators in Table 4 determines the profitability of the project. The deducted profitability indicators (NPV, IRR, B/C) will involve discounting to translate future value into their present value worth by applying a discount factor that reflects the diminishing value of the same amount of money as one moves further into the future.

Table 4. Financial Indicators

	Scenario 1	Scenario 2	Scenario 3
non-deducted profitability*			
Pay-back period	-	11.9 year	2.6 year
Accounting rates of return	-	8%	38%
deducted profitability**			
Net present value (NPV)	-	-95,026	746,111
Benefit-cost ratio (B/C)	-	0.7	3.2
Internal rate of return (IRR)	-	5.5%	39%

* **Pay-back period:** it is just to determine the number of years it takes to recover all capital investment. The shorter the pay-back period is, the better the project.

Accounting rate of return or investment: It is the percentage of initial investment that is recovered each year. The higher rate is, the better the project.

** **Net present value:** NPV is defined as the difference between the present value of the project benefit (B) and the present value of the project cost (C). The project is considered economically feasible whenever benefits exceed the cost or when NPV is greater than zero.

Benefit-cost ratio: B/C is the ratio of the present value of the gross benefit to the present value of gross cost. The decision rule is accepting projects with B/C greater or equal to 1; otherwise reject.

Internal rate of return: IRR of a project is the discount rate that equates to the present value of the benefit and cost. The decision rule is to accept the project if IRR is greater than or equal to the relevant discount rate; otherwise reject.

Source: Own Elaboration

In Scenario 1, the net operating income is negative, and the project is unfeasible. For scenario 2, the payback is approximately 12 years with a simple rate of return of 8%, which is fair given the concession is at least 20 years. For scenario 3, the payback is 2.6 years with a rate of return of 38%, which is very good for the project. However, these two indicators do not take into consideration the whole life span of the project but rely on one model period and their application is based on the project's annual data, meaning that all the inflows and outflows enter the analysis at their nominal non-discounted values as they appear at a given time during the project's life. Thus, their results somewhat less precise. The NPV, IRR, B/C are called discounted or dynamic indicators because they take into consideration the entire life of a project and the time factor by discounting the future inflows and outflows to their present values. According to these indicators, the project is not feasible with Scenario2 as the NPV is negative (€-95,026), B/C is less to 1 (0.7), and IRR (5.6%) is less than the relevant discount factor (10%). Scenario 3 is the only economically feasible scenario with a very reasonable NPV (€746.111), B/C (3.2), and IRR (39%). The results emphasize the importance to reach a certain number of visitors (i.e., >5,500 visitors/year) and justify the budget allocated to advertising and marketing in table 1.

7. CONCLUSION

A sound investment in Protected Areas can both protect biodiversity and enhance Egypt's tourism product while simultaneously generating significant financial surpluses (Child, 2012). These potential Win-Win-Win scenarios need to be used as the foundation of the stakeholder engagement process and the associated measures. Examples of these measures include better procedures for revenue generation and retaining revenue in Protected Areas at a level sufficient to cover its primary functions and provide incentives for improved park performance, improved protected area governance, and managing PAs as cost centers accountable for achieving certain levels of performance using effective objective-orientated performance-based planning methodologies (Colby, 2003). This will demonstrate the

importance of the Nature Conservation Sector (NCS) as a governmental body able to generate financial surpluses and considerable economic growth.

WGPNP has excellent potential for ecotourism development given its unique natural and cultural heritage resources (Elhalawani, 2013). The Park does not have to provide all types of recreation activities but should meet demand only for activities that require a National Park to meet its objectives (Khallaf, 2009). This would include natural and cultural history education and interpretation; Ababda culture and craft venues; tours (driving, camel or horse riding, hiking, and boating) to view and learn about the Park; beach leisure for passive enjoyment of the Park settings; nature viewing (birds, turtles, plants, etc.); opportunities for scenic beauty; day use; guided use; and diverse itineraries that mix nature with culture (food/drinks, crafts, and people). Park management should plan and develop appropriate locations for a variety of tourism activities in the Park. Tour guides/operators can then tailor itineraries to include stops and activities along the coast at the designated and permitted locations. Thus, to position the region as a desirable destination for the ecotourism market it is essential to understand that WGPNP at the beginning of long process that should include the following activities: attracting new investments and engaging private sector and local people; coordinating with higher authorities to generate and retain revenues to be used to support Park management and operations; evaluating the capacity of Park staff to account for all revenue generated in a systematic and transparent manner; regulating and monitoring tourism activities within the Park to ensure good practice; building appropriate environmentally friendly lodgings, service infrastructures and facilities that respond to visitor needs; designing and developing professional attractive multi-activity tour packages; constructing fully equipped and appealing visitor interpretation and information centers including interpretive trails, sign, observation towers, etc.; developing local based programs and training essential staff; and marketing to the selected target market with an aggressive campaign that appeals the 'specialty market' tour operators in Europe and elsewhere.

The development of the WG Visitor Center represents a strategy to interpret this part of Egypt's history and culture for tourism. This highlights the importance of the management of the WG Visitor Center professionally and sustainably and as a model for partnership between Park management and the private sector. It needs to be the catalyst that activates ecotourism opportunities at the Park. The probability analysis coupled with the financial indicators presented in this article assures that the VC is financially feasible and could present a model of sustainable revenue generation for WGPNP.

An effective way to evaluate and monitor the achieved progress is to establish a group of indicators that would be the prime targets for future activities. The group of indicators is proposed for the WGPNP Visitor Center include estimated arrivals into the Park (by sea and by land), percentage of ecotourists, number of days spent in the region, number of repeat tourists, number of users of the Visitor Center, number of visitor facilities established in WGPNP, number of supportive stakeholders, amount of revenue generated per tourist per night, amount of visitors buying packages, the value of package sales, revenue generation by the center, number of visitors to the website and social media, post-visit satisfaction surveys, number of agreements with tour operators/hotels/local people, and volumes of sales of handicrafts and gifts.

The "number of visitors" is the most important data as it is the most essential indicator and basis for various planning and marketing activities. The increase in the number of visitors is expected to continue as significant additional tourist accommodations are constructed on the coastal strip to the north and south of the Park. Expansion of management capacity and facilities within the Park in future years will be essential to meet the demands placed on it by increased levels of visitor use. Another approach places the focus on increasing tourist expenditure rather than increasing tourist numbers.

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