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Stakeholder Perspectives Towards National Parks and Protected Areas in Saudi Arabia

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Abstract: There is a genuine need to examine stakeholders' perception of biodiversity conservation and tourism development due to overlapping roles and conflicting priorities among key governmental agencies in Saudi Arabia. The need to understand the role of each stakeholder group will assist to support policy formulation and implementation, along with effective practices. Within this context, the purpose of this study was to examine stakeholder perspectives towards National Parks and Protected Areas in Saudi Arabia. Qualitative data were collected through semi-structured interviews from 11 stakeholders' representative of public, private, and non-governmental organizations from the tourism and conservation community. Findings revealed four main themes—tourism development, management issues, development challenges, and policy concerns. In addition, multiple sub-themes within each were further categorized. Overall, findings highlight the need to form a foundation for sustainable tourism development that aims to conserve biodiversity and provide opportunities for local communities to ensure economic growth. Implications for development in National Parks and Protected Areas in Saudi Arabia are also noted.

Keywords: protected areas; biodiversity; tourism; conservation; stakeholders; Middle East

1. Introduction

National Parks (NPs) and Protected Areas (PAs) cover approximately 10% of the country (208,356 km^2) in Saudi Arabia, and provide local communities with socio-economic benefits such as, regulated and sustainable use of grazing, hunting, fishing, and other related recreational and tourism opportunities [1,2]. While these natural areas are linked to biodiversity conservation, they are also associated with cultural and spiritual values as well as enhancement of well-being of visitors and locals [2,3]. Currently, the Saudi Wildlife Authority (SWA) manages all 15 PAs (Figure 1) which accounts for 86,582.4 km^2 (4.5%) of the total land (Specific descriptions and definitions of NPs and PAs can be obtained from the National Strategy for Conservation of Biodiversity in the Kingdom of Saudi Arabia https://www.cbd.int/doc/world/sa/sa-nbsap-01-en.pdf), whereas Saudi NPs are managed by the Ministry of Environment, Water, and Agriculture (MEWA) [2]. SWA plans to designate additional PAs by 2020 that will cover 17% of terrestrial and 10% of the marine and coastlines [4].

The management system of PAs and NPs is a relatively new concept in Saudi Arabia [1]. In 2005, the National Biodiversity Strategy was developed by National Commission for Wildlife Conservation and Development to conserve natural resources and encourage their sustainable use. Since the implementation of several acts and regulations within different cross-sectional governmental agencies in the late 20th century, the National Biodiversity Strategy has been the first effort to provide a comprehensive framework to guide governmental agencies through the implementation process [2,5].

The established National Biodiversity Strategy emphasizes the importance of sustainable development and aims to mitigate depletion of natural environmental resources [5] (p. 10):

> "The purpose of the National Biodiversity Strategy is to promote the conservation of biodiversity and its sustainable use by placing biodiversity at the center of national planning, development and extending the scope of the Strategy to include the protection, restoration, sustainable use, equitable sharing, and systematic monitoring."

The National Biodiversity Strategy consists of 17 goals for conservation and the sustainable use of resources. The goals include enhancement of environmental awareness, generation of income from wildlife resources, and development of nature-based tourism in PAs and NPs. Despite the efforts and regulations to facilitate governmental agencies' work to implement the initiated strategy, the system of NPs and PAs in Saudi Arabia struggles to achieve its purpose [1–4,6,7]. Barichievy et al. [1] indicate that the conservation strategy is well developed; however, the implementation of the established goals is a challenge. Since the strategy involves multiple stakeholders with conflicting roles and different objectives, its implementation struggles to find a balance between conservation and efficient use of resources [4].

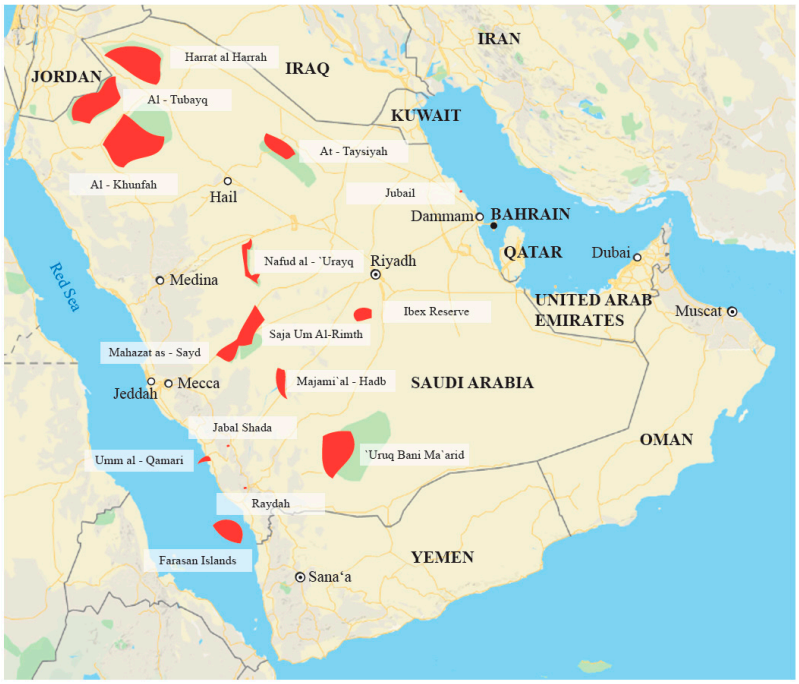


Figure 1. Protected areas managed by Saudi Wildlife Authority.

Saudi Arabia is a diverse country with rural communities that depend on natural resources [3]. The growth of the rural population along with an increase of livestock has led to overgrazing in the natural reserves and buffer zones of PAs [4]. Overgrazing has a direct impact on environmental deterioration, erosion, and the reduction of vegetation cover. Grazing is rooted in local culture along with logging as numerous local communities value it more than wildlife and natural resources due to lack of tangible benefits derived from conservation [1,8]. In addition, fuelwood is in high demand despite the existence of alternative fuel resources [9]. Consequently, habitat destruction and land degradation has caused resources competition among domestic livestock and wildlife species [8]. Collectively, the lack of support from local communities is a major factor for conservation inadequacies and high decline of wildlife [10,11].

Numerous studies and government reports further report that the system is not well managed and the benefits, such as providing recreational opportunities for the public, increasing environmental

awareness, improving community quality of life, and protecting wildlife are neglected [1,2,4,6–10]. A key reason is the lack of unified guidelines to simultaneously direct the management, implement assigned activities, integrate matching policies, and to overcome the lack of environmental compliance and awareness [1,3,4,6]. Furthermore, the deficiency of inter-agency coordination, low participation of local communities, and poor coordination among stakeholders represent barriers for effective implementation [4,10]. The lack of coordination among government agencies impact implementation, and further exacerbates environmental conditions [2]. To improve the situation, input and participation among multiple stakeholder groups are critical, and will likely allow for effective execution of policies for conservation strategies of PAs and NPs.

In Saudi Arabia, stakeholders that are directly involved and/or are related with the development and conservation of NPs and PAs are representative of the public, private, and non-governmental organizations (NGOs). Prior evaluations have examined issues with respect to biology, conservation strategies and management, conservation practices, and locals' knowledge and attitudes about wildlife conservation [1,3,6,7,11–16]. Building on the existing research on PAs and NPs, the aim of this study is to consider the perspective of stakeholders, which is a new approach to assess input in the country. Therefore, this study examines stakeholder perspectives towards conservation and tourism development in PAs and NPs in Saudi Arabia. The objective is to integrate input and to highlight emerging issues and challenges perceived by a diversity of stakeholders with respect to PAs and NPs. This research will provide a better understanding of the current situation as communicated by stakeholder groups representative of the public sector, private sector, and NGOs.

2. Literature Review

2.1. Theoretical Framework

Stakeholder theory as advanced by Freeman [17] provides the framework for this study. Freeman [17] defined stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives" (p. 46). The theory posits that achievements of goals always involve various actors such as public sector, private sector, and locals [18]. Moreover, the determination of these actors is based on their legitimacy of having a stake in the business, as well as level of power in decision-making. Since the complexity of this effect increases with the number and magnitude of involved parties, the necessity for an analysis of all stakeholders has emerged [19]. However, failure to identify all stakeholders and their interests can put a successful management process at risk [20].

The initial application of stakeholder theory was evident in public administration and business management domains [17,21]. Over time, it has been successfully adopted in other disciplines such as, natural resource management, and tourism [19,22–27]. Within natural resources management, Reed et al. [20] emphasized the participatory approach among all stakeholders due to the rapid change of social values and ecological factors. This has been utilized in recent studies within the context of development, conservation and economic aspects of natural resources management [22,23,27]. In tourism, stakeholder theory has been applied to enhance the interaction between institutions and individuals in planning, development support, resource management, conflict management, attitudes, and locals' participation and involvement [19,23,25,27].

The incorporation of stakeholders' input has been beneficial to educate the public, integrate opinions in the decision-making process, reduce conflicts, and gain new knowledge [26,28]. A gradual adoption of the stakeholder theory in the tourism sector has contributed to the shift from a more rigid top-down approach towards a more productive and efficient bottom-up partnership [27]. Additionally, it has allowed for an encompassing approach to assess perceptions of multiple stakeholders, such as, residents, local businesses, visitors, indigenous groups, and policy makers [19,24,26,29].

In the context of PAs and NPs, stakeholders' collaboration and involvement is critical due to the complexity of competing stakeholder groups, especially when it includes social, economic, and

environmental aspects. While the public sector (i.e., government agencies) is generally the lead entity tasked with resource management, the private sector and NGOs also have a major influence in the conservation efforts of PAs and NPs [22,23].

In Saudi Arabia, management is strictly allocated to the public sector and authorized government agencies. The NGOs are more involved in the environmental aspects of conservation plans for the government than in planning, management and decision making [5]. Similarly, the private sector's involvement is limited to the operational management of PAs and NPs, being restricted to the rules and guidelines of the public entities and their strategic plans. As a result, different roles and overlapping responsibilities of the public, private and NGOs stakeholders in Saudi Arabia create conflicts that weaken collaboration. This ultimately results in limited abilities to manage PAs and NPs and their resources effectively [4].

Therefore, a holistic understanding of the stakeholder perspectives towards PAs and NPs is needed. Given the complexity of the interconnected relationships of the different groups, their collaboration and involvement is necessary, especially as it relates to natural resource management and tourism development [1,7]. Within this realm, stakeholder theory offers a robust application that can be used to examine key stakeholders' perspectives toward PAs and NPs in Saudi Arabia.

2.2. Protected Area Management

PAs have evolved over time from protecting land as game reserves to conserving biodiversity and natural ecosystems [30]. Additionally, PAs contribute to the livelihood of local communities, enhance visitors' well-being, and provide recreational opportunities. Globally, there has been a major expansion of PAs inclusive of NPs which has led to the growth of nature-based tourism due to the specific biological, cultural, and historical values [31]. However, expansion has also influenced how local communities interact with the NPs and PAs networks, and can lead to people-park conflicts. This has been witnessed because of lack of access, imposition of land use restrictions, mandatory relocation of individuals/communities, human-wildlife conflict, etc. [32–36]. These issues are dire in developing countries due to the greater dependency on natural resources by local communities [31].

As an alternate strategy, integration of conservation and development programs have been advocated and implemented to ensure socio-economic sustenance of local communities [37]. Most commonly, tourism development in PAs and NPs has been a robust tool in poverty reduction and local empowerment [38,39]. Relatedly, community involvement in the planning process is crucial to ensure the effectiveness of conservation initiatives, however, lack of local participation in the decision-making can lead to unsustainable consumption of natural resources and create conflict with management [25,30,40]. Furthermore, there is a growing issue associated with human-wildlife conflict, which can contribute to loss of habitat and result in fatalities in both animal and human populations [41,42]. The key issues that escalate human-wildlife conflicts are the lack of transboundary PAs, related absence of commitment and coordination by local authorities, and overlapping management roles among different agencies [33,43,44].

Ineffective PA management is a global issue as assessments have shown that only 20–50% are adequately administered [31,45]. Most management deficiencies can be attributed to the absence of effective enforcement and monitoring of conservation values [6,31,41,42]. Additionally, there is evidence from developing countries that lack of infrastructure and financial resources contribute to poor management performance [45]. Furthermore, political instability and armed conflicts are major barriers to effective natural resources management [46].

PAs and NPs face management challenges in delivering their conservation and socio-economic benefits. The role of planning and evaluation are important factors for effective management to mitigate local conflicts, and involve stakeholders in a participatory approach to assist in sustainable development and decision-making [45,47]. Hence, stakeholder theory has been used to assess and increase collaboration among stakeholders in conservation, tourism planning and management in different contexts in the USA, Caribbean, and Africa [23–25]. However, there is a paucity of research in

arid or semiarid environments such as Saudi Arabia. Stakeholder theory offers an avenue to assess the structure and current situation of PAs and NPs in this understudied area.

2.3. Conservation Status in Saudi Arabia

The Arabian Peninsula was one of the first regions in the world to institute a natural resources management system with shared benefits for the public [2]. The initiated traditional system is known as *Hima*, and was established to adapt to the environmental struggles and climate changes associated with high levels of desertification and lack of permanent water resources [5]. In the beginning of the 20th century, countries in the Middle East, specifically Saudi Arabia, unified tribes under the control of central government which led to the establishment of governmental agencies that managed natural resources [3]. The Ministry of Agriculture and Water (now known as the Ministry of Environment, Water, and Agriculture—MEWA) was designated as Saudi Arabia's chief land protection institution in 1954. Since then, protected lands have been entrusted to the central government and have not been used effectively to serve the public [6].

Conservation practices and the sustainable use of resources in PAs and NPs have faced several challenges, including lack of management resources, overlapping roles among governmental entities, and fragmented responsibilities among stakeholders which has created obstacles for successful environmental protection [4]. In addition, issues with policy implementation, lack of tourist infrastructure, people-park conflict issues, and visitor activities have negatively impacted the environment [4,10]. These problems have been exacerbated by the low priority afforded by the government for environmental issues in comparison to others [3,4]. Additionally, weak strategic implementation capability has resulted from workforce shortage, inadequate resource provision and limited financing. Overall, the environmental sector has experienced lack of financial incentives as insufficient resources have been allocated from the annual national budget to government agencies responsible for management [4].

The NPs, forests and natural reserves are under the purview of the Ministry of Environment, while the Saudi Wildlife Authority was created to manage wildlife reserves [5]. Furthermore, a royal decree was issued in June 2018 to establish the Council for Royal Protected Areas to administer national resources and promote ecotourism [48]. The council has been assigned to manage five newly established PAs, with an independent board of directors and supervision for each unit (see Table 1). In addition, each reserve has its own legal, financial and administrative independence. This is the first agency established solely for biodiversity conservation and tourism. However, with decentralized supervision of PAs and NPs, this has created challenges with respect to a uniform and standardized management approach as part of a system [4]

Table 1. Newly established Royal Reserves.

Royal Reserves	Included SWA Protected Areas	Size of Area (km^2)
1 - Imam Abdulaziz bin Mohammad	–	11,300
2 - Imam Saud bin Abdulaziz	Mahazat as - Sayd	2553
3 - Imam Turki bin Abdullah	At - Taysiyah	91,500
4 - King Abdulaziz	–	15,700
5 - King Salman bin Abdulaziz	Harrat al Harrah Al - Khunfah Al - Tubayq	130,700
6 - Prince Mohammad bin Salman	–	16,000

3. Methods

Participants were selected from organizations that have a stake or concern with regards to conservation and tourism related issues in the PAs and NPs in Saudi Arabia. A purposive sampling was utilized as it enables to identify participants that have appropriate knowledge to suit the needs of

the study [49]. Representatives from various agencies and organizations were initially contacted and requested to identify key members within their organization for an interview. The criteria for selection of participants was based on professional work experience in the current organization for at least two years, along with expertise related to NPs and PAs in the country. Among those selected, they included representatives who were directors of public organizations, managers, consultants, environmentalists, park and tourism organizations, and employees from local NGOs. All participants either had specific educational background in national resource management, conservation, or tourism and/or had extensive work experience with regards to NPs and PAs. In-depth semi-structured interviews were conducted to seek information from participants. A total of 11 participants agreed to be interviewed. The majority were males (N = 10) and only one female, which is typical in Saudi society given the dominant role of men (Table 2).

Table 2. Profile of participants and their organizations.

Organization/Institution	Type
Saudi Commission for Tourism and National Heritage	Public
Directorate of Land and Survey (MEWA)	Public
Directorate of Environment (MEWA)	Public
Saudi Wildlife Authority	Public
Saudi Tourism Society	Public/Private
National Parks/ Protected Areas Managers	
Department of Forestry (MEWA)	Public
Thumamah National Park	Private
Environmental and Tourism Consultants	
Saudi Geographical Society	Local NGO
Water Experts Bureau	Private
Environmental and Tourism Advocacy Organizations	
EcoLife	Local NGO
Environmental Green Horizons Society	Local NGO

Note: MEWA–Ministry of Environment, Water and Agriculture.

The interview consisted of nine questions designed to measure awareness, knowledge of tourism, conservation, park-based tourism and stakeholders' roles in development along with the integration of locals (Table 3). During the interview, additional questions were posed via probing further on responses. Interviews continued until no new information emerged [49]. The duration of the interviews ranged from 15–45 min. The interviews were conducted in the local language—Arabic. Upon consent, interviews were audio-taped and transcribed with the exception of two that were handwritten. The transcriptions were translated into English and verified by two professionals who were proficient in English and Arabic. Open, axial, and selective coding were employed in data analyses. The validity of the findings was tested via field notes, reflections, and codes [49].

Table 3. Semi-structured questions for stakeholders.

- What role do you think protected areas and national parks play as conservation areas in The Kingdom of Saudi Arabia?
- What is your opinion about the current management of protected areas and national parks?
- What are the major conflicts facing natural resource management arising from outdoor recreation and nature-based tourism?
- What tourism initiatives or projects are in place within your organization?
- What is your knowledge about tourism?
- What is the role of your organization within the field of tourism development?
- What is the potential for tourism development in protected areas and national parks?
- What tourism initiatives within your organization integrate residents and local communities? How are they implemented?
- What is your perspective about tourism as an approach to support biodiversity conservation and socioeconomic development?

4. Results

Based on the analysis, four major themes were identified: (1) tourism development, (2) management issues, (3) development issues, and (4) policy concerns. In addition, multiple sub-themes within each were further categorized (Table 4).

Table 4. Thematic analysis.

Major themes	Sub-themes
Tourism development	• Knowledge of tourism • Potential for ecotourism • Cultural heritage
Management issues	• Current management • Involvement of locals and NGOs • Staff competence
Development challenges	• Conservation and environmental awareness • Privatization • Land development and ownership
Policy concerns	• Conflicting roles • Tourism development cooperation

4.1. Tourism Development

This major theme reflected participants' knowledge and perceptions of tourism. The semi-structured questions solicited participants' knowledge about tourism and its development in Saudi Arabia. In addition, when participants mentioned ecotourism in their responses, additional probing was conducted and further addressed. The emergent sub-themes included: *knowledge of tourism*, *potential for ecotourism*, and *cultural heritage*.

4.1.1. Knowledge of Tourism

Nearly all participants revealed a high level of familiarity with tourism as they associated it with leisure and recreational activities. In addition, a sizeable number of participants indicated that tourism development contributes to the overall national GDP, and improves individuals' incomes. Participants stated that tourism could improve living standards, provide locals with new job opportunities, and enhance quality of life. An official from the Department of Forestry explained:

> Tourism influences our attitudes and behavior. Tourists can benefit by getting more information and learning about recreation and the environment. At the same time, ecotourism supports protecting wildlife, natural environments, and achieving an environmental balance.

4.1.2. Potential for Ecotourism

Participants who mentioned ecotourism in their responses, emphasized the importance of its development in the NPs and PAs. Several participants emphasized that natural areas are places not only where wildlife should be protected, but also represent environments where people can learn, recreate, and reflect on spiritual experiences and traditions. Participants expressed an understanding of ecotourism as a tool to simultaneously conserve biodiversity and promote socio-economic benefits for local communities. However, one participant added that ecotourism can be a double-edged sword if it is not developed in a sustainable manner. An official from the Department of Environment in MEWA commented:

> National parks are sites to maintain wildlife and the environment. They are also places for investment, entertainment, education, awareness, protection of wildlife and heritage sites, and places where handicrafts can be presented and sold.

4.1.3. Cultural Heritage

Most participants communicated that cultural heritage is essential to consider for tourism development by economically empowering local communities to promote their handicrafts and traditional products. This view was echoed by a representative from the Saudi Geographical Society:

> Tourism is an economic activity that is based mainly on investing in a set of natural or cultural resources to receive revenues and financial returns, and ultimately supports the economy and enhances the gross national product.

Some participants noted seasonality was an issue for tourism development. Although Saudi Arabia has short winters and spring seasons with moderate temperatures, the long summers with hot, dry weather and high temperatures (mostly above 40 degrees Celsius) may limit tourists to visit NPs or plan outdoor recreation activities. However, some noted that while harsh weather may discourage visits, bolstering cultural heritage activities could provide additional options for tourists. Thus, stakeholders should be convinced of the need to invest in cultural heritage to diversify activities and offer alternatives, such as local cultural events and exhibitions in NPs and PAs.

4.2. Management Issues

Current management issues that involve PAs and NPs relate to this theme. Three sub-themes were identified: *current management, involvement of locals and NGOs,* and *staff competence*. Within these sub-themes, participants consistently mentioned two key issues: ineffective management practices to conserve biodiversity, and low competence and skills of the protected areas' staff.

4.2.1. Current Management

All participants expressed their disappointment about the current management of NPs and PAs, and the state of biodiversity conservation. An environmentalist in the Green Horizon Society elaborated:

> In the current situation, there is noticeable destruction of natural resources and the environment. There is hunting and overfishing, even in the reserves, which breaks laws that protect biological diversity. The reserves play only a very weak role to protect the environment. Protected areas suffer from destruction that comes from illegal activities and other serious infringements.

4.2.2. Involvement of Local Communities and NGOs

The majority of participants indicated that local residents and NGOs were not involved in the planning and management of NPs and PAs. Further, any initiatives and activities that are proposed to assist in the management are not supported by official authorities. Others maintained that the planning and design is handled by private consultants that are responsible to collect input from locals and visitors. An official from MEWA noted:

> Because these designs are difficult for the ministry to create on its own, it collaborates with the private sector. It is mentioned in the contract [between the ministry and the consultant] that questionnaires must be created and people's opinions must be collected . . . But, getting people's opinions is not enough—you must organize a workshop for each park and invite locals and prospective visitors... This means that a significant portion of design input falls to the judgment of individual private consultants.

In addition, a significant number of the participants expressed negative attitudes towards management plans for NPs and PAs, and the implementation process that lacks stakeholder consultation. The majority blamed the centralized nature of the Saudi ministries for exclusion of the public and other stakeholders from participation.

4.2.3. Staff Competence

Some of the public-sector representatives indicated that the staff and rangers in the NPs and PAs were not qualified, and lack specific competencies. This skill gap results in the failure of strategic plans for wildlife reserves. An official from the Wildlife Authority noted:

> The employees working in our natural reserves have weak qualifications. Some have high school certificates, and others have intermediate certificates.

Several participants attributed the lack of staff qualifications to the working conditions and context. Since fieldwork in remote areas is not desirable for most individuals, human resource managers face difficulties in recruiting qualified staff, and improve the level of qualifications among its employees. An official from the Department of Forestry noted that although they provide training sessions for rangers, most rangers cannot apply what they learned due to a lack of understanding of content and practice.

4.3. Development Challenges

This theme encompasses participants' perspectives on the challenges of tourism development in NPs and PAs. This also covered two sub-themes: *conservation and environmental awareness* and *privatization.*

4.3.1. Conservation and Environmental Awareness

In terms of conservation and environmental awareness, an overwhelming majority of participants denoted their concern about visitors' lack of awareness about ecosystems in NPs and PAs. They were apprehensive that visitors' behaviors and activities in nature could damage the ecosystem and impact the experience of others. In addition, participants who were environmental consultants attributed visitors' low conservation and environmental awareness to weak environmental laws, poor application of existing regulations, and insufficient national education campaigns to foster eco-friendly practices. The Water Experts Bureau representative explained:

> Perhaps the most important obstacle is the low environmental awareness in general. The reason for this, as I mentioned earlier, is the novelty of ecotourism or recreation and the recent establishment of NPs and PAs. Also, there is a lack of information about biodiversity and its importance in the Kingdom, as it is not studied in schools at all levels.

Almost all interviewees indicated that government agencies play at best a very weak role to increase locals' awareness about the importance of the environment and biodiversity conservation. Ministries and authorities have not adopted new strategies to reach the public, and continue to focus only on traditional school field trips. This has led to exclusion of NGOs and their input in the management of NPs and PAs. The majority indicated that if environmental awareness of Saudi society increases and citizens become keen on preservation of the natural resources, parks, and reserves, then such changes could play an impactful role to advance environmental tourism and sustainability.

4.3.2. Privatization

Almost all participants discussed the need to allow private industry to operate tourism concessions within the NPs as they play a key factor to advance tourism development. Participants expressed the urgent need for infrastructure development in NPs and PAs to promote tourism, but currently the government is the sole entity that determines priorities. All participants indicated that the private sector does not have sufficient control over the area or the operation of the facilities to be effective and efficient. In addition, there was concern that the assignment of the management of PAs to governmental agencies cannot sustain them economically, since it is not the government's role to make a profit. A member of the Saudi Tourism Geography explained:

> Tourism depends mainly on expenditures from tourists who represent the demand side of tourism services, while the supply side is represented by the expenditures of the investors. The tourism industry is made up of the private sector, and it is the investors, whether individuals or groups who construct and staff hotels, resorts, and theme parks. In addition, the private sector contributes to the industry by constructing buildings for the public sector.

Public sector officials indicated that their investment strategy is to focus on a few NPs and PAs via leasing options to the private sector by concession contracts. However, the private sector is not involved in the planning process as government authorities formulate the plans and designs for the parks.

4.4. Policy Concerns

The fourth theme covers participants' perceptions on policies that guide conservation and tourism practices. Three sub-themes were identified: *land development and ownership*, *conflicting roles*, and *tourism development cooperation*.

4.4.1. Land Development and Ownership

Most participants emphasized that policy and regulations that relate to land ownership should be reformed for the common good. As an example, participants cited the misuse of land leased by MEWA for agricultural activities. These lands are rich in natural resources, especially water, and there are concerns that the private sector has over utilized it. Some participants believed that the expansion of agricultural and mining activities at the expense of natural resources has been the main reason for wildlife extinction. An EcoLife representative explained:

> Everyone is working alone, but if the community works together and cooperates, it would bring benefits to all. There is one main direction and the most important thing is to have environmental programs or environmental protection, whether by limiting pollution or limiting destruction... We must preserve natural resources for the upcoming generations.

The majority noted that the amount of land utilized for wildlife conservation is not large enough to have a positive impact on biodiversity or socio-economic development. Other participants pointed to their inability under the current system to develop tourism activities or wildlife projects. An official from the Saudi Commission for Tourism and National Heritage noted:

> We are not a legislative entity, we are a regulatory agency; thus, we do not have the resources such as lands to implement tourism projects. The only thing we can do is collaborate with the Wildlife Authority.

Several participants emphasized the importance of government intervention and its ability to enforce laws and issue royal decrees that could designate lands for both tourism and biodiversity conservation. All expressed an optimistic attitude towards the newly designated Royal Reserves, which aim for both biodiversity conservation and tourism development. Participants indicated that the bureaucratic system of governmental agencies work against the current situation, since the country loses land due to delays during execution of conservation strategies.

4.4.2. Conflicting Roles

All 15 PAs in the country are owned and managed by the government; as a result, intergovernmental agencies have conflicting and ambiguous roles in managing, financing, and providing resources for management. To address competing issues, the recently established Royal Reserves were created with the removal of five designated PAs from the Wildlife Authority with new management structures. Nevertheless, there were other issues, such as numerous government agencies often responsible for managing and monitoring multiple uses in PAs. The overlapping roles and responsibilities create obstacles to achieve effective management. As a representative from the Wildlife Authority claimed:

> There are systems and laws but there is no executive authority to apply and enforce to limit infringements such as hunting.

4.4.3. Tourism Development Cooperation

An overwhelming number of participants were concerned about the lack of cooperation among government agencies to achieve biodiversity conservation and tourism development. Stakeholder perspectives vary as the public sector noted that the private sector is responsible for tourism infrastructure development. Conversely, the private sector is concerned about investment regulations and strategies of the public sector. Likewise, representatives from NGOs describe the gap between the two sectors as a lack of cooperation and partnership that hinders socio-economic opportunities. A representative from an NGO mentioned the absence of laws and regulations, which contributes to environmental degradation and wildlife extinction:

> We need to issue policies for the environment and environmental tourism and create a balance between tourist activities and the environment. The government should create policies, laws, and legislation, and there should be cooperation and coordination among authorities and universities, since the entire system of touristic and environmental activities should be efficiently interconnected in order to achieve sustainable development.

The majority expressed disagreement with the way the government has leased some PAs without offering real investment opportunities for the private sector. This has led to delays and cooperation among stakeholders.

5. Discussion

This study examined the perspectives of primary stakeholders (i.e., public sector, private sector, NGOs) toward the PAs and NPs in Saudi Arabia. Responses from the stakeholders' representatives revealed wide-ranging perspectives regarding the development of tourism coupled with challenges and issues. Participants indicated that the Saudi society connects with and appreciates natural areas, but lacks a deeper understanding of the concept of tourism. Furthermore, people perceive tourism primarily as outdoor recreation activities. This was evident among the young generation as Seddon and Khoja [7] noted that activities such as guided tours, picnicking, viewing animals were the most preferred recreational activities.

However, participants demonstrated a broad understanding of tourism, and perceived ecotourism as an important means to contribute to biodiversity conservation and preservation of natural and cultural resources. This is in concert with the National Biodiversity Strategy which aims to conserve natural and cultural values as well as to sustain ecosystems. It also incorporates sustainable tourism development as a goal to encourage better conservation practices [5]. Participants noted that tourism should not be developed as a single approach but part of a holistic concept with an integration of natural, cultural, and socio-economic components. Specifically, ecotourism should be associated with the development of cultural heritage attractions (i.e., traditional local markets, handicrafts, and cultural events). Cultural heritage has been addressed in the academic literature as an important vehicle to promote the economic development and community participation in the tourism industry [24,50]. This aspect is evident in Botswana where stakeholders associated cultural heritage resources with the promotion of tourism in Kgalagadi Transfrontier Park [24].

The objective of tourism development in PAs and NPs in Saudi Arabia is to stimulate visitor expenditures in the region, provide jobs for locals, and offer an economic alternative to harmful activities, such as grazing or over-cultivating areas that already experience high levels of desertification [2]. Hence, PAs and NPs provide an opportunity for tourism initiatives to involve local communities and provide tangible benefits and reduce their dependency on natural resources as a source of income [51]. However, community participation in Saudi PAs and NPs is not promoted but largely neglected [2]. As evident, participants in this study emphasized the lack of involvement in tourism-related initiatives

in PAs and NPs. The benefits from tourism for residents from gateway and buffer zone communities need to be addressed given the potential positive impacts. For example, Panta and Thapa [39] identified that tourism in the buffer zone communities of Bardia National Park in Nepal have not only empowered local women entrepreneurs financially, but also psychologically through self-confidence.

Participants in this study also expressed concerns about current issues in the management of PAs and NPs. Issues focus on the lack of preservation of natural areas, especially as it relates to hunting and excessive construction of buildings. Associated problems related to internal conflict of interest and nepotism have additionally contributed to the perpetual loss of biodiversity and wildlife. Furthermore, uncontrolled exploitation of natural resources has been ongoing and is considered as a net loss in value for the tourism industry and the culture of the country. Overall, the evolving issues have largely been exacerbated due to the exclusion of local communities that reside adjacent to the PAs and NPs, and other environmental and cultural heritage organizations [1,10]. Community support is critical for conservation and tourism development for future endeavors [2,11]. Previous research has identified that community support is important, however, support is influenced by various factors, notably economic values [26,52]. Since local communities that surround PAs and NPs in Saudi Arabia do not benefit, they largely do not value conservation and natural resources [2].

Given the size and location of PAs and NPs in the remote regions of the country, they are understandably considered as undesirable workplaces for individuals. Consequently, park rangers hired for different positions mostly lack higher education and only have minimal qualifications. Such poor qualifications hinder the implementation of parks' management plans, since employees cannot perform their duties sufficiently. Furthermore, as mentioned, training and personnel development workshops often fail due to employees' lack of understanding or motivation to apply and implement the knowledge acquired at the workplace. Hence, the need for enhanced individual capacity development via training as well as recruitment of relevant talent is a major necessity.

The majority of participants expressed concerns about tourists' lack of environmental awareness and the negative impact of their actions and behavior in NPs and PAs. Participants attributed this issue to the lack of information in the form of maps, brochures, and guides. Likewise, lack of environmental awareness was also identified for residents in communities adjacent to the Ibex Reserve in Saudi Arabia. Overall, national environmental awareness seems to be generally low due to the novelty of ecotourism and lack of environmental education in the curricula of schools [11].

NGOs and private sector representatives emphasized the poor collaboration between the public and private sector as a key issue for tourism development. While the public sector (and specifically governmental institutions) is responsible for the development of tourism, the private sector is only assigned at a later stage in the process of planning and decision making. Private sector representatives indicated that their role is limited to the operational management of NPs, and they lack control in the planning process. Therefore, the private sector should be involved early in the design and planning process to ensure sustainable investment. This has been further corroborated as stronger collaborations between the public and the private sector (i.e., concessionaires) can contribute to the creation of an attractive investment environment [23].

Finally, participants expressed the need for more effective regulations, guidelines, and laws that concern land use in general, but especially designation for conservation or tourism. They also noted their concerns about how illegal land abuse and exploitation of natural resources did not result in any legal penalties or regulatory consequences. Hence, the designation of land for a specific purpose and associated regulations for the establishment of development projects is direly needed to prevent sustained exploitation and legal violations.

6. Conclusions

The combined input from all stakeholders suggests that the tenets of ecotourism that integrate input from diverse stakeholder groups are needed. Ecotourism as a holistic concept encompasses the following ideals such as: promote the importance of cultural heritage and traditions, empower

local communities, conserve biodiversity, and preserve NPs and PAs with the goal to strengthen the economic, social, and environmental system [14,39,51–53]. In Saudi Arabia, this should be promoted through collaboration of the public and private sectors with support of NGOs, and vital input from local communities and interest groups. The following recommendations and implications are derived from the input and analyzed results of the interviews with stakeholders from various sectors. While these are not limited to a specific agency/organization, but applicable to multiple entities, hence key stakeholders should work together to identify priorities and build collaborations to improve conservation practices and sustainable use in the NPs and PAs of Saudi Arabia:

- Reevaluate and reform the current system of leasing contracts, to mitigate the loss of private sector investments in Saudi Arabia.
- Form public-private partnerships to invest in wildlife conservation and ecotourism projects.
- Establish government-led initiatives to privatize lands to incentivize the private sector.
- Integrate NGOs into the management systems of parks and reserves and assign them with official roles and tasks.
- Raise awareness of tourism and environmental preservation for each group of stakeholders.
- Build cooperation with academic institutions and universities to develop guidelines for visitor management and design of visitor experiences.
- Establish educational incentive programs with official certification programs for rangers in national parks and protected areas.

Limitations and Future Research

The objective of this paper was to highlight the issues and challenges with respect to PAs and NPs as perceived by various stakeholders. The integration of input from a diversity of stakeholders is a relatively new approach in the country, and needs to be further pursued. While participants represented the public sector, private sector, NGOs, not all stakeholders were included largely due to the lack of responses to participate. Hence, the selected participants may not represent all related organizations or all opinions and attitudes towards the examined topic within the same organization. Future research could expand to incorporate additional organizations and other participants to further examine issues at an individual site level. Future studies could also investigate the role and potential of ecotourism to conserve biodiversity and socio-economic development in the various PAs and NPs of Saudi Arabia.

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