

# Is there any sustainable tourism in National Parks? Case studies from Indonesia and South Africa

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**Abstract** | The recent Covid-19 pandemic has triggered issues related to the sustainability of tourism worldwide, including in protected areas such as national parks. This issue includes whether national parks must be focused on conservation or tourism and whether their management is centralized or decentralized. This study aims to review the condition of sustainable tourism in selected national parks in Indonesia and South Africa. The two countries have different paradigms and management systems. Indonesia is decentralized with a conservation paradigm, while South Africa manages its national parks centrally with a tourism paradigm. We evaluate this condition by examining the literature from studies in the last five years (2018-2022) related to the Baluran, Kayan Mentarang, Komodo, Kruger, and Kgalagadi national parks. Evaluations are carried out on sustainable tourism's economic, social, and environmental pillars. The literature review results reveal that national parks in Indonesia tend to be oriented towards social and environmental aspects with high variability in sustainable tourism performance. When the governance system changes from decentralized to centralized, the orientation also changes towards prioritizing economic aspects. Meanwhile, national parks in South Africa have low variability in performance, with the primary orientation being on the economic aspect. This research contributes to the importance of sustainable tourism management to determine the right governance system to simultaneously achieve the three pillars of sustainable tourism.

**Keywords** | Sustainable tourism, national park, Indonesia, South Africa, protected areas governance

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## 1. Introduction

National parks are essential to preserving ecosystems threatened by development and current human population growth. Conservation of this ecosystem is essential, considering that human life outside the area depends on ecosystem services such as water conservation, plants, land fertility, and biodiversity (Kubacka et al., 2022). Recently, national parks and protected areas have benefited humans outside the area. Studies reveal the benefits of increased human physical and mental health while in the national park area (Buxton et al., 2020). The benefits of human existence in this conservation area create economic opportunities through tourism activities. In addition, the income from tourism can be used to build the social welfare of local communities and contribute to the national park conservation budget (Rhama, 2020). These three dimensions: economic, social, and environmental, are part of the three central pillars of sustainable tourism.

Even so, the role of national parks as tourist destinations has caused controversy, and cases of failure of sustainable tourism have rekindled the debate whether national parks should be focused solely on conservation or allow and even focus on sustainable tourism (Ardiantono et al., 2018). The recent Covid-19 pandemic has exacerbated problems related to sustainability in tourism in protected areas (Sengel, 2021). Sustainable tourism means that tourism practices must align with the main principles of sustainable development, namely economic, social and environmental.

Indonesia and South Africa are two countries at the southern tip of their respective continents: Indonesia in Asia and South Africa in Africa. Both countries have national parks that are partly a legacy of British and Dutch colonialism. Even so, the two countries have sharply different paradigms and governance. Indonesia uses a conservation paradigm and is managed in a decentralized manner. Meanwhile, national parks in South Africa use the

tourism paradigm and are managed centrally.

Previous research has found that national parks in Indonesia and South Africa are faced with significant environmental threats to the sustainability of tourism in these national parks (Reindrawati et al., 2022). This study extends this research by highlighting the problem from the side of the other two pillars: economic and social. This study further compares the two countries based on differences in the paradigm and governance of national parks.

These two cases from developing countries require a more in-depth examination of the effectiveness of centralized and decentralized management systems in supporting sustainable tourism and the validity of both approaches in supporting sustainable tourism. Hence, whether centralized management is better than decentralized management for sustainable tourism's overall purpose is still an open question and will be answered in this study.

## 2. Theoretical Framework

Protected areas such as national parks have long used a conservation-oriented management approach. Protected areas reflect two conflicting perspectives in human-nature relations: the divergence and convergence perspectives. The divergence perspective argues that humans must separate themselves from nature because human existence in nature has caused damage. In this perspective, nature is wildlife, untouched, untamed, and free from human intervention and settlement (Blichfeldt & Liburd, 2021). Separation from nature allows nature to heal and provides ecological support for humans living outside of it. This approach is called the fence-and-fine approach or Yellowstone model and comes from Western society (Nyaupane et al., 2020).

On the other hand, the convergence perspective argues that humans must unite with nature

because humans are part of nature. Nature provides many health and psychological benefits for humans living with it. The damage to nature is caused because humans do not respect nature as a place to live. The existence of national parks is a manifestation of the divergence paradigm, while the existence of nature tourism is a manifestation of the convergence paradigm. More complex frameworks place important factors into these relationships. Regarding interests, a dilemma arises between whether humans should take advantage of nature or must adapt to nature (Sandell, 2006).

The human tendency to focus on solving a problem makes this binary perspective emerge, even though the relationship between humans and nature is complex. Humans later realize this complex relationship. Several protected areas have begun to open themselves up for tourism, while on other hand, natural tourist destinations have begun to open themselves up for conservation. The discourse of sustainable tourism emerged as a way to protect the interconnected human and natural ecosystems and prevent conflicts between the two (Hasana et al., 2022).

The effectiveness of sustainable tourism in protected areas varies widely across geographic locations, management structures, and approaches to resource management (Birendra, 2022). When highlighting these determinants, a dichotomy re-emerges between the convergence and divergence paradigms. The convergence paradigm carries a prescriptive approach where anything is prohibited unless it is clearly stated that it is permissible. The divergence paradigm carries a negotiable approach, where anything is allowed unless it is forbidden (Povilanskas et al., 2016). The prescriptive approach tends to be held by management with a centralized system from top to bottom. The negotiation approach tends to be held by management with a localization system. Research shows that prescriptive approaches promote national goals while ignoring local socio-economic needs. On the other hand, the negotiating approach priori-

zes local socio-economic needs but ignores national needs (Jurkus et al., 2022).

The existence of conflicting management systems then challenges the above conclusion. National park management in South Africa is prescriptive. Based on previous research, this prescriptive approach tends to be conservation-oriented. However, the national goal of prescriptive management of national parks in South Africa is based on the principle of divergence. On the other hand, Indonesia adheres to a negotiable system but is oriented toward conservation rather than sustainable tourism. These two cases provide a dilemma because they do not match each other.

### 3. Methods

The methodology used in this study is a systematic literature review on topics related to the five national parks studied, namely Baluran, Kayan Mentarang, and Komodo from Indonesia and Kruger and Kgalagadi from South Africa. The five national parks were chosen because of their similarities in several aspects. Baluran is a national park in Indonesia that has a savannah ecosystem, just like the national parks of South Africa. Kayan Mentarang has similarities with Kruger and Kgalagadi because it is a national park located in the border area between countries. Kruger is on the border of South Africa and Mozambique, Kgalagadi is on the border between South Africa and Botswana, and Kayan Mentarang is on the border between Indonesia and Malaysia. Komodo is similar to Kruger because both are the leading national park destinations of the two countries that are well known internationally.

The review was carried out on the Scopus and Google Scholar databases using keywords from the names of the five national parks. To filter only articles from English-language journals from Google Scholar, we added the string "nati-

onal+park+tourism+management."The literature is also filtered by only taking literature from 2018 to 2022. The articles analyzed are confirmed to come from reputable journals by checking the journal's status on the Scopus ranking.

The obtained articles are then grouped according to economic, social, and environmental themes. These themes refer to research findings that assess the three pillars of sustainable tourism. The data is then narrated to provide an overview of the sustainable tourism achievements obtained by the national park according to their respective themes. Finally, we determine qualitatively by rating the quality of sustainable tourism from an economic, social, and environmental perspective in each national park. We provide the Very Good criteria if there are no problems related to the pillar. Good criteria mean that, in general, the achievement of sustainable tourism has been satisfactory, but there are still some problems. If the problem is balanced with achievement, we provide the Medium criteria. The Low and Very Low criteria indicate that the pillars of sustainable tourism have many problems that may be difficult to solve.

#### 4. Results

##### Management of Indonesian National Parks

National parks in Indonesia are under the Directorate General of Natural Resources and Ecosystem Conservation, Ministry of Environment and Forestry. Organizationally, the National Park management is carried out by the Technical Implementation Unit (UPT). There are two types of UPT National Parks, namely UPT Class I and UPT Class II, which are further classified into Type A and Type B (Ministry of Environment and Forestry, 2016). The size of the national park determines this category. Each UPT is free to decide whether to open a tour or not and where or how big the tourism area is. The central government only

states that national parks must have zoning and tourism activities included in one of the alternatives that can be taken in the utilization zone. This tourism activity must be limited in nature to increase awareness of nature conservation (Government of Indonesia, 2011). National parks can apply for natural tourism exploitation to the minister of environment and forestry, and if allowed, then national parks can open such natural tourism businesses (Government of Indonesia, 2010).

##### Baluran National Park

Baluran National Park is a class II B national park located on the island of Java, the most densely populated island in Indonesia. This category is the smallest national park category of the four national park categories. The Baluran area is only 250 km<sup>2</sup>. This national park is known as Africa van Java because of the existence of the savanna ecosystem that dominates the national park area. Access to the national park is straightforward because it is located between the national tourist center in Bali, Indonesia's leading foreign tourist destination (Widodo et al., 2012), and densely populated cities on the island of Java. A regional road runs through the park, becoming the main tourist destination route. In addition to the savanna ecosystem, beach destinations within the national park can be visited via particular roads. Since this road was paved again, the number of tourists has skyrocketed from only a maximum of a thousand people on holidays to several thousand people every day (Hansen et al., 2020).

Even so, the tourism potential in Baluran is still not well developed. Despite being visited by nearly 100,000 people annually, more than 95% of local tourists pay for cheap entrance tickets and just pass through (Pudyatmoko et al., 2018). As a result, there is no positive economic impact on local communities. Local people only earn income from motorcycle taxis or simple accommodation.

One of the main problems of Baluran National Park's lack of attention to local people is that local people are considered illegal occupants. They came in 1975 in large numbers when the government allowed the use of some of the land for commercial purposes. The granting of this permit is considered invalid because, since 1962, the Baluran area has been designated a conservation area. The utilization permit expired in 2000, but local people were unwilling to leave, resulting in their status as illegal occupants. The village, district, and provincial governments support local communities, but the central government still does not recognize them (Pudyatmoko et al., 2018). However, a recent report said that the negotiation had already taken place and local community participation began to develop (Purnomo et al., 2020).

Tourists themselves do not interact with the local community. They are more interested in feeding the long-tailed macaque (*Macaca fascicularis*) that lives in large numbers in this national park. The interaction between tourists and long-tailed macaques results in a high population of these animals in Baluran, both on regional roads that run through the park, residential areas, tourist areas, and agricultural areas in and around the national park. The management of Baluran itself prohibits feeding these animals, but they also do not officially provide food to this monkey population. The high population of macaques has caused conflicts with local communities, but no national park management effort has been made to overcome this problem (Hansen et al., 2019).

Baluran national park management has been eradicating the invasive species of acacia (*Acacia nilotica*) to maintain the original savanna ecosystem. Neglect of social aspects makes the tourism situation that develops in Baluran, not by the principles of sustainable tourism.

### Kayan Mentarang National Park

Kayan Mentarang National Park (KMNP) is a

Type II A National Park with an area of 13,605 km<sup>2</sup>. KMNP is located on the island of Borneo, the only island in the world that belongs to three countries. Indonesia controls the central and southern parts of the island, while the northern part is Malaysian territory. Brunei is located on the north coast and does not directly border Indonesia. In line with this position, KMNP is part of a transboundary ecological conservation project, the Heart of Borneo (HoB), which involves three countries. The central ecosystem of Kayan Mentarang is the tropical rainforest. One of the action plans of the HoB is to develop ecotourism to promote socio-economic sustainability. KMNP has not become a priority for HoB ecotourism development (Keong & Onuma, 2021).

KMNP is located in an area that is difficult to access even though it has much ecotourism potential. KMNP management has identified six waterfalls, one ecotourism track, and one rock climbing. The potential for cultural and heritage tourism includes the management of mountain salt, stone age historical sites, and traditional Dayak cultural tourism (Adiman, 2022).

Accessing the KMNP poses a challenge for law enforcement across countries. Satellite imagery shows illegal loggers coming from the Malaysian state of Sabah. This timber theft cannot be overcome because of forest security officers' difficulty accessing this area (Fraser, 2019). Fraser (2019) recommends the use of air transportation for ecotourism needs as well as for forest monitoring activities.

The distance of access from the economic center also impacts local communities. Society generally remains impoverished due to challenging market access (Fraser, 2019). However, national parks and local communities coexist harmoniously and cooperate in conservation. Local communities with a strong conservation culture create participatory management that contributes to the low human footprint in Kayan Mentarang (Dwiyahreni et al., 2021).

## Komodo National Park

Komodo National Park (KNP) is an archipelago in the Lesser Sunda Islands designated as a national park in 1980. The leading ecosystem is the arid island and the surrounding waters. The area of this national park is only 1,733 km<sup>2</sup> and is still classified as type II-A. Even so, tourism development in this area is intense, especially because KNP is the only natural habitat of the giant lizard in the world, the Komodo dragon (*Varanus komodoensis*), and has a UNESCO heritage status site. The Indonesian government has a unique program to promote KNP at the international level. This national park is visited by around 107,000 tourists per year (Ardiantono et al., 2018). This ecotourism program provides a significant income for KNP and local communities through guide services, transportation, hospitality, and souvenirs.

However, some researchers argue that several failures in promoting sustainable tourism in the region (Lasso & Dahles, 2021). This problem is due to the high dependence of local communities on KNP. Before ecotourism was developed, local people generally became fishermen. The increase in the status of KNP makes them no longer able to become fishermen and switch professions to become boat operators or sellers of souvenir products. This profession is unsustainable due to a small market, short tourist season, dependence on cruise excursions, and too intense competition (Lasso & Dahles, 2018, 2020). Lasso and Dahles (2021) worry that the community will experience great difficulties when KNP destinations cannot operate optimally. This concern was evidenced by the low resilience of the community when the Covid-19 pandemic hit the KNP area, so this area had to be closed (Wibowo & Hariadi, 2022; Salahuddin, 2021).

Due to this intense tourism activity, some concerns have arisen regarding the impact of human activities on Komodo dragon conservation. The study of Ardiantono et al. (2018) identified a po-

sitive effect of greater body mass and a more reasonable body condition. On the other hand, behavioral problems such as attacking humans and livestock were also identified. This behavior change is due to tourists' habit of feeding the dragons. The researchers emphasize the importance of alternative ecotourism and spatial regulation of ecotourism.

One of the alternative tourism that is being developed in KNP is diving. Since the tightening of surveillance of the waters around the KNP, coral reefs have become very abundant. However, new challenges emerge. Over time the number of foreign tourists visiting to dive is decreasing, and the frequency of accidents is increasing. Studies show that diving sites around KNP are the most dangerous dive sites in Indonesia, mainly due to unpredictable weather factors (Wirakusuma et al., 2021).

Moreover, the sustainability of the KNP itself is in trouble. Until now, there are still threats of illegal fishing and poaching, while global warming significantly impacts coral reef life, mangrove forest conservation, and turtle nesting locations (Claudino-Sales, 2019). Regarding tourists, many international tourism review websites include KNP in the "No Visit" category because ticket prices are too high (Perdana et al., 2020).

With the trend above, the Indonesian government seems to be trying to maximize the economic potential of the KNP. Recently, there has been a discourse to build private infrastructure within the KNP area instead of outside the KNP area. This discourse is dubbed "Jurassic Park" because the Komodo dragons are the main attraction of this infrastructure. Local and national communities reject this plan because it will have an even more negative impact on the preservation of the Komodo dragon and marginalize local communities (Perdana et al., 2020). Local people seem to understand more about sustainable development as a balance between economic, social, and environmental interests (Rastegar, 2019).

## Management of South Africa National Parks

All national parks in South Africa are under the exclusive management of SANParks (South African National Parks), under the Department of Environment, Forestry, and Fisheries. The organizational structure of SANParks includes four managing executives: conservation services, tourism development and marketing, Parks, and Kruger National Park. There is also a special department for socio-economic transformation (SANParks, 2022a). This organizational structure reflects that SANParks, from the highest level of view, that national parks have a dual function: conservation and tourism. Socio-economic transformation is under these two functions. In addition, there are specializations for managing Kruger National Park from 18 other national parks. SANParks reflect the current trend across African countries where the concept of national parks is correlated with tourism rather than conservation (Njerekai, 2019). This prioritization of the tourism function allows SANParks to publish publications such as Responsible Tourism in SANParks: The Journey to 2022 (SANParks, 2022b). Studies show that overall, SANParks can reduce emissions by 1% per year, which is still below the target of 8% (Phophe & Masubelele, 2021).

Centralized tourism management is very different from the decentralized situation in Indonesia, where tourism is not even a priority in the function of national parks. Even so, the similarities between the two are under the ministry of environment and forestry. However, SANParks complies with the National Minimum Standards for Responsible Tourism (SANS1162) issued by the Ministry of Tourism. Indonesia also has a similar standard, the Indonesian National Standard (SNI) 8013:2014 Management of Nature Tourism, issued by the National Standardization Agency, completed in 2020. However, this standard is still in the process of a pilot project in Way Kambas National Park.

As much as 80% of SANParks operational

costs come from ecotourism revenues (SANParks, 2021), different from national parks in Indonesia, which 100% comes from the national budget while income from ecotourism is returned to the center as a form of non-tax state revenue, with an insignificant amount. The following presentation is carried out at the national park level to see how tourism is implemented with a centralized system in South Africa:

### *Kruger National Park*

Kruger National Park is on the border with Mozambique, with an area of 19,485 km<sup>2</sup>. The tourism infrastructure is located within this national park area, partly owned by the government and partly by the private sector. These facilities include 22 rest camps (some have campsites), 15 private lodges, several picnic areas, and one conference facility (Ferreira, 2020). There is also the Greater Kruger area (GKNP), a conservation area managed by local and private communities, located west of Kruger National Park with an area of 1,800 km<sup>2</sup>. Although only 10% of the Kruger National Park size, GKNP contributes to 60% of the employment, taxes, and GDP of the Total Kruger National Park (Kruger and GKNP) (Chidakel et al., 2020; Chidakel & Child, 2022). Kruger was founded in 1898 as a game reserve and officially became a national park in 1926. Two years later, Kruger opened tourism services. This situation is similar to Baluran, which was initially a game reserve in 1928 before becoming a conservation area in 1962 and finally becoming a national park in 1980. Currently, Kruger receives an average of 1.8 million tourist visits per year and almost reaches the existing social carrying capacity limit (Scholtz & van der Merwe, 2020), indicating the risk of over-tourism (Das Neves & Eusebio, 2021). Kruger National Park is considered to have significantly contributed to the economy at the regional level and on the African continent (Mukanjari et al., 2021).

Kruger National Park studies are pretty abun-

dant in academic circles. Case studies in three tourism organizations in Kruger identified that they still did very little to accommodate the requirements of SANS 1162. They did not have a sustainable tourism policy, did not inform sustainable activities, and made misleading claims about sustainability (Pope et al., 2019). Another study also identified 7% of tourist behavior in GKNP could be unwanted based on photographic analysis (Liang et al., 2019).

Meanwhile, for Kruger National Park itself, research confirms the impact of sustainable tourism on the ability of local communities to meet local community SDG (Sustainable Development Goals) development targets (Mabibibi et al., 2021). Surveys of visitors to Kruger National Parks show that visitors agree with Kruger's minimal environmental impact on tourism and offer many further improvements (Morrison-Saunders et al., 2019). Many complaints related to facilities collected by Ferreira (2020) during 2010-2017 showed many problems related to the quality of the facilities, such as damage, substandard maintenance, and hygiene problems. Other studies examine what accommodations are suitable for certain types of tourists and identify three types of tourists: self-service seekers, servicescape seekers, and self-safari seekers (Kruger et al., 2018). Another study seeks to build tourist segmentation to optimize national park revenues (Nduna & van Zyl, 2020).

There is also low utilization of educational facilities such as museums and libraries, which have also been established in the Kruger National Park area (Netshakhuma, 2021a). Efforts to disseminate educational facilities to the broader community were also not carried out (Netshakhuma, 2021b). Several cultural and heritage resources in Kruger are currently not being used optimally to support the local community's creative tourism strategies (Wessels & Douglas, 2021). The development of geotourism is also still shallow both in terms of marketing and quality (Matshusa et al., 2021). These studies reflect similar studies con-

ducted in tourist destinations and demonstrate the tourist-oriented nature of national parks in South Africa.

Concerning the welfare of the community, tourists observe the existence of poverty in the surrounding community, characterized by a high unemployment rate (Ferreira, 2020). Studies at specific locations in Kruger show remoteness, insufficient transportation, and low water availability. However, SANParks (2021) insists that what they have done will never be finished because the community always asks for more from whatever program they have. There is also evidence that sustainable tourism development in Kruger has an economic impact on local communities by providing jobs and businesses in the form of small and medium enterprises (Mattku et al., 2020). On the other hand, the study also highlighted the low level of community participation in supporting sustainable tourism, using a different method than SANParks (Malepe et al., 2022).

Studies in the environmental context show several threats from climate change facing Kruger National Park. This threat includes an increase in average temperature and extreme weather events, especially droughts, floods, and extreme heat (Dube & Nhamo, 2020). These extreme climate events significantly lead to large herbivorous species' death (Malherbe et al., 2020). There is also a threat from invasive species, particularly the common myna (*Acridotheres tristis*) (Pyskova et al., 2022). Even so, some efforts to manage elephant conservation effectively manage populations (Robson et al., 2018). This conservation effort, however, has had an impact on the associated banana ecosystem due to mass sterilization by elephants (Midgley et al., 2020).

#### *Kgalagadi Transfrontier Park*

Kgalagadi Transfrontier Park (KTP) is a transnational national park managed by Botswana's SANParks South Africa and the Department of Wildlife and National Parks (DWNP). KTP was



established in 2000 as a combination of South Africa's Kalahari Gemsbok National Park and Botswana's Kalahari National Park. The total area of this area is 38,000 km<sup>2</sup>. The two countries manage tourism through development plans initially made autonomously by each country. Of course, sustainable tourism is an integral program of Kgalagadi's development plan.

Studies in this area show that community participation has developed quite a bit. However, tourism is still in its early stages, and people are still less motivated to participate in tourism development. Lack of budget also increases the challenges of community participation in addition to low awareness (Lekgau & Tichaawa, 2021). Community support is high for KTP, but the tangible benefits that are currently felt are still low (Moswele et al., 2020). Another study revealed that many residents of the Bushmen ethnicity tried to sell crafts on the side of the road to KTP to make ends meet. An older adult who sells handicrafts stated that they were hunted to be evicted from KTP even though they were born and raised there. In 2002, the Bushmen's claim to part of Kgalagadi's land was compromised by granting eight lands, six of which were livable (Koot & Buscher, 2019).

Some studies were conducted to inform what needs tourists have for Kgalagadi. Van der Merwe et al. (2019) identified visitor segmentation based on their choice of interpretation. Meanwhile, another study revealed that the entrance fee to KTP is still lower than it should be. Currently, the KTP entry fee is only \$23, while the potential to be taken is \$144 (Mukanjari et al., 2021). Just like in Kruger, the main environmental problem in KTP is the uncertain availability of water (Chilowane et al., 2020). There is a conflict of interest in utilizing water resources between community needs and megafauna conservation needs (Weeber et al., 2020).

## 5. Discussion

The following table 1 is based on the description of the five national park management situations above. In this case, we compare each national park's economic, social and environmental performance.

The assessment results show three clear patterns of sustainable tourism outcomes in the two countries when viewed from the aspect of tourism vs. conservation orientation. First, the economic performance of national parks tends to be better in countries with a tourism orientation. The performance of Kruger and Kgalagadi is good compared to the high variation but tends to be low in national parks in Indonesia. Second, social performance in Indonesian national parks is better than social performance in South Africa. Third, environmental performance is also better in countries with a conservation perspective than a tourism perspective.

On the other hand, when viewed from a centralized vs. decentralized dimension, the national parks of South Africa have high consistency in terms of economic, social, and environmental performance. There is a very high variation in these three indicators across national parks in Indonesia. In Indonesia, there are cases where national parks are very low performing (Baluran) in the economy and high performing (Komodo). Baluran is socially low-performing, but Kayan Mentarang has high performance. Environmental performance is also very extreme. There are national parks with excellent environmental performance (Kayan Mentarang) and some with abysmal environmental performance (Komodo and Baluran).

The findings above show that the dichotomy of centralized vs. decentralized and conservation vs. tourism are different. Previous literature tends to equate these two dimensions where one is a consequence of the other. This research reveals that the centralized paradigm helps uniform the performance of sustainable tourism, whether it is all bad

or all good. When all is well, the pressure point will depend on whether the prescription emphasizes conservation or tourism. In the case of South Africa, because SANParks emphasizes tourism, it is only natural that economic performance is the best aspect of the three pillars of sustainable tou-

risism. The decentralized paradigm creates a high diversity of sustainable tourism performance in all domains in national parks in Indonesia. Indonesia adheres to a conservation paradigm; therefore, social and environmental performance is higher than economic performance.

Table 1 | Sustainable tourism management and results across national parks studied

National Park	Economic performance	Social performance	Environmental performance
Baluran National Park, Indonesia	Very low. The majority of local tourists with cheap fares and just passing through	Low. Local people are considered illegal occupants, but there is an agreement between local communities and the national park.	Very low. Changes in macaque behaviour that harm local communities and invasive species that harm conservation
Kayan Mentarang National Park, Indonesia	Low. There is no focus on ecotourism, and the location is difficult to access, but management has a list of tourism potential.	Good. Although, from the perspective of neo-developmentalism, the surrounding community is classified as poor, this is not a problem because the community still lives traditionally and participates in conservation. As a result, the locals' culture is greatly facilitated.	Very good. The environment is very natural with low human impact, but timber theft is still in border areas.
Komodo National Park, Indonesia	High. Promoted internationally and attracted foreign tourists. Nevertheless, there are threats to safety in marine tourism.	Medium. The community generally benefits, but sustainability is still questionable because the community is too dependent on KNP.	Very low. There is a behaviour change and a threat of climate change to coral reef ecosystems.
Kruger National Park, South Africa	High. Get a visit that is close to social carrying capacity. Even so, there is dissatisfaction from tourists with the condition of the facilities.	Low. Although the program generally impacts the community's economy, there is still much poverty and low community participation.	Very low. The risk of global warming, water conflicts, species death, invasive species, and mass sterilization
Kgalagadi National Park, South Africa	Medium. Tourism is relatively underdeveloped, but there are efforts to develop tourism sustainably.	Very low. There are ethnic groups who have been expelled from their territory and have to live by selling souvenirs. There are also conflicts over the use of water resources.	Low. The water crisis is between megafauna's interests and the community's interests.

Source: Own elaboration

The findings of this study confirm that sustainable tourism in protected areas is a managerial issue from a paradigmatic perspective: whether it is centralized or not (Candela et al., 2015) and whether it is conservative or tourism-centric (Povilanskas et al., 2016). Indeed, the discourse of sustainable tourism is a discourse that seeks to reconcile the two poles (Hasana et al., 2022), but it must depart from one point in the spectrum. The starting point of departure determines which pillar will be filled first to create sustainable tou-

rism. South Africa started its starting point with tourism; the first pillar that will stand out is the economic pillar. Indonesia has started its starting point with conservation, and the first pillar that will stand out is the environmental pillar, followed by the social pillar, then the economy. Over time, if both countries are consistent with their respective management models, South Africa will fill all their pillars of sustainable tourism together.

On the other hand, with its decentralization principle, Indonesia will produce several economi-

cally developed national parks while others are still limping towards fulfilling this pillar. Inconsistencies in this management model will create problems, as in the case of Komodo National Park. In this case, the management system that was initially decentralized became centralized with the involvement of the central government in making Komodo National Park a super destination that was promoted massively to replace national dependence on Bali. As a result, there is a tendency towards economic pillars rather than social and environmental pillars.

In a reductionistic manner, this research describes the problems faced in studies of the effectiveness of sustainable tourism: what factors determine the sustainability of tourism in protected areas (Birendra, 2022). We focus on the governance and ideological aspects of the national park. Then, is there sustainable tourism in national parks? According to this study, no such tourism exists because no national park can achieve excellent performance on the three pillars of sustainable tourism. The national parks studied only performed well on one or two pillars: Kayan Mentarang on the social and environmental pillar, Kruger and Komodo on the economic pillar. The solution to promoting ideal sustainable tourism must combine a centralized and decentralized approach, such as a polycentric approach (Nyaupane et al., 2020) or formulating other innovative approaches to address these governance challenges.

## 6. Conclusion

This study found that national parks in Indonesia and South Africa have different performances in sustainable tourism and none have maximum achievement. National parks in Indonesia tend to have mixed performance. Baluran National Park has low performance in all aspects: economic, social, and environmental. Kayan Mentarang National Park is socially and environmentally sound,

while Komodo National Park is high on economic pillars. On the other hand, national parks in South Africa tend to be uniform in terms of performance, and all of them are high on the economic pillar and low on the social and environmental pillars. This finding is explained due to differences in management paradigms and models. The conservation paradigm with the decentralized management model in Indonesia creates a high variation in the performance of sustainable tourism in the national parks of this country with an emphasis on social and environmental aspects. The tourism paradigm with a centralized management model in South Africa makes the performance of national parks relatively uniform and focuses on economic aspects. This research contributes to governance (centralized vs. decentralized) and ideology (conservation vs. tourism) in determining sustainable tourism performance in national parks.

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