

Constraints in Developing Ecotourism Based on Protected Areas: A Case Study of Jaffna District, Sri Lanka

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ABSTRACT

Ecotourism provides simultaneous benefits for conserving nature, respecting local cultures, and benefitting local communities. Generally, protected areas provide a suitable physical setting for ecotourism development, but they have various limitations in biodiversity conservation as well as the promotion of ecotourism. This study aims to assess the constraints in developing ecotourism in protected areas. Chundikulam, Delft National Park, and Nagar Kovil Nature Reserve were declared as protected areas after the end of the last thirty years of ethnic unrest in Jaffna district, Sri Lanka. The methodology includes qualitative interviews with key stakeholders such as government officers, managers of the private sector, and workers in non-governmental organizations. Twenty respondents were selected, and semi-structured interviews and focus group discussions were employed to collect qualitative data. The collected information was thematically analyzed. The categorized themes include awareness of the protected areas and ecotourism principles, biodiversity conservation, public participation, the livelihood of the local community, utilization of resources, and coordination among stakeholders. The results revealed that the respective government departments failed to gain support from stakeholders during the process of protected area boundary demarcation, as most people were against the initiative. As a result, this has become a barrier to gaining stakeholders' support which stifled ecotourism development. This study suggests that proper engagement and training for stakeholders should be a pre-

requisite for protected area management and ecotourism development, implementation of co-management activities, re-demarcation of boundaries of protected areas, and creation of buffer zones within an ecotourism park to develop ecotourism effectively.

Keywords: Constraints, ecotourism, local community, participation, protected area, stakeholders

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INTRODUCTION

Sri Lanka is a well-known tropical island destination among international tourists. It encompasses a wide variety of ecotourism destinations, such as physical and ecologically important natural habitats. Tropical rainforests, pristine beaches, mountains, waterfalls, different protected areas, and small islands are among the various attractions to visit. Tourism is one of the fastest-growing sectors in Sri Lanka, ranking as the third-largest exchange earner in the economy until the unexpected COVID-19 incident (Central Bank of Sri Lanka, 2020). The Sri Lankan Government has implemented many initiatives to make Sri Lanka one of the world's premier international destinations with the slogan: "Wonder of Asia." As a result, Sri Lanka was listed by the World Travel and Tourism Council in 2019 as one of the top 20 fastest-growing travel and tourism economic countries (Sri Lanka Tourism Development Authority, 2019). In Sri Lanka, different protected areas are declared under the flora and fauna protection ordinance. The country's tropical climate and topography have nurtured and produced a sunny climate, pristine beaches and warm seas, tropical forests, and rich biodiversity, all tourist attractions. There are more than 500 protected areas in Sri Lanka, and 109 protected areas are managed by the wildlife conservation department, which is well-established for tourism purposes (Department of Wildlife Conservation, 2020).

During the thirty years of civil war, the northern and eastern provinces of Sri Lanka were badly affected without any conducive environment for tourism development in these provinces. As far as Jaffna district is concerned, it is located right smack in the war zone and had to suffer until the reawakening after the end of the civil war 2009. Currently, there are many initiatives carried out to enhance the socio-economic condition of the local community and enhance the environmental condition. There is a possibility of more arrivals of tourists in the study area (District Secretariat Jaffna, 2018). Accordingly, tourism is an important sector in National and Provincial development plans. Foreign and local tourist arrivals have been increasing continuously since 2012 (Centre for Cultural Fund, 2019). Therefore, development initiatives are being accelerated to provide infrastructure and service facilities to promote the tourism sector (Northern Provincial Council, 2019). The study area has immense untapped potential for ecotourism, including seven small, inhabited islands, lagoons with mangrove vegetation, migratory birds, wild horses, intensive fishing sites, coral reefs, a beautiful coast with pristine dune beaches, and crystal-clear seas and plenty of tropical sunshine (Fernando et al., 2017).

Recently, different protected areas have been declared in the study area. It is one of the environmental conservation efforts which provides opportunities to promote ecotourism. For instance, Delft and Chundikulam National Parks have resource potential for ecotourism development.

At the same time, priority also has been given to promoting tourism based on these resources in the tourism agenda. At this juncture, developing ecotourism in protected areas will help to achieve some Sustainable Development Goals (SDGs), including SDG-3 (improve the well-being of local communities living in the marginal area, women empowerment) and SDG-15 (promote sustainable use of terrestrial ecosystems, sustainably manage forest and biodiversity). However, some weaknesses remain, such as the lack of public participation and awareness in protected area management and a lack of coordination and training among tourism stakeholders in utilizing these resources properly to promote ecotourism. Thus, this study tries to identify the constraints in developing ecotourism along the protected area.

LITERATURE REVIEW

Theoretical Framework

Engagement and integration of the role of various stakeholders have given ecotourism stakeholders a chance to acquire knowledge, share the benefits and address many conflicts and issues in ecotourism. It also offers opportunities for bottom-up partnerships in ecotourism development and research. Stakeholder engagement in the initial phase of ecotourism planning enables planners to identify and address conflicting preferences among stakeholder groups (Tekalign et al., 2018).

Many countries have begun to focus on sustainable tourism development

policies, but the policies are challenging due to the lack of shared responsibility. Therefore, stakeholders need to participate in sustainable tourism policy development and implementation to achieve greater tourism sustainability (United Nations World Tourism Organization, 2017).

In the study area, priority has been given to promoting tourism after the end of the protracted war in 2009, and also efforts have been taken to conserve the biodiversity in this region. As a result, national parks and nature reserves have been declared in 2015 and 2016. Undeniably, there is huge potential in a protected area to develop ecotourism. However, the concept of the protected area and ecotourism development are new aspects, and it is essential to increase the awareness and support from the stakeholders first. The government sector has complete control over managing protected areas in this region. In the context of ecotourism development, an integrated approach should be initiated. The delivery of responsibilities and services by the government, private sector, NGOs, and local communities is essential in developing sustainable ecotourism. In this respect, stakeholder theory can be applied to ensure the participation of stakeholders in this regard.

Protected Areas

The concept of protected areas attempts to promote biodiversity conservation with the socio-economic development of local communities living in surrounding areas. The International Union for Conservation of

Nature (IUCN) has contributed to tourism and conservation. Accordingly, ecotourism is considered to conserve nature (Feyers et al., 2017). The world conservation union defines a protected area as “a clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (United Nations, 2012). IUCN categorized protected areas into different levels and launched a global protected area program. The following are the various categories of the protected area: Strict Nature Reserve (Ia), Wilderness Area (Ib), National Park (II), Natural Monument or Feature (III), Habitat/Species Management Area (IV), Protected Landscape/Seascape (V), Protected area with sustainable use of natural resources (VI; Feyers et al., 2017).

The earliest initiative to conserve biodiversity in developed nations was relatively successful because of low population densities. Controversially, most developing countries with large rural populations depend on extractive activities in protected areas (Heinsen, 2012). Rural poverty exacerbates the need for access to natural resources in protected areas. Such a situation created conflicts between the local community and protected area management (Fedreheim & Blanco, 2017). Conservationists have insisted that the successful management of protected areas must include local people’s participation. It will help to increase the quality and effectiveness of conservation.

Protected Areas and Ecotourism Development

Over the last two decades, protected area policies have initiated sustainable tourism ideas (Mellon & Bramwell, 2016). Nature-based tourism in the protected area is increasing globally (Horton, 2009). Protected areas have huge potential for ecotourism development. Its goal is to conserve ecosystems and create environmental awareness among people (Azmaiparashvili, 2017). Most countries established protected areas, which later became iconic ecotourism attraction sites. In 1981, the Great Barrier Reef Marine Park in Australia was granted World Heritage status by UNESCO. The Port Douglas area claims to be the World’s only region of marine and terrestrial world heritage sites (White & King, 2009). Grand Canyon and Yellowstone National Park in the United States of America are well-known protected areas. Eighty percent of Chinese nature reserves employ ecotourism as a tool for economic growth (Feyers et al., 2017). In China, Yunnan and Sichuan provinces have rich flora and fauna, but these resources rapidly declined. As a result, it has established numerous protected areas (158 nature reserves) to conserve nature (Li et al., 2018). Worldwide conservationists have promoted ecotourism as a tool for conserving natural resources (Das & Chatterjee, 2015). Research has found that 91% of ecotourism operations were carried out in protected areas (Feyers et al., 2017). Many developed, and developing countries have declared protected areas to protect biodiversity through ecotourism development (Fennell & Cooper, 2020).

There are many studies linking protected areas and ecotourism development. In the last few decades, European countries such as the United Kingdom, France, Italy, and Germany have promoted nature conservation through ecotourism to protect the pristine conditions of mountain regions (Stubelj & Bohanec, 2010). In many countries, protected area-based ecotourism has evolved as an important destination, leading to improved ecotourism sustainability (Cini et al., 2012). For instance, the Celestina Biosphere Reserve in Mexico promoted as an ecotourism site in 1990, became an internationally competitive eco-tourist resort (Azcarate, 2010). In the 1980s, Costa Rica had very limited services for tourists. In the 1990s, the government expanded protected areas and established the new ecotourism hub from 1970 to 1980 (Horton, 2009). In the 2000s, Costa Rica became one of the world's leading ecotourism destinations. National parks and reserves included $\frac{1}{4}$ of the land area in Costa Rica (Jone & Spadafora, 2016). Likewise, Luang, Namtha, a protected area, is the leader in ecotourism and was a successful example of community participation, and this became a model for the development of rural livelihood and forest conservation (Roche, 2009). This type of tourism is the primary income earner in developing countries like Kenya, Nepal, Tanzania, Costa Rica, and Botswana (Mbaiwa et al., 2018). African countries also have become famous for wildlife tourism. For instance, in southern Africa, the tourism industry is mostly based on national parks and protected areas (Adeleke, 2015).

Ecotourism development is carried out based on natural resources. Marine-based ecotourism is increasing attraction. For instance, fisheries-based ecotourism is essential for sustainable human development (Mozumder et al., 2018). International tourist generates much higher income in Yunnan and Sichuan provinces in China and also encourage the Chinese youth to stay in their province rather than migrate to export processing provinces. Another story from the Sundaraban tiger reserve shows the generation of more income as well as improving human capital through children's education, proving that it is the ideal activity of ecotourism (Das & Chatterjee, 2005). Over the past two decades, ecotourism has played a meaningful role in the country's economy, mainly in low-income rural communities (Sanchez, 2018). Ecotourism addresses issues in a variety of dimensions, such as the support for wildlife and protected areas, diversification of livelihoods, environmental conservation and ethics, and strengthened resource management (Stronza et al., 2019)

Stakeholder Theory and Tourism Development

This study attempts to apply stakeholder theory in the tourism sector. Integration of various stakeholders has given a chance to enrich public knowledge and decision-making to solve the conflict. It offers the opportunity for bottom-up partnerships in tourism research (Tokhais & Thapa, 2019). Participation of stakeholders is crucial for tourism development in developing countries (Tekalign et al., 2018). Policymakers pay

attention to tourism economic income and prioritize the minimization of conflicts among multiple stakeholders (Gossling et al., 2012). Lack of community awareness and stakeholder participation in ecotourism were the main challenges that caused illegal activities resulting in severe challenges to park authorities. For instance, the park authorities established checkpoints to control the illicit activities of the local community with the help of militarization to protect the resources in the Maya biosphere reserve (Devine, 2014). Tanoboase is a sacred natural site in Ghana that has not been adequately regulated to involve the local people in the planning and development of ecotourism.

The co-management approach in ecotourism development is an appropriate method, and it is essential to arrange professional training with NGO's help and offer financial aid to startup capital to implement this approach (Adom, 2019). According to the study of Tekalign et al. (2018), a conflict has been identified between forest management and the local community in the Menagesha Suba forest reserve in Ethiopia, and the study revealed that stakeholder engagement in the initial phase of tourism planning enables to identify conflicting preferences among stakeholder group. The study indicated that lack of information, training, ineffective centralized public administration, and coordination are the main constraints for successful ecotourism development along the protected area (Bello et al., 2017).

The literature survey clearly shows that most countries that promote ecotourism in protected areas have achieved great success through the engagement and involvement of stakeholders. Hence, in Jaffna District (the study area), protected areas are envisaged to have great potential in promoting ecotourism. However, it is also envisaged that there are many difficulties faced by the tourism sector in integrating stakeholders into mainstream tourism development initiatives. This study tries to identify these constraints and find solutions to the development of ecotourism in protected areas.

METHODOLOGY

Study Area

Sri Lanka is divided into nine provinces, and the Jaffna district is in the Northern province. The Northern province comprises five districts, and Jaffna District is one of them. The North and Eastern provinces were badly affected and damaged during the internal war. After the end of the internal war in 2009, possibilities arose for the promotion of the tourism sector, which was identified as one of the strategies for the reconstruction of the economy. However, tourism development in the study area is slow, resulting in it languishing in the initial stage of development. Presently, there are many development activities carried out to enhance the socio-economic and environmental sectors of this region. At this juncture, priority has been given to Jaffna to promote the tourism sector in national and regional development plans. Significantly, Jaffna District is the main center of the

Northern Province, possessing a variety of rich natural resources such as abundant fisheries, scenic coastal landforms, pristine beaches, beautiful warm seas, enchanting small islands, unique geology, long history, mystical culture, and rich biological features. After the end of the war on ethnic conflict, different types of protected areas have been declared in this region, including Chundikulam and Delft national parks and Nakar kovil Nature Reserve.

A major part of Chundikulam National Park is located in Vadamaradchi East Divisional Secretariat Division along the Eastern coastal belt of Jaffna district with other parts in Kilinochchi and Mullaithevu districts. The existing Chundikulam bird sanctuary was declared in 1938 to conserve the biodiversity along the Chundikulam lagoon, but it was included only in Chundikulam village (J/435). In 2015, the sanctuary area was upgraded to National Park status with boundary expansion (19565 ha). It comprises the following villages-Chundikulam (J/435), Pokkaruppu (J/344), Mullian (J/343), and Vettilaikkerny (J/432), all within Jaffna District. Interestingly, migratory birds are found to make their stopovers here during the seasonal change. Adjoining the Chundikulam lagoon is a dense area of mangrove forests that serves as a habitat for a great variety of native species of birds and animals. Moreover, this lagoon has excellent potential for prawn and crab culture.

The Nakar kovil Nature Reserve is a typical mangrove forest area along the Thondaimanaru lagoon, which is a habitat

for migratory birds and was declared a nature reserve in 2015. This boundary has included nineteen GN divisions, and most of the land area has been included in the Vadamaradchi East Divisional secretariat (J/423, J/424, J/425), with the remaining area in a lagoon.

The Delft National Park has its major part located on Delft Island and was declared a national park in 2015, mainly for the conservation of wild horses as well as other natural conservation. However, one-third of the total area of this island, which is meant for various development activities, has come under this National Park boundary and includes the Grama Niladari divisions of Delft South (J/02), center west (03), center (J/04), center east (J/05) and east (J/06) region. Figure 1 shows the location of national parks in the study area.

Data and Methods

Qualitative methods are employed in this study. This method is largely used to explore the inner experiences of participants (Corbin & Strauss, 2013). Qualitative data collection methods include interviews, focus group discussions, and field surveys to identify the constraints related to ecotourism awareness, protected area management, biodiversity conservation, and utilization of local resources for ecotourism development. Based on the stakeholder theory, members of community-based organizations, officers of government departments working in tourism and environmental conservation works, officers of non-governmental organizations, and hoteliers have been included as stakeholders in this study.

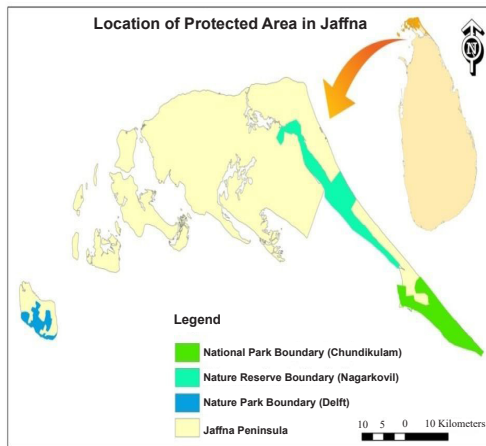


Figure 1. Study area

Focus Group Discussions (FDG) were set up among those living near the protected area. Members of Community-Based Organizations (CBOs) with functioning effectively to ecotourism have been selected as focus groups to discover villagers' views during the first phase of the field visit. A total of six focus groups have been selected for the FGD discussion sessions. The introductory information was provided by the researcher who participated in the discussion. Additionally, assistance has been received from Grama Niladaris in respective areas to identify the Community-Based Organizations. People from the adjoining areas of Chundikulam National Park, Delft Nature Reserve, and Nagar Kovil Nature Reserve have been chosen for discussion. Six to eight members participated in each group. Information related to the knowledge of protected area management and its importance, ecotourism development, community awareness, and willingness to participate in protected

area management and ecotourism-related activities, opportunities, and challenges in ecotourism development were collected. This focus group discussion was conducted from January 2020 to March 2020.

In-depth semi-structured interviews were also conducted with key stakeholders. The stakeholders selected include Northern Province Tourism Bureau officers, the Department of Wildlife Conservation, the Coastal Conservation Department, the Central Environmental Authority, the Vadamaradchi-East Divisional Secretariat, the Delft Divisional Secretariat, Non-governmental organizations, and Hoteliers. The length of each interview was 30-45 minutes. A total of 20 officers were selected for the interview. Judgment sampling was used as an appropriate method at the initial stage to identify the officers with experience in ecotourism-related administrative work. Subsequently, the snowball sampling method was used to identify appropriate respondents. Semi-structured questions were designed to measure knowledge, awareness, and challenges concerning ecotourism development in protected areas.

Field visits were carried out in three phases from January 2020 to February 2021. The first phase of the visit focused on familiarizing with the study area and observing the site's potentials and issues, viz., the real situation. Following this, subsequent arrangements were made to conduct focus group discussions. Finally, revisits were made to observe the changes or progress.

The thematic analysis method has been used to analyze primary data collected via In-Depth semi-structured interviews and focus group discussions. Accordingly, major constraints on ecotourism development in protected areas have been identified through this analysis. The interview was transcribed in English with related data in the first step. Then coding was employed. Based on the coding, themes have been defined and categorized. Finally, the report has been written descriptively. Accordingly, the following themes have been classified: awareness of the protected area and ecotourism development, biodiversity conservation and public participation, the livelihood of the local community, utilization of resources, and lack of coordination among the stakeholders.

RESULTS AND DISCUSSION

Awareness of Protected Areas and Ecotourism Development

The employment of protected areas, together with an in-depth understanding of ecotourism, are vital ingredients for the development of successful ecotourism projects in an area. There should be clear knowledge, awareness, and understanding among the stakeholders, with no conflict. Opinions have been collected from stakeholders to identify the perception of ecotourism development along the protected area. Accordingly, more than half of the officers (60%) from the interview respondents have knowledge and ideas related to protected areas and ecotourism development. Particularly, hoteliers have

clear knowledge and idea about ecotourism in comparison to other stakeholders. Hoteliers have to work in a competitive market and satisfy tourist expectations. They are aware of ecotourism-related activities. However, even though hoteliers are interested in expanding ecotourism-related activities in the study area, they face many difficulties in gaining support from other stakeholders.

In addition, the local community's knowledge and awareness are essential to achieve a successful expected outcome in ecotourism development. Community views have been assessed through focus group discussions. Accordingly, five focus groups among six showed a lack of understanding about the importance and management of protected areas and opportunities to develop ecotourism. Focus groups adjoining the Chundikulam National Park and Delft Nature Reserves show a lack of awareness and interest in participating in ecotourism-related initiatives. As far as Jaffna District is concerned, tourism has developed gradually since 2009. Local communities were trapped in the long-term ethnic war. Therefore, they generally lack the awareness of the potential of ecotourism to enhance their livelihood and are not interested in participating in ecotourism development activities. During the interview, government officers mentioned that the most important challenge in ecotourism development is the lack of awareness and participation among the local communities in ecotourism-related projects. Results indicate that the majority of the local communities were not aware

or convinced of the importance of the involvement of the local communities in ecotourism development initiatives. They also lack an understanding of how they can play a vital role in developing ecotourism and protected area management. If the local communities have awareness and interest, they can get employment and income from the ecotourism sector, and it can be supported to reach sustainable development goals such as improvement of well-being and empowerment of women.

Non-governmental organizations can directly or indirectly support and promote ecotourism in their activities, such as coastal conservation and cleaning, motivation of eco-friendly products, increasing vegetation cover, and environmental education. Unfortunately, these initiatives were unsuccessful due to the lack of support from the local communities as well as government institutions. Consequently, NGOs are only working with selected interest groups on an ad hoc basis in environmental conservation with the support of well-wishers.

Biodiversity Conservation and Public Participation

National parks' demarcation and existing sanctuary boundary expansion were implemented in 2015 after thirty years of protracted ethnic war ended in 2009. The Wildlife Conservation Department did all these boundary demarcations. The result created an adverse situation among the stakeholders. It led to a negative impact that hindered the participation of local people in protected area management. The public

made their complaint to the concerned authority to re-demarcate the boundary. Regional administration also facing many difficulties in this regard. It is the major challenge that remains unresolved in the management of protected areas. At this juncture, tourism authority faces many difficulties in promoting ecotourism based on a protected area, and they cannot gain public participation because the local people fear that the land utilized for their livelihood activities will be further encroached upon within the protected area. Under this circumstance, it has become a barrier to the implementation of ecotourism development initiatives.

Furthermore, it was found that the activities of the protected area management authority are not people-friendly and threatened the people by various restrictions. Due to this reason, the respective authorities failed to get support from the public to manage the protected areas. It has created conflict between people and the park. Further, strict restrictions have been enforced to control public activities, such as restrictions for fishing, agriculture activities, and natural resource collection within the park. It is very important to note that environmental management practices will not be successful without public participation.

Moreover, proper environmental conservation initiatives have not been taken by the park authority until now. For instance: The area of wild horses at Delft Island is considered an important ecotourism site in Delft Island. Here, food and water are scarce for horses, and it is a major problem

during drought seasons as many incidences of death of horses have been reported during acute drought seasons. At this juncture, there are no active plans to sustain this habitat and supply enough food and water during the adverse drought seasons. In the future, this biological diversity will be threatened due to the impact of climate change, and no measures have been taken by the respective authorities to protect the physical and biological resources within the protected area. It has also become a barrier to ecotourism promotion. Undeniably, gaining public support and proper management practices will help to carry out biodiversity conservation within protected areas.

The Livelihood of the Local Community

The livelihood of the local community has also been affected by the protected area

declaration. Chundikulam bird sanctuary included only a Chundikulam Village (J/345) within the Jaffna District. This bird sanctuary has been upgraded to the status of a national park, and the new boundary has been expanded to adjacent three Villages (J/344, J/343, J/342) in the Vadamaradchi Divisional Secretary area. The following Figure 2 shows the boundary of the Chundikulam National Park.

Another important aspect is the huge loss and damage of properties because of the protracted ethnic war and the 2004 tsunami. At present, people have resettled and started their livelihood activities. Meanwhile, the boundary expansion notice threatened the adjoining area inhabitants, and they are against these activities because their private lands included within this boundary are being used for various purposes such

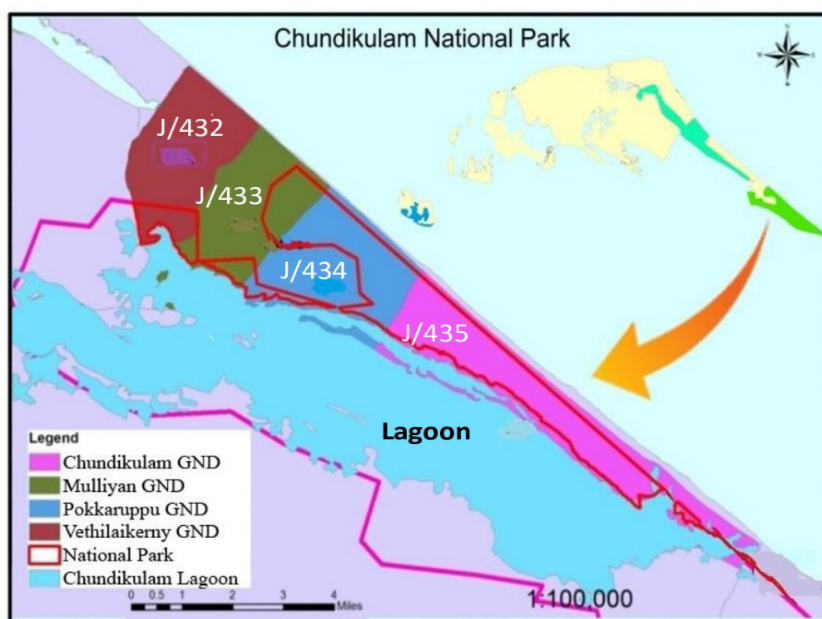


Figure 2. The boundary of Chundikulam National Park
 Source: District Secretary, Jaffna (2020)

as tsunami housing schemes, schools, hospitals, religious centers, community infrastructure, paddy land, agriculture lands, coconut and Palmyra, fishing huts, farming, and dry fish production sites. People from Chundikulam village have not yet resettled due to a lack of infrastructure and livelihood facilities and their paddy land; coconut land and fishing sites are also included within the boundary. A school in Mullian GN Division (J/433) is the only secondary school that served the adjoining 4 GN division within the boundary. During the field visit, it could be identified. The northern part of the National Park boundary has 31 km along the coastal line. The “Madal” fishing site is one of the significant livelihoods with long history along the coast of the designated area. However, the control measures strictly implemented by the wildlife conservation department hinder the livelihood activities within the park. Therefore, fishermen face many difficulties in carrying out their livelihood activities. A total of more than 300 fishing families (lagoon fishing, deep sea fishing, and dry fish production) at Mulliyan (J/433) and Pokkaruppu (J/434) have been affected by these initiatives. Due to this reason, local people adjoining the protected area are against any initiatives of development within the park. Meanwhile, ecotourism initiatives will not be possible without the contribution of the local community.

Nagar Kovil Nature Reserve includes 19 GN Divisions. Most land area is included within Vadamradchi East DS Division. The

three villages of Nakar kovil East (J/423), Nakar kovil West (J/424), and Nakar kovil south (J/425) are included in this area. A tsunami housing scheme area, home garden, grazing land, Palmyrah land, coconut land, proposed settlement area, paddy land, lagoon fishing, deep sea fishing, and dunes sites are also included within this boundary. Furthermore, the cottage industry based on coconut and palmyrah, which used to thrive in this area, has also been negatively affected. Land adjacent to the protected area is remote and marginal, and the people in this area have limited infrastructure and services compared to other parts of the Jaffna District. These people depend on resources within the protected area for their livelihood. Under these circumstances, it is unsurprising that local people are reluctant to implement the tourism project within the protected area. The following Figure 3 shows the boundary of the Nakar Kovil nature reserve.

Delft National Park is one of the most important wildlife sanctuaries in Sri Lanka, as it is the only region for wild horses in the country. The declaration of the national park is one of the important initiatives in environmental management practices. However, one-third of the total area of the island meant for developmental activities has come under this National Park boundary. It included the Grama Niladari division of the south, center, and west region. As such, although the park is good for wild horses, it has created a barrier to local people in their livelihood activities. Even development

activities by the government institutions park. Figure 4 shows the boundary of Delft are also unable to be implemented in the National Park.

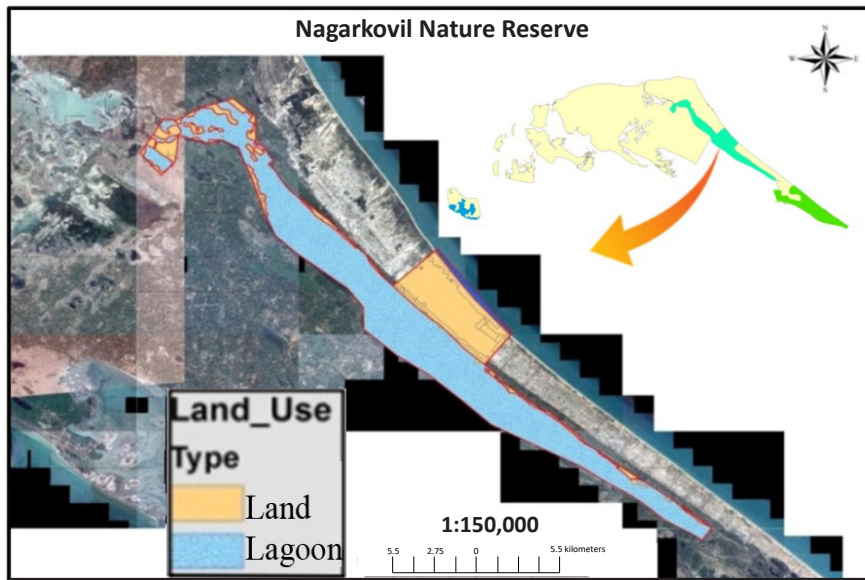


Figure 3. The boundary of Nakar Kovil Nature Reserve
 Source: District Secretary, Jaffna (2020)



Figure 4. Boundary of Delft National Park
 Source: District Secretariat, Jaffna (2020)

The wildlife conservation department enforces boundary expansion notices and restrictions. These initiatives threatened the local people, and they feel and fear that their land will be further encroached upon by these activities. In the initial stage of the protected area declaration, respective government departments failed to gain stakeholder opinion. As a result, there are barriers to gaining public participation to initiate ecotourism development projects.

Utilization of Resources

National parks located along the coastline have great ecotourism potentials such as bird watching, wild horses watching, sight-seeing of white dune coastal beaches, and enjoyment of marine-based ecotourism activities. However, the tourism authority faces challenges in getting approval from the park authority to establish basic amenities for ecotourism development, like bird watching and site seeing. Although a variety of resources is available for ecotourism development in the study area, it is important to notice that there is a lack of awareness and training among tourism stakeholders and under-utilization of available resources to attract tourists. It is one of the major constraints in developing ecotourism in the study area.

Delft Island has been prioritized to promote ecotourism in regional and national tourism strategic plans and targeted to utilize the local resources, especially fishing and Palmyra resources. More than half of the population living on this Island is involved in fishing activities. However, the fishing

community is not interested in reaping the potential of ecotourism. They are only fisher folks and do not have other skills to maximize these resources for ecotourism development. Further, the Palmyra trees spread abundantly within the protected area, and there has been increasing demand for Palmyra products among the tourists in the Jaffna District. Still, the Palmyra resources have not been utilized optimally so far. If these resources are exploited and utilized properly, there are huge opportunities to promote small-scale industries to attract tourists with different experiences to this Island. It will create job opportunities and income generation for the local people on the island. The younger generation of youths can also be involved in the provision of tourism products and services.

Lack of Coordination Among the Stakeholders

In the study area, it was found that some of the ecotourism sites failed to get the expected outcome without proper stakeholders' consultation during site selection. One of the ecotourism sites developed at "Mandaithevu Island" did not attain the status of a tourist attraction site because of a lack of coordination among the stakeholders. Local people were not aware of it. Local authorities and Divisional Secretariat were struggling to monitor this site.

In addition, there is a lack of environmental concern among the stakeholders. Even though private investors are interested in investing in

ecotourism-related services in the study area, the concerned authorities did not find a mechanism to guide the investors to find out the possible investment for ecotourism promotion. Private investors are only actively purchasing land along the coastal site and constructing restaurants and other facilities. However, the investors focus solely on profit and disregard environmental conservation. Further, Casuarinas Forest, located along the coastal belt near the Nagar Kovil nature reserve, has been identified for ecotourism development. An awareness program on Casuarinas tree plantation has been initiated to protect the forest from adverse anthropogenic activities. It has not reached the expected success level because of a lack of stakeholder participation.

In the case of government institutions concerned with ecotourism, there is often a lack of inter-departmental coordination in relation to ecotourism and environmental conservation activities, particularly on resource utilization and protected area management. For instance: there is a lack of coordination among the Wildlife Conservation Department, Central Environmental Authority, and Divisional Secretaries in managing the protected area. The Wildlife Conservation Department has carried out protected area boundary demarcation without proper consultation with stakeholders. Therefore, regional administrators face many difficulties in managing parks and public complaints. It was also observed that there are no concerted efforts among the government institutions for integrated and comprehensive management

of the protected areas. Each government department is merely managing the parks within its jurisdiction.

CONCLUSION

This study concludes that tourism development, especially ecotourism development, has been given much attention in Jaffna District after the long civil war. It is both good for economic gain as well as environmental conservation in general. The thrust for ecotourism has been a milestone as far as tourism is concerned. Jaffna district is special and unique in many aspects. It has many unique and interesting physical and biological resources. However, despite these efforts, there are some weaknesses that are barriers to successful ecotourism development. One weakness is that the rich natural resources in the area have not been fully tapped but are underdeveloped. Declaration of protected areas also creates opportunities to promote ecotourism. However, people did not realize its effects on local communities. Activities of the park authority are not people-friendly, and the strict rules and regulations of the park are barriers against the people's livelihood activities. Hence, while parks are generally beneficial to natural resources and environmental conservation, they are negatively affecting people's livelihoods. It has resulted in many difficulties and hurdles in the promotion and development of ecotourism based on protected areas. Overall, the lack of comprehensive understanding among stakeholders on basic ecotourism principles and sustainable

ecotourism has resulted in an ineffective state of ecotourism in the Jaffna District.

Recommendation

Responsibility for protected area management must be shared among the government, NGOs, the private sector, and local communities. Co-management activity is the suitable way forward to achieve effective management of protected areas. For the successful participation of the local people, there is a need to increase awareness among people living adjoining the protected area. It is essential to re-demarcate the boundary with stakeholders' participation. It will be possible to avoid conflict between the protected area authority and other stakeholders. Nagar kovil Nature Reserve boundary can be shifted along the Point Pedro–Maruthankerny road. Likewise, there is the possibility of moving the Chundikulam national park boundary to the existing sanctuary boundary (included only with Chundikulam village). In addition, there is a necessity to establish buffer zones (500m) within the protected area and clearly define the public activities within that zone.

Meanwhile, public behavior needs to change in an environmentally friendly manner within the protected area while utilizing the resources. There is a need to conduct awareness programs and proper training for the local people as well as other stakeholders. While initiating the ecotourism project along the protected area, adjoining area resource potentials like traditional fishing sites, pristine beaches, and dunes sites should be taken into consideration.

These can provide opportunities to increase different types of ecotourism products in this region. Local people's participation should be given emphasis in ecotourism, and it is considered a tool for strengthening the socio-economic and environmental conditions of the local people. Optimum utilization of local resources with the involvement of the local community will create new job opportunities and enhance the economic condition as well as biodiversity conservation. It will then, in turn, support the achievement of Sustainable Development Goals (SDGs).

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