

THE CONCEPTUAL FRAMEWORK OF OUSSUDU LAKE: A SUSTAINABLE TOURISM HOTSPOT IN PONDICHERRY

Ramyasri *

Abstract: Pondicherry is one of the major tourist destinations in India and it has received many tourists from all over the world every year to savor its unique culture and heritage and its many tourist spots, from where Oussudu Lake is considered to be the emerging tourist spot. This lake is remarkable by freshwater, attractive scenic beauty and more than 190 varieties of birds existing there during the year. Many research papers have discussed the Wetland Ecosystem, Ecotourism, and the kind of Biodiversity availability at the terminus, but missed out on the concept of sustainable tourism. This study analyses the key issues of the lake and provides a comprehensive strategy to boost the destination as a sustainable tourism hotspot and thereby fills the gap which exists in the other research papers. The research gives a clear idea about the Oussudu Lake, its resources, threats, and how the place can be made sustainable available for the future generations to come by preserving and conserving its ecological and biological resources. Further, the study also suggests that this can only be attained by the coordination and cooperation of local community people, stakeholders, Non-Governmental Organizations, and most significantly, by preparing the tourist to be environmentally and socially responsible for the destination. Effective management with a continuous planning process is needed to attain sustainable development in the destination.

Keywords: Tourism; Ecotourism; Sustainable Tourism; Sustainable Management; Tourism Planning.

O QUADRO CONCEITUAL DO LAGO OUSSUDU: UM HOTSPOT TURÍSTICO SUSTENTÁVEL EM PONDICHERRY

Resumo: Pondicherry é um dos principais destinos turísticos da Índia e muitos turistas de todo o mundo chegam aqui todos os anos para saborear sua cultura e herança únicas e visitar seus muitos pontos turísticos, dentre os quais destaca-se o emergente atrativo turístico Lago Oussudu. Este lago possui destaque por sua porção de água doce, beleza cênica e variedade de mais de 190 de pássaros ao longo do ano. Estudos anteriores discutiram o ecossistema de zonas úmidas, ecoturismo e o tipo de disponibilidade de biodiversidade no terminal, mas deixaram de lado o conceito de turismo sustentável. Este estudo analisa as principais questões do lago e fornece uma estratégia abrangente para impulsionar o destino como um hotspot de turismo sustentável. A pesquisa dá uma ideia clara sobre o Lago Oussudu, seus recursos, ameaças e como o local pode se tornar sustentável para as gerações futuras, preservando e conservando seus recursos ecológicos e biológicos; e também sugere que isso só pode ser alcançado com a coordenação e cooperação das pessoas da comunidade local, stakeholders, Organizações Não-Governamentais e, mais significativamente, preparando o turista para ser ambiental e socialmente responsável pelo destino. Uma gestão eficaz com um processo de planejamento contínuo é necessária para o desenvolvimento sustentável do destino.

Palavras-chave: Turismo; Ecoturismo; Turismo Sustentável; Gestão Sustentável; Planejamento Turístico.

LE CADRE CONCEPTUEL DU LAC D'OUSSUDU: UN HOTSPOT TOURISTIQUE DURABLE EN PONDICHERRY

Resumé: Pondichéry est une de les principales destinations touristiques de L'Inde, ou arrivent de nombreux touristes du monde entier chaque année pour savourer sa culture et son patrimoine uniques, et aussi ses sites touristiques, parmi lesquels se détache le lac d'Oussudu. Il est considéré comme le site touristique emergent etait remarque par l'eau douce, sa beauté pittoresque attrayante et plus de 190 variétés d'oiseaux observées tout au long de l'année. De nombreux documents de recherche ont discuté de l'écosystème des zones humides, de l'écotourisme et du type de biodiversité disponible au terminus, mais ont omis le concept de tourisme durable. Cette étude analyse les problèmes clés du lac et fournit une stratégie globale pour faire de la destination un point chaud du tourisme durable et voit ainsi l'écart qui existe dans les autres documents de recherche. L'étude suggère également que cela ne peut être atteint que par la coordination et la coopération des communautés locales, des parties prenantes, des organisations non gouvernementales et, surtout, en préparant le touriste à être écologiquement et socialement responsable de la destination. Une gestion efficace avec un processus de planification continu est nécessaire pour atteindre un développement durable dans la destination.

Mots clés: Tourisme; Écotourisme; Tourisme Durable; Gestion Durable; Planification du Tourisme.



Licenciada por Creative Commons
Atribuição Não Comercial / Sem
Derivações / 4.0 / Internacional

* Part –Time PhD Research scholar in Dr. MGR educational and Research institution (Pursuing, 2020 batch), Chennai, Tamilnadu, India. MBA Tourism, Pondicherry University (2012-2014 batch), Puducherry, India. Working as Guest Lecturer in Tagore Govt. Arts and Science College, Puducherry, India. Subjects of interest: areas: leisure Tourism, Responsible Tourism, Sustainable Tourism. ORCID : <https://orcid.org/0000-0002-3857-7433> [ramyasri101289@gmail.com]

1. INTRODUCTION

Pondicherry is considered to be a tourist destination for a calm and relaxed holiday for tourists in and about the globe. The French colonies, Indo-French culture, food and the serene beauty of seashore attracts leisure and heritage tourist from all over the globe.

Among the major tourist spots in Pondicherry, Oussudu Lake has got its importance when it comes to must-see places in Pondicherry. This spot has got serene water and picturesque landscape and abundance of natural beauty altogether make Ousteri Lake as one of those perfect locations in Pondicherry to spend quality time with friends and family. This waterbody spread over an area of 390 hectares of land and it has been considered as one of the important wetlands of Asia by the International Union for Conservation of Nature and Natural Resources (IUCN).

The Ousteri lake structure includes wetland, mudflat, and water. Despite that, the place is rich in plant life and fauna. The vegetation ranges from several sorts of trees to small herbs. The later one fauna includes a large avifaunal species that consist of both native as well as the migratory birds which arrive here during summer and winter.

The concept of sustainable tourism helps in maintaining the tourist spot Oussudu lake in the long run by preserving and conserving the ecological resources and provides an economic benefit to the local stakeholders and the Government. Thereby, minimizing the threats that occur at the destination. In this study, we aim to re-evaluate the studies and threats of tourism which is available at the Oussudu lake, through a critical analysis highlighting the aspects related to the methodology for the development of sustainable tourism.

2. THEORETICAL REVIEW

Wetland provides numerous services to humans and the environment. It helps to provide water and maintain the streamflow, restore groundwater, provides water to fish and the wildlife habitat, and helps for leisure and recreation tourism services to the society and local community people according to Devabalane (2014).

The concept of sustainable tourism has started in the year of the 1970s (Zhenhua, 2003). The estimate of sustainable development was first highlighted by the International Union for the Conservation of Nature and

Natural Resources (IUCN, 1980) in its World Conservation Strategy.

In 1987, the Brundtland Commission report defined sustainable development as "development that conforms to the demands of the present without compromising the ability of future generations to satisfy their own needs" (WCED, 1987:43).

The Brundtland Commission stated that sustainable growth is not a determined state of harmony, but instead a dynamic process of changes which 'are all in harmony and enhance both current and future potential to satisfy human needs and aspirations' (WCED, 1987:46). The most usual and widely accepted definition for sustainable tourism was stated by The World Tourism Organization:

'Sustainable Tourism Development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, and biological diversity and life support systems'. (WTO, 2001 : s/).

In the concept of Sustainable Development in tourism (Bramwell and Lane, 1993) affirm that in general four basic principles seem crucial to the concept of sustainability:

1. The idea of holistic planning and the formulation of strategies for sustainable tourism development.
2. The importance of maintaining essential ecological factors.
3. The need to maintain cultural inheritance and biodiversity.
4. Develop productivity in the long-term for future generations.

3. THE OBJECTIVES OF THE STUDY

The major aims of the present study are,

- To study about the current tourism status of the Oussudulake.
- To address the key issues of the destination and
- To evolve a comprehensive scheme to boost the destination as a Sustainable tourism hotspot.

4. METHODOLOGY

This work was developed through the critical analysis of studies of tourism which exists in the Oussudu Lake and various vulnerabilities and threats available at the destination. The methodology supports the sustainable tourism activity to be carried over at the destination to conserve and preserve the destination and its ecosystem for the long-term. The methodology adopted during the study is through secondary sources.

Because of the lockdown as a result of COVID-19, the report has been taken using only the secondary source of information. This secondary information on various aspects was collected from various departments of the Government of Puducherry and Tamilnadu websites and other published research articles and reports from Newspapers. The time taken for the study has been for 2 months, from February to March 2020 and hence the study has its limitation.

Costa, Emmanuel & Cavalcanti de Miranda (2016) in his article stated that the idea of sustainable development in tourism involves the recognition of the negative impacts that the activity may have as well as the management actions necessary to minimize/stop them so that sustainability is achieved. The carrying capacity has been pointed out as a possible tool capable of considering such problems, however, it does not adapt in face of the complexities found in the tourist activity (Lindberg et al., 1996).

The concept of carrying capacity also plays a major role in determining sustainable tourism development at the destination. The carrying capacity is based on determining the maximum number of

users that a visiting area can support without significant impacts occurring at the destination (STANKEY; Manning, 1986).

5. ANALYSIS

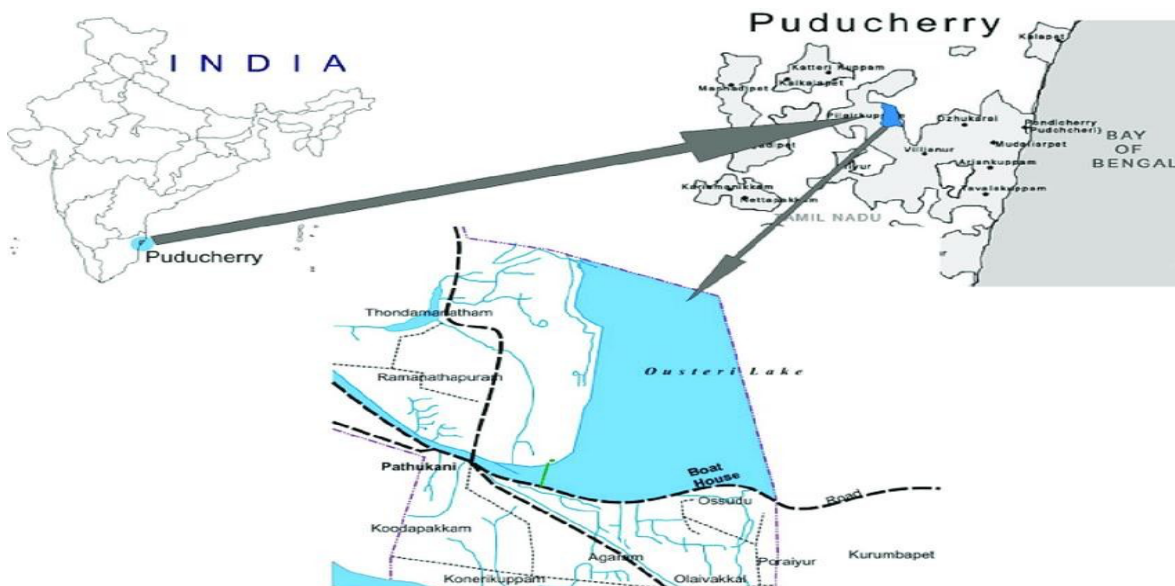
5.1 Context and Object of Analysis

5.1.1 Origin of the Study

Devabalane (2014) in his research article stated that Ousteri lake is situated near the village Oussudu, at 11°57 N, 79°45 E, partly in Pondicherry and most of it in Tamil Nadu state. Figure1, illustrates the exact position of an Oussudu lake on the map. The lake has got 7 km circumference and 15 km² of the catchment area. The 410 hectares of Oussudu Lake which lies in the Tamil Nadu are in rural settlements and the 310 hectares of the lake which lies in Pondicherry are predominantly in the suburban portion of the province.

Ousteri Lake is the largest freshwater lake in the Pondicherry region. The lake continues to approximately 800 hectares in which 390 hectares lie in Pondicherry and the rest in Tamil Nadu. It can store 540 million cu. ft of water and this place is capable of irrigation of up to 3800 hectares of land (Abbasi [11]). Agreeing to the legend, in recognition of Oosi's altruistic service, the lake was named Oosteri which in due course of time the name changes as Ousteri.

Figure 1: Location of Oussudu Lake and Birds Sanctuary, Pondicherry part.



Source: Murugesan; Arun & Prusty (2013).

5.1.2. Oussudu Lake Bird Sanctuary

Ousteri Lake is a man-made lake and is situated around 10 km from Puducherry town, which is regarded as unitary of the most important wetlands in Asia by the International Union for Conservation of Nature (IUCN). Since the different species of migratory birds reside in this lake throughout the year, the lake gains significance from the IBA (Important Bird Areas).

The structure of the lake is intricate - comprising of water, wetland/swamp and mudflats; it moves about as the single biggest catchment of freshwater in Puducherry. The lake has also been declared as a bird sanctuary by the Government of Pondicherry in 2008.

Bird watching has been the most significant thing to do at Oussudu Lake. In 1995 the lake recorded some 20,000 birds and in 1998 the figure went up to 25,000 birds of 44 species, as argued by the Bombay Natural History Society (BNHS, 2004). In add-on to many resident birds like Common Coot and Little Cormorant, Spot-billed Pelican, Cotton Teal, White Ibis, Spoonbills and migratory species like the Eurasian Wigeon were recorded in huge numbers (upwards of 4600 birds).

Several species of lapwings, flycatchers, herons, ducks, hawks, cormorants, kites, terns, kingfishers, darters, were abundant. Trees lined in the lakeside make the spot suitable for a children's park. Some trees stand on the lakeside allowing tree- nesting bird to breed here. Many tourists want to picnic with their friends and families to this place. Aside from that Ousteri Lake is also an ideal tourist spot for photographers who wants to picture the natural scene.

5.2 Tourism in Oussudu Lake

Ousteri Lake is one of the tourist destinations in Pondicherry which draws a considerable figure of nature lovers as well as commercial tourists from all over the world. The 390-hectare lake which lies in the Pondicherry region supports a large variety of flora and fauna.

The vegetation includes small herbs to trees, which supports migratory birds as well as native birds to breed during summer and wintertime. The forest department has decided to lodge the forms of birds visiting Pondicherry to update and put together a complete database about the birds visiting every year.

Under the initiative of local government, the location near the lake has been made litter-free so that it becomes favorable for the migratory birds. The region around the lake will be declared as the plastic-

free and no-horn zone. The authority will take care of the maintenance of the newly declared bird sanctuary. Signboards indicating the perfect details of birds and multi-colored paintings of birds of dimension eight feet by six feet will be set up at different places of the sanctuary. The government will also plant several trees near the lake.

Aside from these, the Government also plans to build a three-floor interpretation center with a library and audio-visual room and a small park. For the bird watchers, two telescopes are proposed to be set up at the top of the center to watch the birds. So, the tourist can attain complete information about the birds visiting the water body. The best time to travel to the lake is from October to March. During the winter season, many migratory birds from different corners of the world could be spotted here.

The Pondicherry tourism department has projected to boost the region as an ecotourism destination. In the prospect of eco-tourism, the tourism department has recommended banning fishing and motor boating in the lake instead of pedal boating is hosted for visitor's leisure.

Pondicherry Tourism Development Corporation (PTDC) operates a small boat guild at the lake. The 20-seater boats offer a 30min ride would be a visual treat for the visitors who want to savor the cool breeze at the finish. Besides this, the government of Pondicherry is proposing to put up an Ousteri National Park in the district procuring land from neighboring townships.

5.3 Data Description

5.3.1 Infrastructure for Sustainable tourism

Devabalane (2014) in his research article stated that tourism infrastructure is a very essential requirement to develop the place as a sustainable tourism hotspot in Pondicherry. Though the place is easily linked by roadways, and 10 km distance from Airport and Railways. The facilities available at the destination are not adequate for the tourists. A well-planned infrastructure should be grown in space near the lake area in such a way to attract more number of tourists.

The infrastructure should include the basic amenities such as Toilets, Parking Areas, camping grounds, bird watching tracks, picnic zones, walking and cycling trails and children's playground. Since it is an important bird sanctuary in Pondicherry, tourists want to stay for a while to watch some migratory and rare species of birds. To gratify their needs, more or less

standard and supplementary accommodation need to be created like eco- friendly resorts, lake view hotels, and green hotels.

The tourist infrastructure and facilities available at the destination is not sufficient to accommodate more number of tourists. Therefore, recreational facilities like cafes, birdwatching trails, restaurants, binoculars, and boating facilities can be created with minimal contamination, keeping in view the sustainable development of the lake.

5.3.2 Artificial islands in Oussudu Lake

The Hindu (2019) in their article mentioned that the Forest Department has led the initiative pace to improve the home ground for birds in the Oussudu Lake. Puducherry-based Indigenous Biodiversity Foundation (IBF) and Aaranyam Foundation have called for the initial steps to recreate the habitats and to create artificial islands along the lake for migratory birds to breed here. The Oussudu Lake is described as a wetland of national importance under the National Wetland Conservation Program of the Ministry of Environment and Forests (MoEF) and has also been declared one of the 93 significant wetlands in Asia by the Asian Wetland Bureau.

The Forest Department in collaboration with wildlife researchers and conservationists has taken efforts to protect the flora and fauna of the lake, which gives home to over 166 bird species and also the lake has been regarded as one of the major sanctuaries for migratory birds.



Figure 2: Artificial Island initiative of IBF and Aaranyam Foundation in Oussudu Lake (source: The Hindu, 2019).

The lake expanded for about 800 hectares, of which 390 hectares lie in Pondicherry. The normal season for migratory birds begins by mid-October and continues till February. The IBF and Aaranyam Foundation wrote a letter to the Forest department seeking permission to create artificial islands for nesting of birds. The island has to be created before the

migratory season begins. IBF and Aaranyam Foundation started the procedure of making artificial islands. The project was funded by Five Star Groups and two NGO's.

Figure 2, shows the picture of the Artificial Island initiative by the IBF and Aaranyam Foundation in Oussudu Lake. Nine artificial islands have been created on the lake. That has been built 150 meters from the lake's boundaries for some three hectares. The alluvial soil generated from desilting the lake bottom will be made into a mound for creating the islands.

The islands were separated by a distance of 100 meters and were made till Poothurai Road. Three-meter deep trenches would be dug surrounding the artificial islands to insure a natural habitat with enough prey for the bird. Many migratory birds such as the White Ibis have been visiting the lake in large numbers in search of prey. Since there is a lack of prey in the lake the birds have started moving to other wetlands in the region such as the Kaliveli Lake in Villupuram district and Vedanthangal bird sanctuary in Kancheepuram district. Migratory birds such as the Spot-Billed Pelican, Painted Stork and Spoonbill Duck would return once the islands were ready. IBF had compiled a list of over 100 saplings that will be arranged on the periphery of the artificial islands. The denser the vegetation the better it is for birds to receive shelter and nutrients.

5.3.3 Vulnerability and threats of Oussudu Lake

The lake faces several threats such as dredging and de-silting by the authorities it has resulted in the removal of some useful weeds which serve as the nest for the birds. The lake is also facing other problems like fertilizer, plastic waste pollution, poisoning, poaching and discharge of various other pollutants from factories that are nearby. Motor and pedal boats regularly ply in the lake when the water level is sufficiently high and that also happens to be the bird season. A big hospital has been constructed nearby and a restaurant-come-legal community has grown ostentatiously.

Further urbanization, as has been proposed, around the lake will only append to the disturbance and noise and additional pollution. Apathy and reluctance on the part of the authorities to run it as a real bird sanctuary are visible. Vulnerability assessment study conducted in Oussudu Lake, Pondicherry had shown concern over rising plastic pollution in water bodies. The report had highlighted that the canals have

become dumping grounds for used plastic bags, thermocols, cups, plates, pipes and bottles.

The dumping of plastic items had interrupted the free flow of monsoon run-off. Around two-thirds of all forms of plastic getting accumulated, degrades slowly and leaches into the land and water. Plastic causes serious environmental pollution, affecting the basic life support systems such as soil, water and air. Plastic pollution also results in health ailments such as eye irritation, vision failure, difficulty in breathing, liver dysfunction, and cancer.

5.4 Data Analysis and Discussion

5.4.1 Key Issues of the Oussudu Lake

The following are among the main weakness of the Oussudu Lake which must be addressed if we are to progress further in this field of research for sustainable tourism development.

1. As we have seen in previous studies (Rodríguez Gutiérrez et al., 2019), the tourism resource available at the destination is abundant by nature. The destination has to be promoted in such a way to preserve nature thereby benefiting the host community as well as the Government.

2. Attention has to be paid to the tourist demand, especially sustained tourist flow has to be maintained at the destination level.

3. While emphasizing intergenerational equity, no due attention has been paid to intragenerational equity, that is, the fairness of benefits and cost distribution among the stakeholder group of tourism growth.

4. While underlining the interests of the host population, the destination community should reap the economic benefits of tourism but keep its culture intact. Tourism-related socio-cultural changes should be encouraged at the destination level.

5. Determine the absolute level and the pace of evolution has to be taken out at the destination. The tourism organization and the government have to identify and set or threshold tourism growth by identifying the carrying capacity and indicators of sustainable tourism development.

6. Many authors and practitioners enthusiastically promote ecotourism and wetland tourism, but none of these figures can rely on as the way ahead for sustainable tourism. In the track of sustainable tourism development, one can find

ecotourism, alternate tourism, responsible tourism, low- impact tourism, community tourism, and thus along.

5.4.2 Comprehensive strategy for sustainable tourism development in Oussudu Lake

Sustainability is often cited as a balanced environment. It is the process of evolution that meets the demands of the present without affecting the ability of future generations to meet their demands. This form of tourism takes full account of its current and future economic, social and environmental impact. It acts not only to visit someplace as a tourist but, also to create a positive impact in all the surroundings.

Mainly three things sustainable tourism can be responsible are: preserve and conserve the environment, benefit the local communities through tourism at the destination, and to protect the sociocultural environment which prevails at the destination. The competent authorities should undergo the following guidelines: To develop overall strategies for tourist destinations based on the negotiation with the private sector, local bodies, and NGOs with a vision for the hereafter.

1. The tourism department should put up a program to inform the tourist service providers and tourists to educate them about the kind of wetland ecosystem available at the Oussudu Lake and the importance of preserving the biosphere reserve to keep it for the long run.

2. Call for the local community people in and around the lake make them realize the resource conservation planning effort conducted at the lake and assist them to derive economic benefit by selling the eco-friendly products available at their venue.

3. Encourage the tourist to participate in the enhancement and management of tourist destination. Ask them to throw the litter in the dustbin by not contaminating the freshwater lake.

4. Collect the economic data bearing on the importance of sustainable tourism locally and supply the complete guidelines for the visitors to protect and conserve birds and community.

5. Enhance the infrastructure by supplying basic conveniences such as bathrooms, Parking Areas, camping grounds, bird watching trails, picnic zones, walking and cycling tracks, and children's playground.

6. Provide bird watching trails using elevated platforms for viewing the resident and the migratory birds reside over the lake and provide essential equipment for the bird watching observatory.

7. The Government and the authority should take the necessary measure to minimize the negative impact like contamination of natural resources and creating sound pollution the birds which reside here.

8. The change in lifestyle of the citizen should go a long manner to achieve sustainable development and water bodies' conservation.

6. CONCLUSION

The present work shows that Oussudu Lake is predominantly a very important tourism hotspot spot in Pondicherry. The work deals with the diverse conservation and management interventions that can be brought up for the long-term sustainability of Ousteri Lake, the biggest lake in Pondicherry. Wetlands in urban regions have always been exploited for several purposes due to anthropogenic activities.

Nevertheless, such activities may contribute to the modification of wetland features and thus cause changes in species composition and density. The Ousteri Lake is rich in flora and fauna and is known to provide several ecological services including recharging underground aquifers and providing several livelihood options for the local community.

To protect and conserve nature the lake area will be declared as no-horn and plastic-free zone. The study recommends that before Plastic Ban, it is necessary to adopt the daily usage of alternative packing items. Encourage people to identify and manufacture alternative packing items. Hoteliers should be encouraged to shift to banana leaf, teak leaf, vanathula leaf, and mantharai leaf for serving and packing food.

Skill development in producing alternate packing materials should be encouraged. Strong enforcement of rules and regulations for the production and use of plastic, throwing of litter in the dustbin, and recycling of biodegradable and biodegradable products could play a major role in the reduction of plastic pollution in Oussudu Lake.

The local authorities should take the necessary action to preserve and maintain the newly declared bird sanctuary. Signboards with complete details of birds and its paintings have to be kept in the destination to educate the tourist who arrives here. Towards the economic sustainability Pondicherry Tourism

Development Corporation (PTDC) should operate mode pedal boats to the tourists rather than motor boats so as not to pollute the waterbody and encourage the local community people to become the stakeholders to the destination to improve their living.

According to (Marilia Duraõ, Celeste Eusebio & Maria Joao Carneiro, 2014) Interpretation helps in the promotion of attractions and provides Economic sustainability to the destination. Durão & Carneiro, (2012), the interpretation can be defined as a communication process, which seeks to convey-implicitly or explicitly- information, ideas, and meanings to the visitor that contribute to the enrichment of their experience and for creating links between people and spaces, promoting understanding, and arousing emotions and feelings that lead to changing attitudes and behaviors.

There is a wide range of interpretation techniques are available among them the most frequently used are, the guided tours; Audiovisual media (e.g. Audio guides); the replica and models; and publications (e. g. Brochures, Guides). These interpretive services can be offered free of charge or in the form of a service or by paying the fee (McNamara & Prideaux, 2010). Interpretation is an important tool for visitor management, based on three principle essential elements: education, entertainment and conservation, and sustainable development (Timothy & Boyd, 2003, cited by Dallen & Prideaux, 2004).

The visitor management strategy can be carried over at Oussudu Lake. According to (Kuo, 2002) visitor management can be considered hard or soft strategies. Hard strategies involve physical management of space, regulations, and economic management (for example, charging a higher price for boating at a time of higher demand and use them for certain management of resources and space). Soft strategies are based on education and interpretation.

As such, these results are not easily observable as those of hard strategies, as they result from behavioural changes and attitudes. Obtaining visitor, behaviour modification or changing attitude towards environmental conservation can be used as an indirect indicator for the economic value of interpretation in which visitor satisfaction can be converted into a return to attraction, the enjoyment of services and purchase of products at the destination, or they recommend the destination to their friends and family, increase the range of potential visitor in the future.

The development of code of conduct for visitors and tour operators may reduce the negative impacts of tourism and community involvement can be perceived as an essential indicator for economic benefits related to the arrival and distribution of revenue to the local community and improve the skills of local residents in tourism business management.

The study also suggests that the authority should make the necessary action to create a job opportunity for local community people in and around Oussudu Lake. Their role becomes particularly important when conducting guided tours, sell locally available foods and products to the visitors, or making small lectures or interactions with visitors by giving them the necessary training to play this role. The involvement of local community people appears as an important element in increasing the quality and value of sustainable tourism at Oussudu Lake.

REFERENCES

- Abbasi, S. A.; Chari, K. B. (2008). *Environmental management of urban lakes: with special reference to Oussudu*. New Delhi: Discovery Publishing House, pp. 269.
- Bramwell, B.; Lane, B. (1993). Sustainable tourism: an evolving global approach. *Journal of Sustainable Tourism*, v.1, n.1, p.1-5.
- Bramwell, B.; Lane, B. (2000). Collaboration and partnerships in tourism planning. In: Bramwell, B.; Lane, B. (Orgs.). *Tourism collaboration and partnerships: politics, practice and sustainability*. Clevedon: Channel View, p.1-19.
- Butler, R.W. (1997). The concept of carrying capacity for tourism destinations: Dead or merely buried? In C. Cooper and S. Wanhill (eds) *Tourism Development: Environmental and Community Issues* (pp. 11-21). Chichester: John Wiley.
- Butler, R.W. (1998). Sustainable tourism: Looking backwards in order to progress? In C.M. Hall and A.A. Lew (eds) *Sustainable Tourism: A Geographical Perspective* (pp. 25-34). Harlow: Addison-Wesley Longman.
- Butler, R.W. (1999a). Problems and issues of integrating tourism development. In D.C. Pearce and R.W. Butler (eds) *Contemporary Issues in Tourism Development* (pp. 65-80). London: Routledge.
- Butler, R.W. (1999b). Sustainable tourism: A state-of-the art review. *Tourism Geographies* 1 (1), 7-25.
- Chari K.B., Abbasi S.A. (2003). Ecology, Habitat and Bird Community Structure at Oussudu lake: Towards a strategy for Conservation and Management". *Acquatic Conservation: Marine Fresh Water Ecosystem*, vol. 13, pp. 373-386.
- Conservation of Ousteri Lake, Puducherry. (2021). *The Department of Forests and Wildlife*, Government of Puducherry.
- Costa, R. J; Miranda, G. C de. (2016). Analysis of studies of tourist load capacity for the reefs of Picãozinho, Seixas (João Pessoa-PB) and Areia Vermelha (Cabedelo-PB). *Caderno Virtual de Turismo*. Rio de Janeiro, vol. 16, n. 1, p. 60-73, abr.
- Dallen J., T., & Prideaux, B. (2004). Issues in heritage and culture in the Asia Pacific region. *Asia Pacific Journal of Tourism Research*, 9 (3), 213-223.
- Devabalane, E. (2014). Lake Ousteri: An Artificial Wet Land Lagoon for Tourists in Puducherry. *International Journal of Research in Humanities and Social Sciences*, Vol 1(2), 75-82, July-December.
- Durão Marília, E. C. & Carneiro, M. J. (2014): "The role of interpretation in promoting more sustainable attractions and destinations: An analysis of the economic dimension of sustainability". *Revista Turismo & Desenvolvimento*; v. 3, n. 21/22.
- Durão, M., & Carneiro, MJ (2012). Evaluation studies of interpretation of tourist attractions: Geographic scope, assessment dimensions contemplated and techniques used. *Revista Turismo & Desenvolvimento*, 17/18 (2), 797-807.
- Kashwan, Prakash (2005). *Environmental Governance in India - a concept note*. New Delhi: Lead India-2, IGIDR.
- IUCN (1971). The Ramsa Convention. *The Final Act of the International Conference on the Conservation of Wetlands and Waterfowl*. IUCN Bulletin, vol. 2(Spl. Supplement), pp. 1-4.
- IUCN (1980). World Conservation Strategy. *Gland, Switzerland: International Union for the Conservation of Nature and Natural Resources*. 1196 Gland, Switzerland.
- Kuo, I. L. (2002). The effectiveness of environmental interpretation at resource-sensitive tourism destinations. *International Journal of Tourism Research*, 4 (2), 87-101.
- Lindberg, K; Mccool, S; Stankey, G. (1996). Rethinking carrying capacity. *Annals of Tourism Research*, v. 24, n. 2, p. 461-
- Lindenberg Medeiros, A. (2008). Stakeholder analysis for Sustainable Tourism. *Caderno Virtual de Turismo*, Vol.8, No.1.
- McNamara, K. E. & Prideaux, B. (2010). Reading, learning and enacting: interpretation at visitor sites in the Wet Tropics rainforest of Australia. *Environmental Education Research*, 16 (2), 173-188.

- Murugesan, M.; Arun, P.R. & Prusty, B.A.K. (2013). The butterfly community of an urban wetland system - a case study of Oussudu Bird Sanctuary, Puducherry, India. *Journal of Threatened Taxa*, 5(12): 4672–4678.
- Ousteri Lake, Puducherry (2021). Available: <https://www.tourmyindia.com/states/pondicherry/ousteri-lake.html>
- Prasad, S. (2019). *Artificial Islands coming up in Oussudu Lake*. [Online] Available: <https://www.thehindu.com/news/cities/puducherry/artificial-islands-coming-up/article28494107.ece>
- Rodríguez Gutiérrez, K. S., Sánchez Macías, A. E., & Pibaque Pionce, M. S. (2019). Orchids as a Tourist Resource in the Southern Area of Manabí Province. *Revista Latino-Americana De Turismologia*, 5(1 e 2). <https://doi.org/10.34019/2448-198X.2019.v5.14032>
- SACON (November 2010 – March 2011). *Comprehensive Management Action Plan for Conservation of Ousteri Lake, Puducherry*. The Department of Forests and Wildlife, Government of Puducherry.
- Stankey, G; Manning, R. (1986). *Carrying capacity of recreation settings. A Literature Review*. The President's Commission on Americans Outdoors. Washington: US Government Printing Office, p. 47-57.
- WCED (1987). *Our Common Future*. Oxford: Oxford University Press.
- WTO - World Tourism Organization (1998). *Tourism 2020 Vision*. Madrid: WTO.
- WTO - World Tourism Organization. (1998). *Guide for local authorities on developing sustainable tourism*. Madrid.
- WTO - World Tourism Organization. (1999). *Yearbook of Tourism Statistics* (51st edn). Madrid: WTO.
- WTO - World Tourism Organization. (2001). *The concept of sustainable tourism*. Available at <http://www.worldtourism.org/sustainable/concepts.htm>. Accessed 24.3.02.
- WTO - World Tourism Organization. (1994). *Agenda 21 for Travel and Tourism: Towards Environmentally Sustainable Tourism*. WTO, WTTC and the Earth Council: London, UK.
- WTO - World Tourism Organization. (2002). *World tourism stalls in 2001*. Available at: <http://www.world-tourism.org/>. Accessed 5.2.02.
- Zhenhua, L. (2003). Sustainable Tourism Development: A Critique, *Journal of Sustainable Tourism*. Available: <https://www.tourmyindia.com/states/pondicherry/ousteri-lake.html>

Processo Editorial / Editorial Process / Proceso Editorial

Editor Chefe / Editor-in-chief / Editor Jefe: PhD Thiago D. Pimentel (UFJF).

Recebido / Received / Recibido: 18.08.2021; Revisado / Revised / Revisado: 26.09.2021; Aprovado / Approved / Aprobado: 27.09. 2021; Publicado / Published / Publicado (online): 05.10.2021.

Seção não revisada às cegas por pares / No double blind review section / Sesión no revisada por pares ciegos.