

## Creating Sustainable Experiential Tourism for Showcasing Tulunadu's Ecological Treasures

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### Abstract:

Tulunadu, located along India's beautiful western coast, is a location of extraordinary ecological richness. Its lush woods, breathtaking vistas, rich fauna, and active coastal ecosystems all work together to create a nature lover's and tourist's dream. However, the enormous increase in tourists over the years has begun to put strain on this vulnerable ecosystem. Unregulated development, an increase in visitor numbers, and unsustainable activities endanger the natural wonders that draw people to Tulunadu. This study digs into sustainable tourism techniques that are adapted to Tulunadu's unique ecological situation. The major goal is to discover ways in which local communities, government bodies, and tourists may work together successfully to ensure the long-term protection and conservation of Tulunadu's ecological treasures while also enjoying the region's beauty and cultural diversity. Practicing eco-friendly travel, limiting trash, supporting local conservation programs, and protecting wildlife and natural habitats can all help to preserve the region's ecological integrity. The findings of this study will not only add to the larger discussion about sustainable tourism but will also serve as a roadmap for maintaining paradise in Tulunadu, ensuring that its ecological assets are preserved for future generations to adore and enjoy.

**Keywords:** Tulunadu, sustainable experiential tourism, Nagaradhanae, Bhootaradhane, Yakshagana.

Tulunadu, situated along the pristine western coast of India, is an area of remarkable ecological richness. Its verdant forests, awe-inspiring landscapes, diverse wildlife, and dynamic coastal ecosystems combine to create a paradise for nature enthusiasts and tourists. However, the rapid increase in tourism over the years has started to exert pressure on this fragile environment. Unregulated development, a surge in visitor numbers, and unsustainable practices pose significant threats to the very natural wonders that attract people to Tulunadu.

Recognizing the urgent need to strike a balance between tourism and environmental preservation, this study delves into sustainable tourism strategies specifically tailored to Tulunadu's unique ecological context. The primary objective is to identify ways in which local communities, government bodies, and tourists can collaborate effectively to ensure the long-term protection and conservation of Tulunadu's ecological treasures while still being able to appreciate the region's beauty and cultural richness.

One crucial aspect of this endeavour involves empowering and involving local communities in the conservation efforts. Through education, capacity building, and alternative livelihood opportunities, communities can become stewards of their environment, actively participating in its preservation. Additionally, integrating traditional knowledge and practices into tourism initiatives can help maintain cultural richness while promoting sustainable development.

Embracing eco-conscious travel practices, reducing waste, supporting local conservation projects, and respecting wildlife and natural habitats, can significantly contribute to preserving the region's ecological integrity.

This study's findings will not only contribute to the broader discourse on sustainable tourism but also serve as a blueprint for preserving paradise in Tulunadu, ensuring that its ecological treasures remain for future generations to cherish and enjoy.

### Need for Study:

The need for this study stems from several pressing environmental concerns in Tulunadu. The unchecked surge in tourism has led to the exploitation of natural resources, including unsustainable practices like overfishing, pollution, and habitat destruction. These activities risk irreversibly harming Tulunadu's fragile ecosystems. By conducting this study, we aim to address these critical issues and advocate for the implementation of sustainable tourism strategies.

**Scope of the study:**

To understand and study sustainable tourism practices followed in places across the world, in India and suggest the practices that can be implemented in Tulunadu.

**Research Objectives:**

- 1)To explore and study various sustainable tourism practices implemented globally specifically focusing on West Indies, Australia and African Countries.
- 2)To explore and study various sustainable tourism practices implemented in India.
- 3)To assess the current tourism situation in Tulunaadu with respect to tourism infrastructure, trends, etc.
- 4)To assess the feasibility of implementing some globally identified sustainable tourism practices in Tulunaadu by considering factors such as local culture, artforms, environment and community engagement.
- 5)To develop a sustainable tourism plan for some identified places in Tulunaadu and propose it to various stakeholders.

**Research Methodology:**

This study employs a mixed-methods approach, integrating both primary and secondary sources to comprehensively explore sustainable ecotourism practices globally, with a specific focus on Australia, South Africa, West Indies, and key regions in India, namely Kerala and North Karnataka. To complement the insights gained from secondary sources, primary data is collected through direct interactions with experts in the field. These experts, drawn from various disciplines relevant to ecotourism, provide firsthand knowledge and experiences. The culmination of information from both secondary and primary sources forms the basis for proposing a sustainable tourism plan for a proposed place at Shiroor in Udupi district.

**PART 1- SECONDARY RESEARCH**

**1 GLOBAL**

**1.1 Sustainable tourism practices in Australia**

**The Great Barrier Reef**

The Great Barrier Reef, located off Australia's coast, is the world's largest coral reef system and a UNESCO World Heritage site. Renowned for its marine biodiversity and vibrant coral ecosystems, it attracts divers, researchers, and nature enthusiasts globally. Tulunadu, encompassing Udupi and Mangalore in India, shares similarities with the Great Barrier Reef in natural beauty, ecological significance, and tourism potential, justifying its inclusion in this research.

The Great Barrier Reef, a global treasure, confronts threats from climate change, water quality, coastal development, fishing, and crown-of-thorns starfish. Balancing conservation with sustainable tourism is vital. The Great Barrier Reef Marine Park Authority plays a key role through collaboration, regulations, education, and indigenous partnerships to preserve this unique ecosystem for future generations.



**Projects that were undertaken in Great Barrier Reef:**

**1. Leading Eco-Friendly**

**Initiatives and Climate Change Refuge in the Great Barrier Reef.** The eco-resort in the Great Barrier Reef region pioneers eco-friendly practices

with a hybrid solar power station and low-impact accommodations. Leading in investments and research, the resort actively supports the reef's recovery from climate change challenges.

**2. Fitzroy Island: A Tropical Paradise and Turtle:** Fitzroy Island, near Cairns, is an eco-friendly paradise in the Great Barrier Reef, offering exceptional sand and sea experiences. The island hosts one of Queensland's largest turtle rehabilitation centers, providing guided tours for visitors to observe and learn about the crucial medical care and rehabilitation efforts conducted by dedicated scientists and volunteers for injured turtles found in the region.

### **Rottnest Island**

Rottnest Island, a renowned destination famed for its beautiful shoreline and bike paths, is not just a picturesque locale but it serves as a compelling example of sustainable tourism. The island's commitment to sustainability is evident right from the core of its infrastructure, particularly in the management of water and energy systems.



### **Sustainable Energy Practices on Rottnest Island, Australia: Wind and Solar Power**

Rottnest Island exemplifies a commitment to sustainable energy sources with its prominent wind turbine positioned on Mt Herschel. The gentle rotation of its blades, visible even from the shores of Perth, harnesses wind energy, converting kinetic energy into direct current (DC) electricity. This DC electricity is then transformed into alternating current (AC) and increased in voltage before being distributed across the island to power various facilities. In parallel, the island employs solar panels in a solar farm, consisting of photovoltaic (PV) cells that convert sunlight into

electrical energy.

## **1.2 Sustainable Tourism in South Africa**

### **A. iSimangaliso Wetland Park**

The iSimangaliso Wetland Park in South Africa spans 328,000 hectares between Richards Bay and the Mozambique border. Recognized as a UNESCO World Heritage Site in 2009, the park is home to diverse wildlife, including 530 bird species, 100 mammals, and 50 reptiles. It serves as a nesting ground for marine turtles. With various ecosystems like coral reefs, beaches, dunes, lakes, and wetlands, the park is a popular tourist destination offering activities like game drives, boat tours, safaris, birdwatching, and fishing. Cultural attractions include Zulu villages and archaeological sites. (GUMEDE, 2009)



The park emphasizes eco-tourism with activities like birdwatching and turtle nesting tours, aiming to educate visitors on environmental conservation. Through community-based tourism, local communities, such as Khula village, participate in cultural activities and contribute to the development of lodges and guided tours. The lodges are attractively designed with ambient lighting, open-air dining lounges, and outdoor bathrooms enclosed by reeds, enhancing the overall visitor experience (Gumede, 2009).

Some specific examples of sustainable tourism practices that have been implemented in iSimangaliso Wetland Park (KOSI FOREST, n.d.) :



- **Solar-powered lodges:** A number of lodges in the park are powered by solar energy, which reduces their reliance on fossil fuels. Kosi bay lodge, Inkwazi lodge, etc have been powered by solar energy. In one of the lodges they have solar-powered boats. The lodges have been investing in large solar energy farms.

- **Ethically sourced seafood:** The lodges in the park, focus on sustainability with respect to food and supplier choices.

- **Rainwater harvesting and greywater harvesting:** Some lodges like Inkwazi lodge, has implemented rainwater harvesting and grey water recycling , and the like sustainable practices.

- **Waste management:** The park has a comprehensive waste management plan in place, which includes waste reduction, recycling, and composting. This helps to reduce the amount of waste that goes to landfills.

- **Ranger Training:** Rangers are trained in responsible tourism practices and wildlife conservation, helping to educate visitors and enforce park regulations.

- **Recycling Food:** Reusing surplus food from lodges to support nearby childcare centres through feeding programs. (KOSI FOREST, n.d.)

### B. Garden Route

The Garden Route in South Africa, stretching from Mossel Bay to Storms River, is known for its scenic beauty and diverse wildlife.

Highlights include Tsitsikamma National Park, Knysna Lagoon, and the Cango Caves. Prioritizing ecotourism, the region supports local economies and emphasizes heritage preservation. With wildlife sightings and nature-based activities in Plettenberg Bay, it fosters an appreciation for and protection of the natural environment among visitors.

### San Cultural Tourism in Southern Africa

San Cultural Tourism in Southern Africa allows the San people to showcase their heritage, with notable differences between San-owned and outsider-managed projects. San-owned initiatives provide cultural control, avoiding stereotypes, and aim to educate visitors about the San's history. Projects range from family-based to larger ventures, including San-owned lodges like Dq̄e Qare and !Xaus Lodge, offering diverse activities. Despite being a niche market compared to nature tourism, cultural tourism provides economic opportunities and supplemental income for San livelihoods.



### Cultural Villages in Zululand- ZULU kingdom

Zululand culture tourism offers a captivating opportunity to explore the rich cultural heritage of the Zulu people in South Africa. Key features of Zululand culture tourism include:

- **Cultural Villages:** Visitors have the chance to visit cultural villages in the heart of Zululand, where they can witness the reconstruction of contemporary and historical dwellings and view a variety of artifacts.
- **Interaction with Locals:** Travelers can meet with local Zulu people and engage in conversations to gain insights into their culture, practices, rituals, and ceremonies.
- **Traditional Cuisine:** Visitors are treated to traditional Zulu cuisine, providing an opportunity to savor authentic flavors and dishes.

- **Dances, Music, and Rituals:** Cultural villages often host traditional dance performances and music shows, offering visitors a glimpse into how the Zulu people celebrate their heritage. **Rituals and ceremonies are also presented, enhancing the cultural immersion.**
- **DumaZulu Traditional Village:** This particular village in Zululand provides visitors with a comprehensive Zulu cultural experience.
- **Isibindi Zulu Lodge:** For those seeking a deeper rural Zulu life experience, Isibindi Zulu Lodge offers tours of traditional homesteads and interactions with sangomas, traditional Zulu doctors, who perform fortune-telling and rain-wishing ceremonies.
- **Simunye Village:** This authentic Zulu village, located near Melmoth, offers a genuine experience of Zulu history, culture, and traditions.

### 1.3 Sustainable Tourism in the West Indies

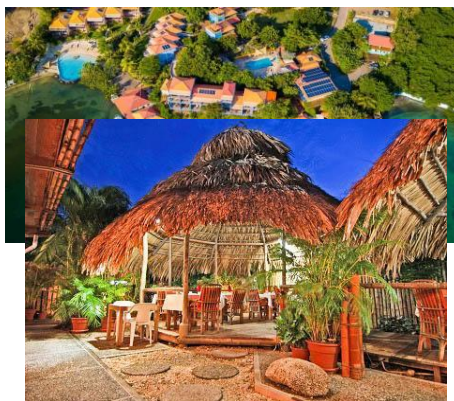
#### Grenada

Grenada, known as the "Spice Isle," prioritizes sustainable tourism through initiatives like the Sustainable Tourism Policy (2016-2026), Grenada Green Certification Program, and Sustainable Tourism Marketing Plan. Sustainable tourism in the West Indies centers on responsible resource management, community engagement, and biodiversity protection. Key efforts include marine and coastal conservation, cultural promotion, eco-friendly accommodations, and encouraging responsible travel behavior. Businesses are encouraged to adopt sustainable practices, covering energy efficiency and waste management.

#### Eco-friendly accommodations and community-based tourism initiatives

Grenada offers a variety of eco-friendly accommodations, including:

- **True Blue Bay Boutique Resort:** True Blue Bay Boutique Resort in Grenada is a solar-powered eco-friendly retreat on a private beach. It practices sustainability through rainwater harvesting, organic gardens supplying its restaurants, and sourcing food locally. The resort aims to minimize its environmental footprint, supporting the community by employing locals, purchasing from nearby businesses, and providing environmental education programs to guests.



- **Trinidad:** The Asa Wright centre's mission is to "protect part of the Arima Valley in a natural state and to create a conservation and study area for the protection of wildlife." The lodge is home to more than 170 species of birds, including toucans, manikins, tanagers and the rare oilbird.

- **Kariwak Village:** This eco-lodge is located in the rainforest on the Northern Range of Trinidad. It offers a variety of sustainable activities, such as hiking, birdwatching, and nature walks. The lodge is powered by solar energy and has a number of other sustainable features, such as rainwater harvesting, composting, and a recycling program. The lodge also sources its food from local farmers and fishermen whenever possible.

Some of community-based tourism initiatives in Grenada include:



**Spice and Chocolate Tours:** These tours offer visitors a chance to learn about Grenada's famous spices and chocolate. Visitors can visit spice plantations and chocolate factories, and even sample some of the local products.

### **Concordia Eco-Tents - St. John**

This resort in the US Virgin Islands operates a "Trash to Treasures" program in which the resort's trash is recycled into craft items and fine art. Guests can visit and participate in classes at the centre's glass studio, clay studio, textile department and gallery.

### **Natura Cabanas and the Attabeyra Spa- Dominican Republic**

This eco-spa in the Dominican Republic between Cabarete and Sosúa was conceived as a compliment to its natural surroundings. Cabanas were built using Feng Shui principles with materials found locally like mahogany, bamboo and coralline stone. Screened walls and windows keep them comfortable without air-conditioning.

### **Promotion of local culture and traditions**

The Grenada Tourism Authority actively champions the preservation and promotion of local culture and traditions through multifaceted initiatives. Notable among these is the annual Grenada Cultural Festival, a vibrant celebration encompassing music, dance, food, and art, providing a platform for Grenadians to showcase their rich heritage.

### **Barbados**



Barbados, a captivating Caribbean nation renowned for its exquisite beaches and lush landscapes, is at the forefront of sustainable coastal development. In 2018, the island embraced the Sustainable Coastal Zone Management Act. The act addresses the pressing issue of coastal erosion, emphasizing strategies such as beach nourishment and seawall construction to counter the impacts of climate change and rising sea levels. To safeguard water quality, the act promotes pollution prevention measures and advocates for wastewater treatment.

### **Marine Conservation Efforts in Barbados**

Barbados is actively committed to marine conservation with various initiatives safeguarding its underwater ecosystems. Notably, the establishment of marine protected areas such as the Carlisle Bay Marine Park and the Folkestone Marine Park serves as crucial havens for marine life, playing a pivotal role in preserving the nation's coral reefs and seagrass beds. The Barbados Sea Turtle Project, a non-profit organization, contributes significantly to turtle conservation efforts.

### **Sustainable Practices in Accommodations and Tourist Attractions in Barbados**

Turtle Beach by Elegant Hotels in Barbados exemplifies a commitment to sustainability as a certified Green Globe hotel on the west coast. With solar panels, rainwater harvesting, and a composting program, the hotel implements various eco-friendly features to minimize its environmental impact. Beyond environmental considerations, Turtle Beach actively supports the local community, showcasing a holistic approach to sustainable practices in the Barbadian tourism sector

### **Sustainable tourism in the West Indies and Caribbean region**

The West Indies and Caribbean region, boasting breathtaking landscapes and rich cultures, attract over 25 million tourists annually. Programs like the Sustainable Tourism Zone of the Greater Caribbean and the globally recognized Green Globe Certification underscore the commitment to responsible practices. These initiatives aim to harmonize the economic benefits of tourism with environmental preservation and community well-being.

In water conservation, initiatives include efficient urban and rural water management, recycling, rainwater harvesting, and promoting water-saving technologies, supported by public awareness campaigns. To address energy dependence, the region focuses on diversifying energy sources, investing in renewable projects like solar and wind power to reduce reliance on imports, cut carbon emissions, and enhance energy independence.

The sustainable tourism practices and initiatives briefed from various regions around the world, including Australia, South Africa, the West Indies, and the Caribbean including the Great Barrier Reef's efforts to balance conservation with tourism, sustainable energy practices on Rottneest Island in Australia, eco-friendly accommodations and community-based tourism initiatives in iSimangaliso Wetland Park and the Garden Route in South Africa, as well as marine conservation efforts and sustainable practices in accommodations and tourist attractions in Barbados. Additionally, the initiatives in the West

Indies and Caribbean region to address environmental challenges such as water scarcity and reliance on imported fossil fuels through sustainable resource management strategies. Overall, these global best practices offer valuable insights and a holistic framework for sustainable tourism that can be applied in Tulunadu to promote environmental conservation and community well-being.

## **2 INDIA**

### **2.1 Sustainable Tourism in India**

#### **2.1.1 Kerala**

Kerala is a state in southwest India that is well-known for its backwaters, rich culture, and verdant surroundings. The state's culture, artwork, and gastronomy all reflect its rich and varied past. Numerous historic churches, mosques, and temples can be found throughout the state. Kerala is renowned for its customary arts and crafts, including mural painting, Kathakali dance, and Mohiniyattam dance.

#### **Responsible Tourism Initiative by Kerala**

In order to use tourism as a tool for sustainable development, Kerala created the Responsible Tourism (RT) project in 2008. The triple bottom line sustainability model, which considers social, economic, and environmental factors, is the foundation of this programme. To promote and execute responsible tourism practises, the Mission collaborates with a wide range of stakeholders, such as travel agents, lodging providers, neighbourhood associations, and governmental organisations. (Keralatourism, n.d.)

The Responsible Tourism (RT) Mission offers visitors a close-up look at the kindness and artistry of Kerala's tranquil, isolated villages. God's Own Country towns are fortunate to have a plethora of small-scale traditional industries and highly talented artisans. For example, Thiruvananthapuram, a community known for its handicrafts, guarantees a distinctive ethnic gathering place. When travellers visit Kerala and its beautiful tourist attractions, they get to experience a wide variety of Kerala's culture promoting community-based tourism. Some of the prominent activities are stated below:



life. Take advantage of the opportunity to learn about and experience the fishing methods used in Kerala, including Chinese and traditional net fishing methods. (Keralatourism, n.d.)

- **Fishing:** Packages are available from RT Mission that allow visitors to observe and participate in traditional fishing techniques as well as learn about the fishermen's way of



- **Bamboo Craft Making :** Making bamboo crafts is a skill that Kerala's talented artisans impart. Bamboo goods are not only aesthetically pleasing and easy to use, but also environmentally sustainable. It's a lovely pleasure to learn how to make those exquisite Kotta and Vatti (baskets) and bring one home.



- **Weaving of Coconut Leaves:** In Kerala villages, they thatch their roofs using coconut tree leaves. These are weaved into lovely models of thatch. These leaves give homes incredibly effective thermal insulation. This will tempt the visitors to try their hand at weaving palm fronds after witnessing the locals' skillful performance.

- **Rabbit Farm :** With their charming and innocent nature, rabbits never fail to draw attention. Raising rabbits is currently one of the main sources of income for villagers in Kerala. Observing young bunnies at rabbit farms is an exciting experience for tourists.



- **Coir Making:** People of Kerala have always been skilled in the craft of creating coir. Travellers can participate in the manufacturing of coir and enjoy seeing it being made at RT Mission. Visitors will witness the process by which Keralan women work in the communities to produce coir as a means of subsistence.

- **Coconut Tree Climbing:** With the help of professionals, travellers can climb coconut trees during this activity. The villagers are prepared to demonstrate the many ways to climb them. Travellers have two options for ascending: the strenuous traditional route with a thalappu, or the contemporary route with the newest equipment.

- **Bow and Arrow Fishing:** Travellers will learn how to fish with a bow and arrow from traditional fishermen.
- **Net Fishing:** Net Fishing is the most common way of fishing practiced in Kerala. Travellers can catch some fish and pick up some advice from the pros. It is an adventure of a lifetime to go fishing in Kerala's backwater areas.



- **Use of solar energy in houseboats:** Traditional boats called houseboats are used for backwater cruising and overnight stays. Many houseboat owners have converted to using solar energy to operate their vessels in recent years. In the backwaters, this serves to lessen pollution from the air and noise.

- **Promotion of traditional transportation like houseboats and canoes:** In the backwaters, houseboats and canoes are the primary means of mobility. Compared to motorised boats, they are also more environmentally friendly.

### 2.1.2 North Karnataka

Within the Indian state of Karnataka, a region known as North Karnataka is a hub for both tourism and culture. Numerous historic sites, forts, and ancient temples can be found in the area. Moreover, North Karnataka is renowned for its rich culinary traditions and lively culture. Numerous resorts in this region of Karnataka highlight their rich cultural heritage while also promoting ecological practices. Agritourism is a kind of travel that emphasises a destination's agricultural features. This covers things like going on farm tours, studying agricultural techniques, and sampling regional produce. Agritourism has the potential to be a fantastic way for visitors to gain insight into the culture and economy of the region as well as a source of additional income for farmers.



- **Ethnic North Karnataka Food:** North Karnataka ethnic food, known for its diverse and flavorful dishes, plays a crucial role in sustainable tourism by promoting local culinary traditions and supporting regional economies. This, in turn, fosters a demand for sustainable farming practices, helps local farmers, and contributes to the overall well-being of the community while providing visitors with a delicious and immersive cultural experience.



- Clay is a medium for creative exploration, and we support them. Visitors are directly involved in making handmade functional pottery and many are avid collectors of the same. Through this activity visitors learn about the art of Pottery.(kaamik.com, n.d.)
- Promoting Indian culture and tradition by educating visitors about local customs, rituals, and healthy food habits. Providing a hands-on experience of the village lifestyle to help visitors connect with the local culture.
- Utilising every waste product as an input for the next process to minimise waste and improve overall farm efficiency. Practising self-sustaining agriculture by recycling and reusing resources.

The sustainable tourism initiatives in Kerala and North Karnataka, India promotes activities such as fishing, bamboo craft making, and coconut tree climbing, emphasizing traditional industries and eco-friendly practices. North Karnataka focuses on agritourism, showcasing local culinary traditions, handmade pottery, and sustainable agriculture techniques, contributing to cultural preservation and community engagement. Both regions prioritizes responsible tourism to preserve cultural heritage, support local economies, and minimize environmental



impact. These exemplary practices within the country provide valuable insights and a comprehensive framework for sustainable tourism that can be implemented in Tulunadu.

## PART 2- PRIMARY RESEARCH

The synthesis of global best practices, local traditions, and innovative initiatives outlined in this research gives us a framework for implementing sustainable tourism in Tulunadu.

- 1 Cottages:** A sustainable cottage is a type of accommodation designed and operated with a focus on minimizing its environmental impact and promoting eco-friendly practices. These cottages typically incorporate various sustainable features and principles to reduce energy consumption, conserve water, minimizing waste, and utilization of renewable resource for the materials used in the making of cottages.

The structuring for cottages will be as follows:

### 1.1 Structural Materials:

- **Bamboo:** A fast-growing and renewable resource that is strong and versatile. Bamboo is an extremely strong, flexible, and naturally insect-resistant material that grows quickly and is renewable. It adds a lovely organic look to cottages and fits in perfectly with the surrounding environment. (Fig 1)
- **Reclaimed Wood:** Salvaging wood from old buildings reduces the demand for new timber, preventing deforestation. Reclaimed wood not only adds character to the cottage but also extends the life of existing materials.



### 1.2 Insulation:

- **Recycled Insulation Materials:** Materials like recycled denim or cellulose insulation made from recycled paper offer an energy-efficient solution. These materials provide effective insulation while repurposing waste products.
- **Straw Bales:** Provide excellent insulation and are a byproduct of agriculture.

### 1.3 Roofing:

- **Green Roofs:** Living roofs with vegetation provide insulation, absorb rainwater, and reduce the heat island effect. Green roofs are living roofs covered with vegetation. They offer insulation benefits, absorb rainwater, and mitigate the urban heat island effect. They also promote biodiversity and improve air quality.
- **Clay roofs:** Clay roofs offer durability and a timeless appearance but can be heavier and costlier. Reclaimed slate roofs are sustainable, provide a rustic charm, but may face availability challenges. Consider climate, aesthetics, budget, and structural capacity when choosing between them. Professional advice is crucial for proper installation and long-term performance. (Fig 2)

### 1.4 Flooring:

- **Red oxide flooring:** It is often relegated to the poor man's floor as they are inexpensive and easy to repair. Red oxide is an eco-friendly and non-toxic oxide of iron which when mixed with cement gives it its distinctive red hue. Varying shades of red can be achieved with different ratios of red oxide and cement. (Fig 3)
- **Bamboo Flooring:** Fast-growing and durable. Fast-growing bamboo is a sustainable alternative to hardwood flooring. It's durable, aesthetically pleasing, and its cultivation has a lower environmental impact compared to traditional hardwoods. (Fig 4)

### 1.5 Water Efficiency:

- **Low-flow Fixtures:** Water-saving faucets, showers, and toilets to reduce water consumption.
- **Rainwater Harvesting:** Collecting rainwater for non-potable uses such as landscaping reduces the demand on municipal water supplies. It's a sustainable practice that conserves water resources.

### 1.6 Lighting:

- **Solar-Powered Lights:** Outdoor lighting powered by solar energy harnesses sunlight during the day using solar panels. This stored energy is then used to power the lights at night, reducing the reliance on conventional electricity sources and lowering overall energy consumption. (Fig 5)

- **Earthen lamps:** Earthen lamps in a sustainable resort contribute to eco-friendly ambiance. Their use reduces reliance on electricity, promoting energy conservation. Crafted from natural materials, these lamps align with the resort's sustainability goals. Incorporating them enhances the resort's atmosphere while minimizing environmental impact. (Fig 6)
- **Large Windows:** Incorporating large windows in building design maximizes the use of natural daylight, reducing the need for artificial lighting during daylight hours. This not only saves energy but also enhances the indoor environment.
- **Solar tubes or sun tunnels:** These are cylindrical tubes that capture and transmit natural light into interior spaces. They provide a way to illuminate areas deep within a building without the associated heat gain often caused by direct sunlight.



Fig 1



Fig 2



Fig 3



Fig 4



Fig 5



Fig 6

## 2 Experiential activities

It refers to immersive and interactive experiences that allow travelers to engage with the local environment, culture, and communities in a responsible and meaningful way. These activities are designed to promote environmental conservation, support local economies, and foster cultural exchange.

**2.1 Story Telling And Puppet Shows:** In the realm of storytelling, the storyteller, aged and retired men and women can be employed, to narrate stories about Tulunadu, stories of Prashuramana Srishti, Koti-chennayyara kathe, Bhootha kola stories, and many other Tulunadu folk tales and keep the tourists engrossed. A translator may also be hired to translate to the foreign tourists. Puppet shows, on the other hand, bring stories to life in a visually engaging way. (Fig 7)

**2.2 Pottery Making:** Pottery making, offers visitors a hands-on journey into the ancient craft, allowing them to mold clay into personalized creations under the guidance of skilled artisans. This immersive experience creates lasting memories and a tangible connection to the local culture. (Fig 8)

**2.3 Weaving Coconut Leaves:** The ancient craft of weaving coconut leaves can take a centre stage as skilled artisans guide and assist tourists in hands-on workshops. The process involves harvesting and preparing the leaves, followed by skilful interlacing techniques to create baskets and mats to hats and decorative pieces. (Fig 9)

Apart from these activities, the following cultural activities and traditional games can be employed on the decided space to engage the tourists and introduce them to the culture of Tulunadu.



Fig 7

Fig 8

Fig 9

**3 Experiential cultural Activities (Onsite and Offsite)**

Similarly, involving experiential cultural activities that are in the verge of losing its connection with the upcoming generation, ensures connecting the younger generation to old and golden culture and traditions of Tulunadu.

**3.1 Yakshagana (Onsite/Offsite):** Indian theatre tradition Yakshagana, referred to as Aata in Tulu, originated in Dakshina Kannada, Udipi, and Kasragod. Usually, it is done from dusk until dawn. Stories are taken from the Hindu and Jain epics. There are two varieties of yakshagana: balagattittu and tenkutittu. Now women also participate in play. (Fig 10) [Yakshagana](#)

**3.2 Pilivesha (Tiger Dance) Or Pilinalike (Onsite):** The folk dance known as "pili yesha" at Tulu Masque is exclusive to the coastal region. This dance is performed during the dussara season in honour of goddess Durga, who is represented by the tiger. A troop of five to ten young men is formed, and within it are three to five male painted tigers and outfits designed to resemble tigers. A band will play so that the men can dance. (Fig 11) [Pili Nalike](#)

**3.3 Yoga (Onsite):** Yoga enhances experiential tourism by providing a transformative and mindful travel experience. Integrating yoga into tourism offerings offers visitors a chance to connect with local culture, nature, and themselves. This holistic approach promotes wellness, cultural immersion, and environmental consciousness. (Fig 12)

**3.4 Nagaradhanae (Offsite):** In Tulunadu, snake worship is a distinctive custom reflecting the belief in snakes as revered gods and powerful beings. Various poojas, like Nagamandala and Ashlesha Bali, are performed to appease snakes during significant times. Drawings of Nagamandala and Ashlesha Bali, representing male and female snakes, are made on holy grounds with sacred colors. (Fig 13) [Nagaaradhane](#)

**3.5 The Buffalo Race (Kambala) (Onsite/Offsite):** The Kambala buffalo race, dating back 800 years, two pairs of buffalo-tied ploughs race on slush-filled tracks with a jockey guiding them. Despite buffalo not being inherently fast, they aim to run 100 meters in 12 seconds or less. Winners, once awarded a coconut, now receive medals, money, and trophies. (Fig 14) [Kambala](#)

**3.6 Būta Kōlā (offsite):** The shamanistic dance performance known as Būta Kōlā, or Daiva Kōlā or Daiva Nēmā, is popular among the Hindu population in Tulu Nadu, Karnataka, and certain parts of Kasargod in northern Kerala, India. "Bhootaradhane," or worship of the local deities, has impacted the folk theater of Yakshagana. (Fig 15) [Buta Kola](#)



Fig 10



Fig 11



Fig 12



Fig 13



Fig 14



Fig 15

#### 4 Sports and games Of Tulunadu

Introducing traditional games aligns with the principles of sustainable tourism. These age-old games, often passed down through generations, offer insights to the tourists to the games that were being played at Tulunadu in the olden days.

**4.1 Chinni Dandu:** It is a popular outdoor game in Tulunadu, involves two teams: hitters and opponents. Using a long stick (dandu) and a short stick (chinni), players aim to propel the chinni as far as possible. The hitter gets three chances to flick the chinni, and the opponent team tries to catch it in the air. The score is determined by measuring the distance between the hitter's contact point and the chinni's landing spot, making it a cooperative game requiring focus and hand-eye coordination. (Prajna, Wordpress, 2017) (Seema Periwal, n.d.) (Fig 16)

**4.2 Goli:** Known by many as goli, kancha, or marbles, this game is incredibly popular in Tulunadu. In order to win this timeless game, the player must use his or her own marble ball to strike the designated target "marble." All of the other players' marbles are taken by the game's victor. The player must have good aim and focus in order to win this game. (Prajna, Wordpress, 2017) (Fig 17)

**4.3 Chowka Bara:** One of the earliest Tulunadu games is Chowka Bara. In North Karnataka, it is referred to as chakara, and in Mysore, as chowka Bara. Like ludo, this game can have up to four players. It's a chance-based game played with cowry shells, sometimes called Kavade. From the starting point to the safety of home, the players try to race their pawns. The game teaches strategy development and enhances eye-to-eye coordination. (Prajna, 2017) (Fig 18)

**4.4 Lagori:** Lagori is an age-old outdoor game is a two-team game that needs a tennis ball and seven stones stacked to create a little tower. In this game, the opponents are occupied with hitting as many balls as they can while trying to rearrange the stones, while one team breaks the tower and then rebuilds it. This game is just for three minutes, and the participants need to stay alert at all times. (Mergulhao, 2023) (Fig 19)

**4.5 Chennamane:** Chennamane, traditionally played in Tulunadu, occurs on the full moon day of Aati. After consuming "Metteda Ganji" or "Paale Kasaya," the game continues until Krishnastami. Manes, fashioned from gold or silver for kings and wood for commoners, are played in 40 variations. Popular versions include the two-person "Bule Perga" and three-person "Arasu Aate," featuring the Arasu (King), Pradaane (Minister), and Geni (tenant). "Seete Aata" is a solo variation with no end, associated with Goddess Sita. Variations like Joduperga, Kodillkatta, and others exist. Traditional wooden [Chenna mane](#) has seven pits. (Fig 20) (Prajna, Wordpress, 2017) (PS, 2021) Watch how to play [Chennamane](#)

**4.6 Jubuli:** Jubuli or Kunte-bille as called in other parts of Karnataka, has eight boxes are either drawn in chalk on the floor or scratched out in the dirt. Without stepping on any of the boundary lines, the first player tosses a flat stone beginning with the first square. The square that the stone lands in is skipped as the player moves on to the next square. Hopscotch was a game used to improve children's human motor skills. (Fig 21) (Subramanian, n.d.)

**4.7 Kaddida Aata:** The game involves using coconut leaf midribs of varying sizes with players sitting on the ground. Midribs are thrown to shatter, and to avoid being out, a shorter midrib must land on top of a longer one. Players take turns picking up sticks without disturbing others, facing elimination if they move. The highest scorer in a round gets the first turn in the next, with experts aiming for a maximum possible score of 300 points. (Sandy, 2019) Click on the following link to hear about the game. (Fig 22)



Fig 16



Fig 17

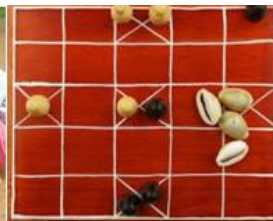


Fig 18



Fig 19



Fig 20



Fig 21



Fig 22

## **5 Food Culture of Tulunadu**

In the southeastern reaches of Tulu Nadu, a culinary haven known as the 'Adpil' or 'Ateel da Kone' stirred to life, resonating with the clinking of brass and copper utensils and the rhythmic grinding in 'Kadepi Kall'—manual grinders that served as the heartbeat of this kitchen. Beyond daily sustenance, this kitchen was a sanctuary for the preparation of the traditional Bunt Cuisine, where every vessel and ingredient played a vital role in preserving the essence of Tulu Nadu's culinary heritage. The menu includes the food culture practiced in last 100 years in Tulu Naadu.

### **5.1 Utensils and Materials:**

The 'Unpuna Kone,' the dining hall, witnessed the culmination of these efforts. Banana leaves adorned the table, doubling as natural plates that enhanced the aroma and experience of every dish. The dining hall became the epicenter of family gatherings, where the richness of Tulu Nadu's culinary heritage was savoured in every bite.

The kitchen of a house in tulunadu has an array of vessels like 'kataras' which are oversized copper cauldrons with sturdy ring handles, 'mandes' for intricate steaming, 'chembus' for slow-cooking, 'cheriges' for frying, and 'kodapanas' for storing water. Brass and copper utensils took center stage, revered for their even heat distribution and durability. The large, shallow 'Urulis' crafted from these metals were particularly favored, embracing dishes like the delicate 'Neer Dosa' with an unmatched finesse.

**Brass and Copper Utensils:** These can be widely used for cooking and serving. The heat conductivity of these metals allowed for even cooking, and the vessels were known for their durability. Large, shallow Urulis made of brass or copper were especially popular for cooking dishes like Neer Dosa. (Fig 23), (Fig 25)

**Clay Pots and Vessels:** Traditional mud pots were common for cooking various dishes. The porous nature of clay imparted a unique earthy flavor to the food. These pots were used for both cooking and storing. (Fig 24)

**Banana Leaves:** Banana leaves were used as natural plates for serving food. This practice not only added an aromatic essence to the dishes but also aligned with the eco-friendly ethos of the region.

Grinding sessions can be done using 'Kadepi Kall' especially when creating the batter for traditional breakfast dishes like dosas, idli and alsI grinding spices for curries. Kadepi kall acts as a mixer / grinder that is currently found in modern Indian kitchen. (Fig 26)

Peredane is basically a tool used for grating coconut in tulunadu kitchen. A firewood place is used to cook all the food . The tradition of firewood cooking adds a distinctive and authentic touch to the culinary experience. The use of firewood imparts a unique flavor to the dishes, creating a connection between the food and the natural surroundings. savoring seafood delicacies like Bangude Pulimunchi or Kane Rava Fry, prepared over an open flame, allowing the smoky essence of firewood to infuse the dishes with a rustic charm. The slow-cooking process is done in vessels like oversized copper cauldrons ('kataras') and traditional clay pots enhances the flavors, ensuring a depth that is hard to replicate with modern cooking methods. A 'Mutati' sickle with stool used for cutting vegetables, fish and meat, and 'Semai da Mane' rice noodle press are some of the instrument that are meticulous invested in traditional cooking.



**Fig 23**



**Fig 24**



**Fig 25**



Fig 26



Fig 27

## 5.2 Staple Food and Serving Practices:

The staple food in Tulu Nadu predominantly centred around rice. Dishes like Neer Dosa, Rice with Sambar, and various rice-based preparations were common. Seafood, owing to the coastal location, held a significant place, with dishes like Bangude Pulimunchi (spicy mackerel curry) and Kane Rava Fry (ladyfish coated with semolina) being popular choices. In the culinary tapestry of Tulunad, traditional dishes stand as vibrant expressions of the region's rich cultural heritage and agricultural abundance. Among the array of delicacies, snacks like Golibaje, with its deep-fried fritters made from a spiced urad dal batter, and Patrode, where colocasia leaves are coated with a seasoned rice batter and steamed, showcase the creativity and variety intrinsic to Tulunadu cuisine. These snacks, often enjoyed during tea time or festive occasions, are both flavorful and satisfying.

Snack on Golibaje, (Fig 28) deep-fried fritters crafted from a spiced urad dal batter, offering a perfect balance of crunch and spice. For a unique culinary experience, delve into the Patrode (Fig 29) – colocasia leaves coated with a seasoned rice batter and steamed to perfection. These snacks, reminiscent of festive occasions and tea-time delights, bring forth the creative spirit and variety inherent in Tulunadu cuisine.



Fig 28



Fig 29

Jackfruit, a local treasure, finds its way into diverse preparations in Tulunadu kitchens. Jackfruit pickles, with their spicy and tangy profile, add a punch to meals, while the aromatic Jackfruit Curry is a celebration of the region's agricultural abundance. Accompaniments like Neer Dosa and chutneys made with coconut, green chilies, and local spices enhance the dining experience. Neer Dosa, thin rice crepes, exemplify the delicate yet flavorful nature of Tulunad cuisine, often served with coconut chutney for a harmonious balance.

Vegetarian dishes in Tulunadu extend beyond the ordinary, offering unique creations like Seme D Adde, (Fig 30) Gunda, moode (Fig 31) etc. These dishes highlight the region's penchant for transforming humble ingredients into culinary delights. Non-vegetarian offerings are equally diverse, with seafood specialties like Bangude Pulimunchi, featuring mackerel in a tangy tamarind-chili curry, and Kori Rotti, where crispy rice wafers accompany a fiery chicken curry. The interplay of spices and textures in these dishes reflects the coastal influence on Tulunadu cuisine, providing a delightful and satisfying culinary journey. In essence, the traditional dishes of Tulunad serve not only as a source of nourishment but also as a testament to the region's vibrant cultural identity and the artistry embedded in its culinary practices.



Fig 30



Fig 31

## 6 Waste Management Techniques

### 6.1 Dumping and landfills

**Open Dumping:** People used to dispose of their rubbish by just tossing it into open spaces in many ancient countries. Food scraps, garbage from the home, and other non-biodegradable elements may fall under this category. These places would gather trash over time and turn into unofficial disposal sites.

**Pits and Trenches:** To bury their garbage, some communities created pits or trenches. This procedure reduced the amount of garbage that was visible and, in time, might aid in its natural breakdown.

#### **Composting and Manure:**

**Organic Waste:** Composting was frequently employed to handle organic waste, such as leftover food and plant debris. By allowing organic waste to break down under regulated conditions, compost—a nutrient-rich material that can be utilised to increase soil fertility—is created.

**Animal Manure:** It was thought to be valuable to dispose of animal manure, particularly from cattle. Manure was gathered by farmers and used as fertiliser for crops. Many agrarian communities still engage in this technique today.

## 7 Implementation Planning:

We aim to establish a Cultural Experiential Centre at the sprawling 30-acre in Shiroor(Fig 32). This 30 acres has got Swarna River flowing at one side of the property, which is the main source of water for Tulunadu. Shiroor, (Kannada: ಶಿರೂರು ) also known as Shiroor, is a coastal village in Karnataka, India, situated in Udupi District. Positioned along NH-66, a key Mumbai-Mangalore route, Shiroor is easily accessible, the village comprises three main sections - Shiroor Bazaar, Shiroor Market, and Shiroor Kesarkodi - all located within a kilometre of each other. Mangalore International Airport serves as the nearest air travel hub, and the village is well-connected by the Konkan Railway.

This visionary project seeks to bring to life the rich cultural heritage of Tulunadu, showcasing traditional folk games, cultural activities, and the culinary delights of bygone eras. The centre will serve as a daily hub for immersive cultural experiences, offering visitors a break from modern digital distractions.

Our innovative prototype (Fig 33) is designed not only to captivate tourists but also to serve as a replicable model for similar ventures in other locations. The heart of the centre will feature ongoing cultural events and traditional games, creating a lively and engaging atmosphere. This initiative aims to redefine tourism by providing visitors with an authentic, hands-on experience of the region's cultural practices.

Surrounding the Cultural Experiential Centre, around 30 charming cottages will be strategically arranged, offering tourists a unique opportunity to step back in time. These accommodations will be equipped with modern amenities presented in a manner reminiscent of the simplicity and charm of days gone by. The overall vision is to establish a sustainable tourism destination that not only entertains but also educates, fostering a deeper appreciation for the cultural heritage of Tulunadu.

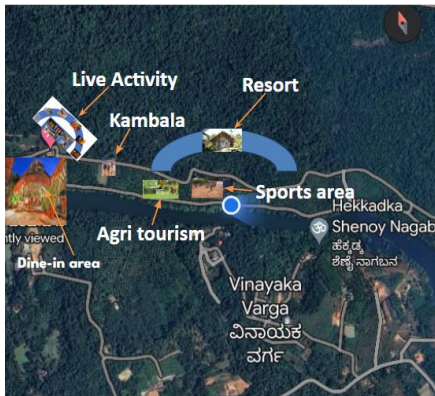


Fig 32



Fig 33

8 Estimated Cost for creation of the Sustainable Experiential Tourism Project

Expense Category	
<b>Initial Investment</b>	
Infrastructure development	
Equipment purchase	
Licensing and permits	
Solar Panel Installation	
<b>Operational Expenses</b>	
Staff salaries and wages	
Training and development	
Utilities	
Maintenance and repairs	
Supplies and Consumables	
Food and beverage	
Cleaning supplies	
Fuel	
<b>Marketing and Promotion</b>	
Website development and maintenance	
Online advertising	
Printed materials	
<b>Transportation</b>	
Bullock cart	
<b>Sustainability Initiatives</b>	
Conservation projects	
Waste management	
Contingency Fund	
Emergency expenses	
Unexpected costs	
<b>Administrative Costs</b>	
Office rent and utilities	



Expense Category	
Insurance	
Legal fees	
<b>Taxes and Licenses</b>	
Local taxes	
Tour operator licenses	
<b>Miscellaneous</b>	
Other expenses not covered above	
<b>Total Estimated Cost Rs.15,00,00,000</b>	

### **Interviews with Key stakeholders**

To understand the independent challenges and opportunities while creating this sustainable experiential project we conducted interviews with various stakeholders who has knowledge in these aspects.

### **An Interview with Manohar Shetty on Sustainable Tourism through Tradition**



Manohar S. Shetty is the Chairman and Managing Director of the Sai Radha Group, a diversified business group based in Udupi, Karnataka. He is a prominent figure in the region's business and social landscape, known for his entrepreneurial acumen and commitment to community development.

As the head of the Sai Radha Group, encompassing diverse sectors such as automobiles, tourism, hospitality, and education, Mr. Shetty has demonstrated exemplary business leadership by spearheading the group's expansion and diversification strategies. Renowned for his strategic acumen and unwavering commitment to customer satisfaction, he has successfully navigated the group through various industries. Beyond his business endeavors, Mr. Shetty is deeply engaged in community affairs, serving as the President of the Association of Coastal Tourism, advocating for the growth of tourism in the region. His involvement extends to impactful corporate social responsibility initiatives, particularly in promoting education and social welfare, earning recognition for his contributions to the development of Udupi. Mr. Shetty is also a prominent figure in talks and events, where he shares his entrepreneurial journey and insights, highlighting the importance of sustainable tourism practices in coastal Karnataka. Passionate about promoting tourism while prioritizing environmental sustainability, he champions the implementation of sustainable practices within the industry. Mr. Shetty firmly believes in the power of teamwork and fostering a positive work environment, aligning with his overarching vision for sustainable growth and development in both business and community spheres. He is also into heritage tourism. He runs 2-3 resorts in forested areas providing travellers with authentic and environmental exposure.

### **Elevating Tulunadu's Culinary Heritage in Sustainable Tourism Project**

Manohar Shetty passionately argues that the unique culinary traditions of Tulunadu should be the core of this project. He emphasizes the region's diverse food offerings, from vegetarian staples like masala dosa and pathrode to the iconic kori



rotti and the global presence of Udupi hotels. He expresses concern that Tulunadu's traditional food, despite recent recognition, still lacks the prominence it deserves and advocates for making it a central focus. Shetty proudly hails the global fame of "Udupi hotels" and their delectable, health-conscious dishes.

He further highlights Tulunadu's unique breakfast delights like golibaje, buns, and chattambade as reasons to celebrate its distinct culinary identity. In essence, Shetty champions the potential of Tulunadu's rich food traditions to become the project's defining element, urging for its protection and promotion alongside the exploration of new culinary possibilities.

### Kambala: Navigating Tradition and Progress in Tulu Nadu's Cultural Landscape

Mr. Shetty starts by addressing the past controversy surrounding Kambala, a traditional Tulu Nadu sport involving buffalo races. He clarifies that despite early concerns about animal cruelty, the Supreme Court ultimately recognized the sport's 1000-year-old significance and allowed it to continue.



He delves into its roots, explaining that Kambala originated as a practical means for farmers to prepare their paddy fields before sowing. By racing their buffaloes across the mud, they would naturally plough the land while showcasing the health and strength of their prized animals. This pride stemmed from their dedication to raising the buffaloes, not monetary gain. He emphasizes that the sticks used are safe and do not harm the animals. Moving forward, Mr. Shetty celebrates the expansion of Kambala beyond Tulu Nadu, citing the recent successful event in Bangalore. However, he cautions against diluting the tradition's essence through excessive commercialization. To manage this growth, Tulu Nadu has established a calendar system for booking events, ensuring they occur within the region's traditional context.

This calendar also guides tourists seeking to experience Kambala alongside other Tulu Nadu cultural attractions like temples. Notably, Kambala's participation has broadened from just farmers to include businessmen, contributing to its evolution and popularity. Overall, Mr.

Shetty presents Kambala as a positive tradition, adaptable to modern times while retaining its cultural core, and one that can resonate with and be embraced by tourists.

### Mr Shetty's views on Agri-Tourism as a Sustainable Pathway for Farming Families

The traditional, slower pace of agriculture in Tulu Nadu is facing increasing modernization, leading to concerns about the well-being of farming families. To elevate their way of life, promoting agri-tourism is seen as a key strategy. This involves transforming existing farm homestays, nestled within the region's natural beauty, into tourist destinations with government support. The benefits are two-fold: families can enjoy tax exemptions and improved income through hosting, while also actively participating in promoting the project through weekend engagement. This allows them to maintain their agricultural work during the week while dedicating weekends to showcasing the unique charm of Tulu Nadu's agri-tourism offerings. In essence, it's a win-win situation that leverages their existing farm life and cultural heritage to generate sustainable income and improve their economic standing.

This approach emphasizes several key points:

- Focus on existing farm homestays: Capitalizing on existing infrastructure minimizes environmental impact and disruption.



- Government support: Tax exemptions and assistance can incentivize participation and ensure project success.
- Weekend engagement: This allows farmers to balance agri-tourism with their traditional agricultural work.
- Promoting Tulu Nadu's heritage: The project showcases the region's unique charm and cultural aspects.
- Sustainable income generation: Agri-tourism offers a reliable source of income for farming families.

By strategically leveraging these elements, agri-tourism can become a powerful tool for improving the lives of Tulu Nadu's farming families while simultaneously preserving the region's natural beauty and cultural heritage.

### Mr. Shetty's views on Rain Tourism: Nurturing Tulu Nadu's Cultural Wealth

#### Amidst Monsoon Magic

The heavy monsoon season in Tulu Nadu presents both challenges and opportunities for local farmers. While agricultural work slows down significantly, this period can be harnessed for alternative income generation through "rain tourism." This concept revolves around turning the region's lush monsoon beauty into a tourism attraction. Villagers can capitalize on this by showcasing their traditional arts and crafts, such as handcrafted pots, during these rainy months. Imagine visitors immersing themselves in the enchanting rain, amidst a vibrant marketplace displaying local artistry. To make this vision a reality, government support is crucial. Funding initiatives to promote rain tourism, train villagers in showcasing their crafts, and develop necessary infrastructure would be key.

This approach offers several benefits:

- Income generation for farmers: Provides alternative income during the monsoon months, supplementing their agricultural earnings.



- Preserving cultural heritage Showcases and supports local artisanship, keeping traditional crafts alive.
- Unique tourism experience: Offers visitors a distinctive experience immersed in nature and local culture.
- Sustainability: Promotes responsible tourism practices and fosters appreciation for the environment.

By tapping into the beauty of the monsoon and the creativity of its people, rain tourism can unlock a unique economic and cultural development model for Tulunadu. Imagine the region blossoming into a haven for those seeking an authentic experience amidst the captivating charm of a rainy paradise, enriched by the warmth of traditional craftsmanship.

### **Mr. Shetty's views on Sustainable Eco-Tourism in Tulunadu through Unique Treehouse Concepts**



Leveraging Tulunadu's abundant greenery, backwaters, and western ghats, sustainable eco-tourism can flourish through unique treehouse concepts. Building within established forest preserves, these treehouses would offer immersive nature experiences without harming wildlife, as the region lacks large predators like tigers and lions. This initiative capitalizes on India's vast green cover and Tulunadu's water rich landscape, providing tourists with an unforgettable, eco-conscious escape into the wonders of nature.

### **Mr. Shetty in his interview unveils Tulunadu's Rich Heritage Through Tiger Dances, Yakshagana, and Immersive Rituals**

The cultural tapestry of Tulunadu is vibrantly woven with captivating performances like tiger dances, Yakshagana, and Kangol, drawing audiences yearning for an immersive experience. This goes beyond mere spectatorship, with opportunities for visitors to participate in rituals like Nagaradhane and Bhoota Kola, offering a deeper connection to the region's spiritual pulse. Rooted in the legend of Lord Parashurama's creation, Tulunadu boasts a rich cultural heritage, exemplified by the renowned Subramanya temple, the state's most visited, where even celebrities like Sachin Tendulkar seek blessings. This deep-seated faith acts as a powerful magnet, attracting people from various backgrounds.

It's no surprise then that Tuluvas achieve success across the globe, carrying the region's cultural essence with them.

Recognizing this potential, government support in promoting Tulunadu's rich cultural offerings could unlock a unique tourism path, allowing visitors to not just witness, but truly experience the captivating soul of this coastal wonderland.



### **Tulunadu's Project to Rediscover and Promote Traditional Games**

Amidst the dominance of modern sports like cricket and football, Tulunadu's project seeks to revive the fading memories of traditional games like Gilli Danda, Lagori, and Channamane. These sports, steeped in local tradition, fostered a sense of community and inclusivity, with boys and girls playing together unlike the more segregated nature of modern games.



Recognizing the educational and social value of these activities for the second and third generation, the project aims to emphasize their importance. By showcasing these unique, inclusive sports, Tulunadu can not only reclaim its cultural heritage, but also offer visitors a window into a more connected, community-oriented way of life, enriching their experience and fostering appreciation for the region's vibrant past.

### **Interview on daiva aradhane and Naga aradhane with Nagaraja Bhat Daragudde**

Nagaraj Bhat Daragudde, a distinguished priest and cultural authority, stands as a beacon of knowledge in Tulunadu's rich heritage. With profound expertise in the intricacies of Naga Aradhane and Daiva Aradhane, he has dedicated his life to preserving and imparting the deep-rooted cultural traditions of the region. As a revered figure, his insights into the historical and mythological aspects of Tulunadu offer a valuable perspective, making him a guiding force in the exploration and understanding of the area's cultural tapestry.



**Naga Aradhane:**

Speaking about the Naga Aradhane, or worship of the serpent deity, Mr Bhat says , is deeply rooted in the cyclical nature of creation, preservation, and destruction (Shristi-Sthiti-Laya). The belief in Nagas as associates of Lord Vishnu, especially during the churning of the ocean (Samudra Manthana), further solidifies their revered status. Mr Bhat highlights the symbiotic relationship between the Nagas and the people of Tulunadu, with Nagas receiving worship in exchange for their departure from the land.



Kukke Subrahmanya, an important site for Naga Aradhane, is associated with a myth involving Lord Ananthapadmanabha rescuing a snake from the floods and placing it in Subrahmanya. The connection between Ananthapadmanabha (Vishnu) and the Nagas in this locale reflects the intertwining of different deities in the Tulunadu region.



**Daiva Aradhane:**

The research explores Daiva Aradhane, focusing on the worship of Shiva Shakti, known as Daivas. The narrative connects Daivas to the concept of Bhuvaneshwari, a part of Parvathi. Devi's role in the Markandeya Purana as Raktsheshwari exemplifies the fusion of Shiva and Parvathi in Daiva worship. Nagaraj Bhat highlights the distinction between Sathvikka and Tamasa Daiva Kriyas, categorizing them based on their inherent nature.

**Unveiling Tulunadu's Soul: Yakshagana and Sustainable Tourism – Interview with Shri**

**Krishnamurthi Bhat Bagwadi and Shri Umesh Suvarna**

Stepping into the Yakshagana Kendra in Indrali, Udupi, on January 1st, 2024, we were immediately transported to a vibrant world pulsating with the rhythm of drums and the shimmer of elaborately adorned costumes. Our quest led us to two renowned Yakshagana Gurus, their names and their presence resonating with the deep history and passion for this ancient art form.



Shri Krishnamurthi Bhat Bagwadi, a titan with over 30 years of experience, embodies the very essence of a multi-faceted Yakshagana artist. His nimble feet grace the stage with captivating dance, his fingers breathe life into instruments with masterful command, and his heart nurtures over 1500 students, his legacy echoing across international stages.



Shri Umesh Suvarna, a rising star with an equal wealth of experience, shines with his versatility. A captivating actor, a powerful vocalist, a visionary choreographer, and a skilled director, he has championed Yakshagana across India and beyond, infusing this cherished tradition with fresh energy and innovative spirit.

As we sat down with these respected experts, their eyes sparkled with contagious excitement, reflecting the lively hues of the Yakshagana Kendra. Their words, filled with wisdom and a deep passion for their craft, revealed a strategy to harness the power of Yakshagana for boosting tourism in Tulunadu in a lasting and meaningful way. They have emphasized on different aspects of the art form and our project and we have noted down the following key points they have emphasized on.

The ancient art of Yakshagana echoes through the vibrant costumes and rhythmic drumbeats of the Yakshagana Kendra in Indrali, Udupi. In our quest to explore its potential as a catalyst for sustainable tourism in Tulunadu, we sought the wisdom of esteemed Gurus: Krishnamurthi Bhat Bagwadi and Umesh Suvarna. Their insights illuminated a path to celebrate this cultural treasure while fostering responsible tourism practices.



**A Tapestry of History and Tradition:** The Gurus revealed the rich tapestry of Yakshagana's past, intertwining it with the cultural heritage of Tulunadu. Blessed by Parashurama, this land pulsates with a legacy where Yakshagana reigns supreme. Shri Bagwadi eloquently declared, "It's not mere entertainment; it's the living soul of our land, whispering tales of heroes, deities, and the very essence of our ancestors."

**Envisioning Yakshagana in our Project:** They emphasized on a short Yakshagana format for our project that is, 1–2-hour Yakshagana performances!

The Gurus suggested showcasing captivating excerpts from timeless epics like Mahabharata and Ramayana, stories deeply woven into the fabric of Indian culture. They further proposed highlighting the legend of Lord Parashurama, a figure deeply resonating with Tulunadu's spirit.

**Preserving a Cultural Gem:** The Gurus emphasized the significance of preserving Yakshagana as a cornerstone of Tulunadu's identity. They cautioned against technology diluting its authenticity, advocating for live performances to enhance audience engagement and preserve the true essence of the art form.

**Bridging the Language Barrier:** Recognizing the predominantly Kannada base, the Gurus offered innovative solutions to bridge the language barrier. Their pre-prepared scripts with English storylines allowed non-Kannada speakers to follow the narrative, ensuring everyone could connect with the spectacle unfolding before them.

**Cost Considerations for Yakshagana Performances:** Bringing Yakshagana to life incurs certain costs. The Gurus estimated INR 25,000 for a 1-2 hour performance, with costume expenses contributing roughly INR 15,000.

**An Immersive Yakshagana Experience:** To keep Yakshagana alive on weekdays, as we have already planned for an experiential center. Gurus gave some insights on how can a large screens showcasing the diverse forms of Yakshagana: Tenkutittu, Badaguthittu, and their sub-divisions could be a game changer to showcase our traditions. This visual symphony would ignite curiosity and draw visitors deeper into the art form, providing a taste of its rich tapestry even during off-peak times.

**Sustainable Benefits for Yakshagana Artists:** This project, the Gurus envisioned, could be a lifeline for both Yakshagana and its practitioners. They shared the example of their own Kendra, where 28 students receive not just artistic training but also basic necessities. This initiative, they asserted, could echo this support, ensuring the art and its artists flourish through sustainable practices.

### **Government Support for sustainable development of tourism in Tulunadu**

The sustainable development of tourism in Tulunadu, comprising Dakshina Kannada and Udupi districts, is bolstered by the support and initiatives of the Karnataka state government. Under its comprehensive policy framework, the government aims to promote and nurture tourism projects and service providers, emphasizing sustainability, marketing, and collaboration with industry stakeholders.

One of the key provisions is the identification of Focus Tourism Destinations, encompassing all tourism spots within the districts. These destinations receive special attention and support from the government, which periodically updates the list based on its objectives.

To avail incentives, subsidies, and concessions, tourism projects and service providers must register with the Department of Tourism. The registration process is facilitated through an online portal, ensuring transparency and efficiency. Moreover, the department endeavors to establish a grading system for tourism projects, enhancing quality standards across the industry.

Facilitation support is provided to streamline the development process of tourism projects, addressing inter-departmental issues and assisting in obtaining necessary approvals and clearances from governmental authorities. Additionally, marketing support is extended to selected tourism projects, showcasing them through various promotional channels such as brochures, print media, and social media platforms.

Recognizing the importance of sustainability, the government offers special recognition and financial assistance to tourism projects implementing sustainability measures. These initiatives include water conservation, adoption of renewable energy sources, and pollution control measures. Moreover, collaboration with tourism aggregators and online travel agents facilitates the dissemination of promotional programs and initiatives.

Sl. No.	Measure	Financial Assistance	Ceiling Amount for Subsidy per Tourism Project
1	Water conservation and harvesting	50% of capital cost for undertaking measure	INR 1,00,000/- (Rupees One Lakh only)
2	Adopting renewable energy sources	50% of capital cost for undertaking measure	INR 1,00,000/- (Rupees One Lakh only)
3	Adopting pollution control measures	50% of capital cost for undertaking measure	INR 1,00,000/- (Rupees One Lakh only)

Efforts are also directed towards easing inter-state travel for tourist vehicles and providing marketing development assistance to recognized tourism service providers. This assistance encompasses various promotional activities such as production of publicity materials, participation in national and international events, and sponsorship of roadshows organized by Karnataka Tourism.

Furthermore, the government instituted Tourism Excellence Awards to acknowledge outstanding contributions to the growth of tourism in Karnataka. Detailed guidelines regarding these awards are periodically issued by the Department of Tourism.

Homestays registered with the Department of Tourism receive support in the form of payment of electricity and water charges at domestic tariffs and property tax rates prescribed for residential purposes.

For new tourism projects and expansion initiatives, capital investment subsidies are offered based on the project type and eligible project cost. These subsidies aim to incentivize investment in key tourism segments such as adventure tourism, caravan parks, hotels, houseboats, wayside amenities, and wellness centers.

In alignment with our project's emphasis on sustainable tourism development, the Karnataka state government offers interest subsidies to new and expansion tourism projects. Eligible projects, including Agri Tourism, Cultural Tourism (Cultural Village, Museum & Gallery), Heritage Tourism (Heritage Hotel, Sound & Light Show), and Safety and Hygiene Tourism (Mobile Toilets at Tourist Destination), can avail of a 5% per annum interest subsidy on term loans taken for fixed capital investment. The subsidy is capped at INR 25 lakh over a five-year period, not exceeding INR 7.5 lakh annually. This subsidy is aimed at promoting timely loan repayment and reducing the financial burden on tourism projects, thereby fostering sustainable growth in the sector. For instance, if a project obtains a loan of INR 10 lakhs at an interest rate of 11% per annum, the department would subsidize 5% of the interest per annum.

Our project, situated in Tulunadu, is aligned with the criteria outlined by the Karnataka state government for subsidies and support. As a Cultural Village Project located in Tulunadu, our focus is on showcasing the unique cultural heritage, rural life, art, craft, cuisine, and traditions specific to the Tulunadu region. The project includes features such as souvenir shops and live demonstration areas, emphasizing indigenous arts and crafts while excluding manufacturing activities.

Additionally, our project embodies the principles of eco-tourism, ensuring ecologically sustainable practices within the Tulunadu region. We prioritize the involvement of the local community, minimize conflicts between resource use and local livelihoods, and ensure compatibility with the environment and socio-cultural characteristics of Tulunadu. By integrating into the overall development strategy of Tulunadu, our project aims to contribute to the economic growth of the area while promoting responsible tourism practices.

Given its alignment with the subsidy criteria for Cultural Village and Eco Tourism Projects, our project in Tulunadu is eligible to receive support and subsidies from the Karnataka state government upto to INR 55,000 annually.

In conclusion, the state government's multifaceted support system underscores its commitment to fostering sustainable tourism development in Tulunadu. Through incentives, facilitation, marketing, and recognition, the government aims to propel the tourism industry towards a path of responsible growth and environmental stewardship. (Karnataka Tourism Department, n.d.)

## 9 Promotional Activities:

- Digital marketing: Website creation: Develop an engaging and educational website for the Cultural Experiential Centre. Provide information about the traditional games, cultural events, cottages, and dining options. Social media: Share interesting articles, pictures, and videos by utilising sites like Facebook, Instagram, Twitter, and LinkedIn. Update these channels often to educate prospective guests about upcoming events, goings-on, and special offers.
- Content Marketing: Blog: Create a blog on the website to post in-depth articles on the customs, culture, and experiences of Tulunadu. Emphasise visitor and artisan stories.

Video Content: Produce top-notch videos that highlight the cottages, local culture, and food options. Distribute these videos via social media and websites like YouTube.

- Search Engine Optimization (SEO): Make sure your website is search engine optimised so that it shows up in relevant search results. Make use of keywords associated with Tulunadu, cultural heritage, and experiential tourism.
- Collaborations and Partnerships: Collaborate with travel influencers, bloggers, and vloggers who focus on cultural experiences. Invite them to experience the centre and share their insights with their followers.
- Email Marketing: Increase email subscriber count by providing newsletters, special material, and promotions. Provide frequent details about future occasions, exclusive deals, and noteworthy cultural events.
- Travel Agencies and Tour Operators: Collaborate with tour companies and travel agencies to incorporate the Cultural Experiential Centre into their schedules. Provide discounted rates for group reservations.
- Public Relations: Reach out to travel journalists, magazines, and online publications to feature stories about the Cultural Experiential Centre. Provide them with press releases and high-quality images.
- Online Reviews and Testimonials: Encourage visitors to leave positive reviews on travel review websites such as TripAdvisor, Google Reviews, and Yelp. Positive testimonials can significantly influence potential visitors.

## **10 Conclusion**

The study delves into the need for sustainable tourism practices in Tulunadu, a region of unparalleled ecological richness. Through a comprehensive exploration of global sustainable tourism practices, with a focus on regions like West Indies, Australia, South Africa, and key areas in India such as Kerala and North Karnataka, this research has provided insights into viable strategies for Tulunadu.

The proposed sustainable tourism plan for Shiroor, encompassing a Cultural Experiential Centre and eco-friendly cottages, showcases a visionary approach to preserving Tulunadu's cultural heritage while promoting responsible tourism. By leveraging the region's natural beauty, rich cultural traditions, and local expertise, the plan aims to create a replicable model for sustainable tourism development, fostering economic growth while conserving the environment.

By adopting a collaborative approach involving local communities, government agencies, and tourists, it is possible to strike a balance between tourism development and environmental preservation, ensuring the long-term sustainability of Tulunadu's ecological treasures. This research serves as a blueprint for stakeholders to embark on a journey towards preserving paradise in Tulunadu for generations to come.

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## ANNEXURE

### Questionnaire of Interview with Mr Manohar Shetty

1.How do you feel about the idea of integrating and highlighting the opulent culinary traditions and kitchen rituals of Tulu Nadu's affluent culture? The aim is to simultaneously preserve and enhance this heritage to provide travellers with a distinctive and unforgettable culinary experience.

2.What is your perspective on presenting Tulu Nadu's unique sporting traditions, such as Kambala, as part of hospitality offerings? What challenges and opportunities do you foresee in promoting these traditional sports to guests within travel packages?

3.How do you believe effectively promoting agricultural tourism in Tulu Nadu, offers visitors an immersive experience in farming practices? The aim is to align sustainable agricultural principles with stable and responsible agricultural practices.

4.In seasons with limited outdoor activities, like the monsoon, what strategies do you think would effectively manage the workforce engaged in agriculture or guide tourism toward indoor activities, ensuring both employment and the success of the resort?

5.In your view, how would you suggest harmonizing the use of wooden structures for safety measures in resort accommodations built in forested areas, while also integrating considerations for environmental sustainability in the construction process? We've already presented a plan to implement tree houses in the project.

6.What are your thoughts on incorporating Tulu Nadu's culture into live performances for our guests, including shows, circus acts, traditional dances, and folk songs?

7.How do you feel about the idea of integrating traditional games like Channamane, boat races, log balancing, and tug-of-war into resorts to offer guests an authentic and appealing cultural experience?

8.What are your opinions on integrating solar power systems in the resort to focus on renewable energy? How can we reduce the environmental impact of solar energy installations in specific areas or facilities?

9.In terms of agricultural tourism, employee reassignments, solar energy implementation, and sustainable reuse during resort renovations, how do you envision ensuring a cohesive and environmentally conscious approach that aligns with Tulu Nadu's cultural and environmental principles?



10. What's your opinion on traditional practices being integrated into the process of decommissioning and refurbishment at the resort, and what modern waste management techniques can be employed to ensure comprehensive and meticulous waste disposal practices aligning with contemporary waste management strategies?

**Questionnaire of the interview with Mr Nagaraj Bhat**

1. How does the historical and cultural significance of Tulunadu, particularly its association with Lord Parasurama and the promise of worship to Samudra Raja, shape the identity and practices of the people in the region?

2. In what ways does the Naga Aradhane tradition in Tulunadu reflect the cyclical nature of creation, preservation, and destruction, and how does the symbiotic relationship between the Nagas and the local population manifest in rituals and beliefs?

3. What is the mythological connection between Lord Ananthapadmanabha (Vishnu) and the Nagas in the context of Kukke Subrahmanya, and how does this connection contribute to the broader narrative of deity interrelationships in Tulunadu?

4. How does the research shed light on the worship of Shiva Shakti, specifically the Daiva Aradhane, and what role do the distinctions between Sathvikka and Tamasa Daiva Kriyas play in shaping the religious practices in Tulunadu?

**Questionnaire of the interview with Shri Krishnamurthi Bhat Bagwadi and Shri Umesh Suvarna**

1. Could you please introduce yourselves and share your background and expertise in the realm of Yakshagana?

2. What inspired you to dedicate yourselves to Yakshagana, and what are some of your notable achievements in this field?

3. Can you describe the atmosphere and essence of the Yakshagana Kendra where you practice and teach?

4. How do you envision Yakshagana contributing to the promotion of sustainable tourism in Tulunadu?

5. What historical and cultural significance does Yakshagana hold for the people of Tulunadu, and how does it reflect the region's heritage?

6. In your opinion, what are the key elements of a successful Yakshagana performance, especially in the context of attracting tourists?

7. How do you suggest balancing the preservation of Yakshagana's authenticity with the need to adapt to modern audience preferences?

8. What strategies do you recommend for overcoming language barriers to ensure all tourists can appreciate Yakshagana performances?

9. Could you provide insights into the financial aspects involved in organizing Yakshagana performances, including cost estimates?

10. How do you propose keeping Yakshagana culture thriving beyond traditional performance settings, such as on weekdays or during off-peak times?

11. Can you elaborate on your idea of using technology, such as large screens, to enhance the Yakshagana experience for visitors?

12. In what ways do you believe your tourism project can support and sustain Yakshagana artists and practitioners?

13. What do you envision as the long-term impact of integrating Yakshagana into sustainable tourism initiatives in Tulunadu?