Heritage Trail will revitalise the livelihood of Palmyra Palm-based rural communities in Tamil Nadu, India

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Abstract

The Palmyra palm tree, called the Tree of Life, provides numerous edible and inedible benefits. It Provides livelihood opportunities for large, underprivileged communities. The present study explores two heritage walk routes, the Palmyra Safari, connecting distinct landscapes of the Kanyakumari district. Moreover, The Palmyra Trail connects diverse religious groups in the Thoothukudi district. These trails were developed in collaboration with government organisations and local communities to attract tourists with special interests. The techniques used to gather primary data, design the itinerary, and document stakeholders' opinions and experiences on the Heritage Trail routes include the Delphi technique, field observation, interviews with the local community, and familiarisation trips. The findings reveal that local communities, tourists, and experts have positive experiences with the trail. The practical implications highlighting the revitalisation of the local community's socio-economic status, reduction of Palmyra-based product adulteration, and creation of authentic experiences and awareness among tourists were established through the itinerary model. The results suggest that the model's success lies in its ability to engage local communities, provide them with a sustainable source of income, and preserve their cultural heritage. By offering genuine experiences to tourists, the model fosters a deeper understanding and appreciation of Palmyra's significance. The findings support the model's improvement and recommendation to the Tamil Nadu State Forest Department and the Tamil Nadu Tourism Development Corporation working committee for further development and promotion.

Keywords: Heritage tourism, Heritage Routes, Palmyra Palm, Livelihood opportunity, Special Interest and experiential Tourism, Walking trails.

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1. Introduction

The paradigm shift in tourist choice and present needs has evoked several new forms of tourism. However, heritage tourism and trails have become indispensable over the centuries. Throughout history, humans have followed trails for various purposes, such as hunting, trading, pilgrimage, route establishment, and later touring. Heritage routes and trails are linear pathways with grounded roots, abstracted to modern circuits, which can provoke nations' sentiments and identity (Timothy & Boyd, 2015). Heritage tourism allows visitors to immerse themselves in the past. It includes tangible and intangible heritage products. It draws in specialised travellers eager to immerse themselves in diverse cultures and artistic expressions (Thomas, 2010). Given this context, Vorasiha (2019) developed an itinerary model spanning two days, focusing on five distinct Palmyra palm routes in Thailand to attract both foreign individual tourists (FIT) and notable interest tourists (SIT). These routes identify the Palmyra vernacular culinary, Palmyra palm artisans, Palmyra palm climbers, tappers, and Palmyra farming communities. The itinerary promotes the engagement of tourists to experience the local culture and learn the making of traditional cuisine, climbing techniques, and weaving from the community. Adapting this idea, the present study explores potential destinations to develop heritage trail routes involving communities dependent on Palmyra palm for their livelihood in Tamil Nadu. Palmyra palm, scientifically called Borassus Flabellifer, provides immense edible and inedible benefits to the community (Govindaraj et al., 2024). The community regards the tree as divine and refers to it as the "tree of life". Unfortunately, the tree's vitality has diminished in recent years, depriving the community of its presence (Davis & Johnson, 1984). We conducted the two trails, "Palmyra Safari in varied landscapes" and "Palmyra Trail connecting diverse religions," in Kanyakumari and Thoothukudi districts, respectively. The study aims to address, understand, and resolve the struggle of Palmyra-dependent communities. It encourages community engagement, decision-making, and empowerment through tourism, as well as reconciling stakeholder involvement to uplift the community and the living heritage. Therefore, we have endeavoured to design and formulate the heritage trail routes with the aim of raising awareness, creating additional livelihood opportunities, enhancing the standard of living, preserving the environment, local culture, history, traditions, and performing arts, and empowering the underprivileged community associated with the tree. It attracts niche tourists and provokes their perception and interest towards the transdisciplinary benefits of Palmyra palm, enhances creative and sustainable experiences for the tourist, and builds sentiments and connection among host and tourist through promoting this successful working model. Further, this study aims to stand as a testament to transfigure the rural community of Tamil Nadu who were sceptical about tourism. It enables them as an active player to sustain and protect their livelihood and identity through tourism. In

addition, the study addresses the stakeholders' perspectives and experiences for future alteration and improvement in itineraries and execution and proposes them to the government of Tamil Nadu for further policymaking and implementation.

1.1. Heritage Trails and Routes

The scholars have conducted extensive research on purposeful trails that combine cultural and natural significance in the past. Timothy and Boyd (2015)'. The Heritage Trail or Route serves as an interpretive tool for storytelling. Heritage storytelling is a collective memory that includes narrative, anecdote, and personal experience. To engage and satisfy tourists, we co-create these memories emotionally, cognitively, and intellectually (Leong et al., 2024). In the process of storytelling, tourists perceive their own connections and experiences in space, landscapes, and communities (Boyd, 2017). These immersive experiences are vital to understanding the essence of the destination and its rooted values (Peng et al., 2023; Sneha & Nagarjun, 2023). Storytelling capability enhances authenticity or the destination's sense of uniqueness (Park et al., 2022; Palombini, 2017). Globally organised agriculture and wine routes aim to educate tourists about the methods used in cultivation practices. As the number of wine trails increased, so did the number of food trails. These purposeful trails benefited mostly micro-business operators. They have augmented a specialised itinerary and marketing mechanism as the destination's unique selling proposition as a new tourism product (Timothy & Boyd, 2015). The conceptual model of heritage trails and routes, the nested hierarchy designed by Timothy and Boyd (2015), explains the experiential dimension of tourists. He explains that the supply, rationale, and scales involved shape tourist engagement, with administrative structures and marketing strategy further influencing it. Trails or route development plays a part in constructing macro-policy environments for tourism at local, regional, and national levels. To bring themes into play and generate community engagement with linear tourism spaces, the model conceptualises routes and trails. Similar to other forms of tourism, heritage trails have a positive ecological, social, and economic impact on the destination and foster sustainable tourism goals (Duda, 2024). An ecological perspective often views nature-heritage trails, while a socio-economic perspective views community-involved craft heritage trails (Boyd, 2017).

1.2. Community Engagement in Heritage Tourism Planning

The relationship between community engagement and tourism receives an overwhelming response in the industry, both in academic and practical terms. Developing countries, in particular, evidently view shifts towards community engagement and the creation of unique experiences

as a responsible approach (Akdemir et al., 2023). Among stakeholder engagements, community engagement plays a prominent role in heritage management. They preserve local culture, heritage, and natural resources, as well as disseminate traditional knowledge to tourists (vanKnippenberg et al., 2021). "Community participation," "capacity building," "skills development," and "decision-making" are mandatory to engage the community (Ginting et al., 2023). Majorities of the communities lack the business and financial assistance that is required for them to play decision-making roles (Boyd, 2017). Biju and Tantiya, (2023) consider self-help groups as "powerful resilient solutions to reduce household financial vulnerability." It fulfils basic requirements such as food, medicines, and education. It empowers marginal communities by promoting inclusive livelihood activity and developing capacity-building programs (Kurniyanti et al., 2023).

Heritage trails are constructive models aimed at promoting social justice and equity in society. It eliminates "racism, supremacy, sexism, misogyny, heterosexism, and xenophobia that have an effect on marginalised and underprivileged communities (Spencer-wood, 2021). Purposive heritage trail routes necessitate cooperation from multiple levels of government, community groups, tourism business organisations, and local community support. Eventually, these routes may increase in popularity, provide multiple business opportunities, and provide leadership opportunities to the community at different levels (Lemky, 2016). The collaboration and common goals of these stakeholders may provide long-term sustainable solutions and revitalize the socioeconomic status of the community (Lemky, 2016; Towner, 2018). Although stakeholders' engagement prospers, heritage management and tourism activities conflict among the groups. Often, it is necessary to draw on stakeholder experience or perception to minimize conflicts of interest. The stakeholders include local tourist communities, service providers, and the government. Sustainable tourism goals validate community perception as a priority (Zhong et al., 2019; Byrd et al., 2009). Arkarapotiwong & Chindapol (2022) classify the experiences of tourists into three categories: expectations, which include basic infrastructure facilities and amenities, impressions and perceptions, which include feedback about the place, process, people, and physical evidence, and demand, which encompasses destination authenticity and uniqueness. Local community experience and perception assist in determining their relationship and attitude toward planning and developing the destination image. Recommendations from all the stakeholders can dignify the destination image and improve the community's quality of life and the local economy (Byrd et al., 2009; Lawton & Weaver, 2015).

1.3. Palm Tourism across Globe

The study involving oil palm and tourism reveals that tourism can sustain natural heritage zones and bring dozens of opportunities to transform the

socio-political status of communities dependent on oil palm in Australia (Butler et al., 2022). Wijaya et. al. (2024) narrates how palm wine, a popular beverage across the world with significant cultural and nutritional value, has become a tourism commodity in Indonesia. The Ministry of Tourism has framed exclusive policies to support the inclusive livelihood of poor communities involved in the preparation of palm wine called tuak. In the Caribbean, palm tourism has the potential for regional value chain integration to support the community's traditional, ecological, and technical knowledge. Indigenous communities in Cambodia have been participating in hatching activities on the northern beaches for thousands of years, providing assistance to tourists. Around 57% of palm groves in this region are public and for commercial tourism purposes (Erazo et al., 2020). In the Okavango Delta of Botswana, tourism activities revitalize the livelihood and indigenous knowledge of women engaged in weaving baskets from palm leaves. This activity aims to achieve sustainable tourism. Goal 8: promote sustained inclusive and sustainable economic growth; and Goal 9: build resilient infrastructure and foster innovation by 2030 (Velempini & Garekae, 2022).

The systematic review of literature under different themes enables a conceptual and theoretical understanding of heritage trails and routes. The review emphasizes the importance of stakeholder engagement and stakeholder perception in safeguarding authenticity, traditional culture, and livelihood inclusivity for the community in the destination, as well as achieving sustainable tourism goals. The research gained valuable insights from studies related to various palm species most of which were native trees of that destination. The literature finds insufficient data on how Palmyra palm cultural ecology, traditional ecological knowledge and association of the local community can boost tourism and improve their living conditions. Critics have provided valuable insights on stakeholders' importance of heritage trails that were neither specific to the Palmyra palm community nor to the selected destination. Further, the mutualism and emotional connection between the tree and the community are less expressed. In the case of similar palm trees, memorable experiences gained by the tourists were expressed to boost economic benefits, the camaraderie and the value created between host and tourist are unspoken. Therefore, the amalgamation of insights into different theme-based heritage trails, the importance of community engagement in planning and similar palm trails from existing literature helps the study to bridge the gap and address the possibility of conducting a Palmyra palm heritage trail in Tamil Nadu, design the itinerary under different palmyra palm themes, and establishing networks and support with stakeholders. The study strives to preserve the inclusivity of Palmyra palm and the community through tourism.

2. Objectives of the study

1. To augment Palmyra palm heritage trail routes, aiding in revitalizing the livelihood opportunities of the Palmyra palm community in Tamil Nadu; and

2. To analyse stakeholder perspectives and experiences towards the developed Palmyra palm heritage trail routes.

3. Research Methodology

The study adopts the Delphi technique, field observation, and in-depth interviews with the local community to gain indigenous knowledge and the expert's expertise (Vorasiha, 2019). The research adopts an "action-oriented research method" with flexibility in planning, reflecting, implicating, progressing, and solving the problem (Macias et al., 2023).

The process for data collection is organized into 4 stages:

First Stage: In stage 1 The information is collected through relevant secondary documents and through expert opinion (Delphi technique). In total, seven potential destinations were selected to develop creative tourism routes. The destinations are Thellandhi near Thadagai forest cover, Kanyakumari, Anthoniyapuram, Adaikalapuram, Udangudi, Manapad, Theri Kaadu, and Vembar of Thoothukudi districts. The study is exploratory in nature, it involves limited empirical data. Therefore, it requires the Delphi technique to receive different expert opinions and consensus for planning and prioritizing the destinations. This process involves clarification of specialized knowledge, agreement and disagreement on different views and insights gathered from the experts. This technique has a limitation towards experts' availability, and potential for bias and consumes a huge time duration.

Second Stage: In stage 2, the study receives interest, cooperation and involvement of the local community towards participating in tourism activity. The study adopts field observation and in-depth interviews with local communities in six selected destinations and nearby destinations to understand the scenario and analyse how itinerary models can be prepared. Overall, 14 interviewees participated. Factors such as livelihood quality, accessibility, infrastructure facilities, the willingness of the local community to tourism, the willingness of other stakeholders, and tourist flow were analysed to find possibilities for conducting the trail. This technique is subjective in nature, time-consuming, and with less control over the environment and particularly in the field observer's effect may affect the authenticity of the information. But the study employs interviews to triangulate the information and to choose the appropriate destination to design the itinerary with local community support.

Third Stage: Two itineraries were made, comprising the shortlisted destinations. Participatory comments from stakeholders (community members, government officials, volunteers, and tourists) were recorded during the trial. These participatory comments help the study understand their emotions, insights and expressions during the trial. Participatory comments also reveal expectations and perceptions for improving and fostering sustainable destination management. It enhances the co-creation experience and inclusivity of the happenings. Having drawbacks to limited expertise and implementation challenges

Fourth Stage: Focus group discussions were conducted among the group of 45, involving tourists, the local community, and planners, to draw on their perceptions, opinions on products and services, experiences, and suggestions for the planned itinerary. This method is adopted in the final stage to encourage interaction and to enable every participant to respond. Every nuance of expressions was discussed to capture a collaborative insight and provide valuable suggestions. This method is limited to group thinking, conflicting opinions and social loafing.

Stage 1 & 2: Results from Field observation and in-depth interviews from the local community

Destinations	Livelihood quality. (Palmyra Tappers. Palmyra Handicraft makers)	Accessibility to the location	Basic Infrastructure facilities	Local Community willingness to participate in Tourism	Stakeholders Willingness to Participate in Tourism	Tourist flow	Planning Process
Thellandhi	✓	✓	✓	✓	✓	✓	✓
Anthoniyapuram	✓	✓	✓	✓	✓	X	X
Adaikalapuram	✓	✓	✓	✓	✓	✓	✓
Udangudi	✓	✓	✓	✓	✓	X	X
Manapad	✓	✓	✓	✓	X	✓	X
Theri Kaadu	X	✓	X	✓	✓	X	X
Vembar	✓	✓	✓	✓	✓	X	X

4. Discussions

Thellandhi Reserve Forest covers Palmyra and people in its foothills. Anthoniyapuram is a village that supports school education through the profit made by Palmyra tappers and sellers; Udangudi Palmyra saps are considered to have the highest brick value in Tamil Nadu. Hindu and Muslim villagers surround Adaikalampuram, which is a historical Christian village. Manapad, a coastal village with magnificent Portuguese churches, attracts film and niche tourists throughout the year. The fishing community in Manapad also relies on Palmyra palms for their livelihood. Theri Kaadu, a desert in Tamil Nadu, boasts a mesmerising biodiversity that includes Palmyra palms. Vembar sea beds are filled with a plethora of Palmyra palms.

Among seven villages, tappers are highly present in Thellandi, Anthoniyapuram, Adaikalapuram, Udangudi, and Vembar. All the listed villages, except Therikaadu, produce handicrafts from the Palmyra palm. That includes utensils, hats, mats, cots, and other miniature crafts. Women in Antoniyapuram have transitioned from being Palmyra palm weavers to factory labourers. Palm Gur, a Kadhi unit, provides training loan subsidies for women participating in Palmyra Craft activities. The scheme benefits more than 100 women living in Manapad. Many traditional handicrafts, such as solavu, cots, fish traps, and pots made from Palmyra leaves, are in the dooming stage.

To develop tourism, these villages have moderate infrastructure, such as communication systems, quality education, health facilities, sewage, and clean drinking water. Tamil Nadu has excellent transportation facilities throughout the state supporting tourist flow. The local community and other stakeholders are highly welcoming and eager to participate in tourism activities. Among them, Thellandhi, Manapad, and Adaikalapuram receive more tourists. All the chosen villages are close to potential attractions like beaches, temples, churches, scenic hills, and forests. Overall, within the limited period, planning and implementing the Palmyra Heritage tourism route was successful only in Thellandi and Adaikalapuram villages. Future planning can rectify the limitations in Anthoniyapuram, Therikaadu, Vembar, Udangudi, and Manapad.

Therefore, this paper presents two itineraries: the Palmyra Safari, which focuses on "connecting varied landscapes." We organised the trail on January 29, 2023, collaborating with the District Forest Department, Kanyakumari Tamil Nadu, Aetram Commune, Palmyra Mission, activists, and Thellandhi village's local community. The second itinerary is the Palmyra Trail, "connecting diverse religions." We organised the trail on April 15, 2023, in association with Aetram commune, Palmyra Mission, members of the Palmyrah Workers Development Board, the Abati welfare organisation of Kayalpatnam, and the Adaikalapuram Palmyra community.

Stage 3 Itinerary Model preparation

The itinerary promotes sustainability, social practices, and entrepreneurship. It develops new routes, networks, and circuits by adding inclusiveness. It can also include maps, pictorial representations, and illustrations (Arcos-Pumarola et al., 2023). It explores heritage places' explicit art, architecture, and literature (Pantalei, 2020).

The itinerary actively involves community and stakeholder engagement to support the community's livelihood. The District Forest Department, Kanyakumari Tamil Nadu, Aetram commune, Palmyra Mission, and the local community of Thellandhi village collaborated to organise the

Palmyra Safari, "connecting varied landscapes," on January 29, 2023. The second itinerary, the Palmyra Trail, which connects diverse religions, was organised in association with Aetram commune, Palmyra Mission, members of the Palmyra Workers Development Board, Abati, a welfare organisation in Kayalpatnam, and the Adaikalapuram Palmyra community on April 15, 2023.

4.1. Heritage Trail Route I: Palmyra Safari

Itinerary model

7.00 a.m.: Starting from the District Forest Office, Vadasery Nagercoil.

7.30 a.m.: Community interaction at Thellanthi Village, tales of Palmyra Climbers. Sharing of Traditional climbing methods, Welcome drink (Palmyra Neera) in palmyra leaves.

8.30 a.m.: Nature Walk at Thadakai forest cover along with Forest officials

10.00 a.m.: Interaction with the experts and local community.

1.30 p.m.: Lunch (traditional Kanyakumari vegetarian food served in Palmyra palm leaf prepared by the community).

1.45 p.m.: Sightseeing the Palmyra tree veneration shrine adjacent to Thadagai hill

3.00 p.m.: Sightseeing Puthalam CSI Church to witness 200-year-old giant Palmyra palm pillars.

4.00 p.m.: Visit handicraft makers and learn creative crafts from the community.

5.00 p.m.: Reaching Chothavilai Beach to listen to the stories narrated by Vareethia Constantine (Connection between Palm and Coastal Community).

6.00 p.m.: Closing remarks and feedback at the District Forest Office Kanyakumari.

4.2. Observation and Participatory Comments during the Trial

Palmyra Safari is organised to cover Thellandhi and its nearby locations. Thellandhi, a lively village located in the foothills of Thadagai Hill Reserve Forest in Kanyakumari district of Tamil Nadu, is covered with dense forest, pristine waterfalls, unpolluted dams, and other nearby eco-friendly locations that attract adventure and nature-loving tourists. (Rev. Godson Samuel, Founder Palmyra Mission Organizer) finds "palmyra palm to be entangled on a banyan tree deliberately for safeguarding the tree." He further explains its association, connecting the mythological stories of Sathyavaan and

Savithri. (District Forest Officer, Mr. Illayaraja, Organizer) stated, "Wild boars in this forest cover eat the fruit from palmyra palms, which helps it sustain itself inside the forest without crossing its boundary."

"Even after a fracture in my pelvic bone, I never stopped climbing, but this poverty made my sons leave our livelihood practice and move to other countries for work. Today, they completely lost interest in climbing." (Kuruks Michael, 74-year-old Palmyra climber).

After relishing, the tourists were also educated on the nutritional benefits of the food and beverages they consumed. They witnessed 200-year-old heartwood pillars in Puthalam CSI Church and reached Sothavilai Beach. An eminent writer (Vareethaiah, an expert) showed the left-out trees on the beach, narrated "the relationship of Palmyra palm with the fishermen community and the coastal region", and highlighted that "Palmyra palm was serving as a navigator for fishermen in the Coromandel coastal region. When the tsunami hit Tamil Nadu in 2004, Palmyra palm, located in the coastal region of Tamil Nadu, prevented the region from the disaster."

Figure 1: Palmyra Safari Invitation

Figure 2: Photos taken during Palmyra Safari

4.3. Creative Tourism Route II: Palmyra Trail

Itinerary model

8.30 a.m.: Starting the trail from Tiruchendur Murugan Temple, Storytelling on solitary Palmyra palm on the temple premises by Rev. Godson Samuel Author of the Book: Panai *Mara Salai* (A travelogue in search of Palmyra Palm)

9.30 a.m.: Sightseeing at Adaikalapuram, a village in Thoothukudi district with Christians as the majority. Interact with the local community and enjoy Palmyra Neera in the Palmyra leaves. Experiencing climbing activities and engaging in making creative crafts.

10.30 a.m.: Nature Walk with Storytelling by Mr. Anto Briton, an educated Palmyra climber and Member of the Palmyra Workers Society, Tamil Nadu.

11.30 a.m.: Visiting Our Lady Church to explore the usage of Palmyra palm in Christian festivals and to witness the usage of Palmyra palm as wood for roofing and learning traditional architectural styles.

12.30 p.m.: Experiencing the making of different varieties of Palmyra-based food from the newly opened outlet that produces exclusive palm food products.

1.30 p.m.: Relishing Kayal's Traditional Nei Soru and Chicken Curry in Mittai Petti (crafted box) prepared from Kayalpattinam, taken to Adaikalapuram Palmyra forest, and served hot.

3.00 p.m.: Exploring Kayalpattinam, a beautiful coastal village located 7 km away from Adaikalapuram.

4.00 p.m.: Interacting with Writer and historian Salai Basheer at Abati.

5.00 p.m.: Observing unique crafts, engaging in making and tasting Kayal summer delicacies made using Jaggery (Vattalapam, Puttu, Paavu, and Ponavam).

4.4. Observation and Participatory Comments during the Trial

The Palmyra trail is organised in Thiruchendur, Adaikalapuram, and Kayalpattinam of Thoothukudi districts. Tiruchendur holds the temple for Lord Muruga, which receives a huge number of pilgrims throughout the year. Adaikalapuram is a Christian-majority village 7 km away from Thiruchendur. In this village, a large number of people depend on palmyra palm for their livelihood. Kayalpattinam is an Islamic town located 6 km away from Tiruchendur. Palmyra palm plays a strong role in connecting the diverse religious people of Tiruchendur, Kayalpattinam, and Adaikalapuram.

People gathered in Adaikalapuram after witnessing the solitude of Palmyra palms at Thiruchendur Murugan Temple. Mr. Anto Briton, a 27-year-old climber, B.Tech graduate, and member of the Palmyra Palm Workers Society of Tamil Nadu, organizer, enlightened the group on tapping neera, palm-based food-making processes, traditional ecological knowledge on Palmyra palm and its belonging species, and also about his motivation, experiences, and struggle.

His grim expression reads, "Many youngsters are not interested in climbing; they are demotivated because they don't get the required income for the effort taken to climb and to produce rich Palmyra palm karupatti." "Society treats Palmyra climbers poorly, and grooms who aspire to continue climbing often struggle to find brides." "The intervention of intermediaries is significant; they do not offer reasonable prices for the karupatti. This forced the community to produce adulterated products" (Anto Briton, Climber).

His motivation for climbing: "I resigned from my work and started climbing. Initially, it was challenging for me to persuade my family, but over time, I began to receive compensation for my efforts, and today, I earn a decent salary that surpasses what I used to receive from my previous job." "Today, my growth motivates numerous young individuals, who seek my guidance to overcome significant obstacles, raise public awareness about adulteration, and inspire the next generation" (Anto Briton, Climber).

His view on this trail: "These trails pave the way to bridge the gap between tapers and consumers; without the middlemen, youngsters can facilitate tours and explain the making process to the tourists." At present, pilgrimage tourists who visit Tiruchendur stop in Adaikalapuram to relish the Pathaneer, which motivated them to open more outlets. The community is eager to welcome tourists. More than pilgrim tourists, these purposeful trails or tours will amazingly help the community to empower, reduce

adulteration, engage more people, and help with the spatial recovery of Palmyra palm." (Anto Briton, climber).

Upon arriving in Kayalpattinam, the tourist engaged in conversation with Saalai Basheer, a writer and organiser who represents Abati. "During Odukkathe Pudhan, a religious practice of Islam, people write Quranic sayings in Palmyra leaves using roasted rice dye. The next day, they pour water on it, apply the ash to their heads, and consume it," he recounts. The community believes that this practice protects them from evil spirits. "Both good and bad ceremonies utilise Palmyra palm leaf mats." "We prepare traditional authentic dishes during marriage or festival times, such as Ponaavam, Puttu, Paavu, Vattalaappam, and many more, using Palmyra palm Jaggery." This tree has been linked to communities in the form of food, worship, craftwork, and cultural practices (Jariya, Founder Abati).
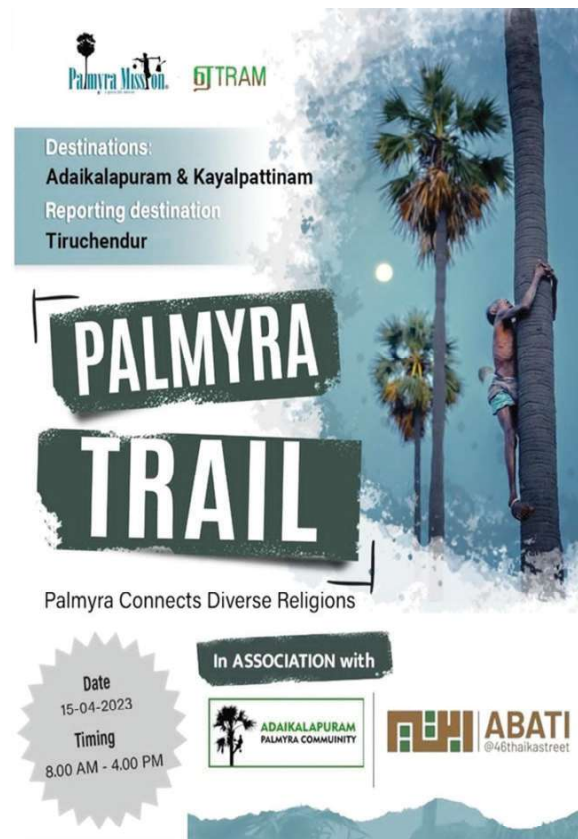

Figure 3: Palmyra Trail Invitation

Figure 4: Photos taken During the Palmyra Trail

5. Results

The District Forestry Department, Kanyakumari, Tamil Nadu, along with other experts in the field, organized the trail Palmyra safari on 29th January 2023 to highlight and improve the current situation of underprivileged communities that rely on Palmyra palms for their livelihood. The Tamil news article validating this information is present in the appendix section.

On 16th April 2023, The New Indian Express reporter Godson Wisley Dass appreciated and wrote about the initiative of the Palmyra trail in binding communities which was organized by us along with the Palmyra palm workers welfare board and local community. The article validating this information is present in the appendix section.

Table 1: Demographic Profile of Participants

Participant Category	Sample Size	Male	Female	Total
Local community	Age Range			
	<18	0	0	0
	18-27	2	0	2
	28-37	2	0	2
	38-47	1	0	1
	48-57	1	1	2
	58+	1	1	2
	Total	**7**	**2**	**9**
Planners	Age Range			
	<18	0	0	0
	18-27	1	1	2
	28-37	1	1	2
	38-47	2	0	2
	48-57	1	0	1
	58+	0	0	0
	Total	**5**	**2**	**7**

Participant Category	Sample Size	Male	Female	Total
Tourist	Age Range			
	<18	1	3	4
	18-27	4	3	7
	28-37	6	1	7
	38-47	7	1	8
	48-57	3	0	3
	58+	0	0	0
	Total	**21**	**8**	**29**
Total		**33**	**12**	**45**

Table 2: Stakeholders' opinions on the planned Heritage trail obtained through group discussion.

Number	Aspects		Opinions7
1.	Perceptions	Local community	The community members were welcoming new ideas. They were eagerly anticipating the chance to embark on their skills and abilities. They believed that the heritage tourism routes would foster and uplift their livelihood and their status in society.
		Planners	Planners were keen on disseminating information on Palmyra palm heritage, biodiversity, livelihood, and historical evidence. This model ensures that the community receives the most benefit. They aim to unite all the stakeholders, such as the government, local community, activists, and common people, to discuss and bring solutions to issues relating to Palmyra palm and its community.
		Tourists	Tourists found the itinerary to be unique and were excited to engage with and listen to the tales from the community and experts. They were eager to gain knowledge and understanding about the vitality of the Palmyra palm from the local community and experts.
2.	Products and services	Local community	The local community actively participated in the trail's facilitation; they shared their traditional knowledge of Palmyra palm, demonstrated the tapping of Neera, served Neera, Ice Apples, and food made from Palmyra leaves, and educated tourists on how to make Palmyra petti (boxes) and value-added food delicacies.
		Planners	Planners conducted extensive research to plan and organize the trail. In the planning process, they collaborate with the government and local community. Planners have identified an exclusive unique selling proposition (USP) to attract niche tourists.
		Tourists	Tourists engage in direct purchasing and experiencing the authenticity of the destination. These tourists also participated in responsible tourism practices, aiming to positively influence both the community and the destination.

3.	Experiences	Local community	Community members were happy to engage in tourism activities and display their culture. They believed this executed model would foster additional earnings and recognition for the community. Even though they lacked confidence, they were happy to interact with the tourists and planners. They wished for more such trials to happen often in the upcoming days.
		Planners	The planners were anxious about ensuring the event was successfully organized. Planners ensured that the local community should be the primary player. They were excited to see the overwhelming response from tourists and the outstanding cooperation from the local community, government, and media.
		Tourists	Tourists expressed positive feedback about their overall experience, which included idea generation, the planning process, interaction with the local community, perceiving livelihood and cultural stories, exploring biodiversity, learning traditional ecological knowledge from the local community, experiencing local craft, celebrating locally made traditional food in leaves, visiting historical locations, interacting with experts, and co-learning with other tourists.
4.	Suggestions	Local community	The government can support us by providing loans, subsidies, and pensions. They can develop tourism in our location to build community well-being and prosperity. They can promote more skill development training and capacity-building programs to support our livelihood and not eliminate us from our livelihood practices. We wish they could add this to their five-year plan and allocate funds.
		Planners	The government can implement this itinerary model on a regular or seasonal basis. As other countries' planners have suggested, the Tourism Department should incorporate a special itinerary into their portal. This itinerary can also be modified with more practical engagement of tourists on the livelihood of the local community that relies on the Palmyra palm. The Tamil Nadu government has taken some measures to conserve the Palmyra palm, but the most important step is to understand the community's need and support the community's livelihood untouched.
		Tourists	Some tourists felt the trail was tightly packed and did not get much time to interact with the local community. They wish the trail could be organized as a two-day tour that would bring them the opportunity to unwind with the tree and its community, and they fully appreciate the entire tour.

6. Discussion

Palmyra climbers are gradually decreasing in Tamil Nadu. Most of the Palmyra climbers were aged above 40. A significant number of elderly individuals participate in this livelihood activity. It empowers around 1,000 women to create crafts. The current heritage trail route aims to unite tourism players in understanding the village's social space. Social space refers to

the regional interactions of communities with others (Ding et al., 2022). The community's interactions are more closely linked to the geographical region.

This model empowers women, elderly people, and young people. It offers additional opportunities to the local community and improves their livelihood which is in a precarious state. The model gives the local community the power to make decisions (Wardana et al., 2023). Empower old men who cannot climb to sell the products to tourists. It allows local communities to set their own prices for their goods and sell them directly to tourists. It eliminates the need for intermediaries. Tourists contribute directly to the local community by enjoying their authenticated services.

The local community views the Palmyra Palm Heritage Trail or tourism as a sharp tool for livelihood conservation. Some additional schemes, such as homestays and experiencing tourism, in this region may positively influence the regional economy and unlock eco-business opportunities (Wardana et al., 2023). This eco-business minimizes production costs and usage of water and electricity, inculcates waste management practices, and infiltrates the brand's image

Tourism, along with participatory activities, promotes environmental conservation. (Arkarapotiwong & Chindapol, 2022). One of the interesting observations is that most of the communities associated with Palmyra palm for livelihood worship the tree. Along with tree veneration, the Palmyra palm is also associated with Thala Maram. The temple premises retained the left-out Palmyra tree to symbolize its previous existence as a grove (Sivasubramanian, 2017). Palmyra climbers considered the tree as a reincarnation of goddess Kali, and Palmyra Neera was Kali's milk. They have the practice of offering the first tapped Neera to the tree before starting their work. Some Christians also take the Neera to church for offerings. The veneration of sacred groves and trees is considered a tool for biodiversity conservation. As a result, local communities are keen on respecting their culture and heritage. This creates more opportunities to highlight their rich culture and heritage.

The tree is a shelter for many endangered endemic species. Most of the local community is aware of their traditional ecological knowledge. In addition to heritage trials, an organized nature walks facilitated tourists' comprehension of the community's trees, biodiversity, and traditional ecological knowledge. In the southern region of Tamil Nadu, tree climbing is considered more primitive than in the northern region. The climber connects his chest with the tree and hugs it tightly to ascend the tree. Whereas in the northern part of Tamil Nadu, the Palmyra climber connects them with the tree using the rope. The primitive climbing methods enable the climbers to climb more trees compared to the climbers using ropes.

The Palma Federation, located in Marthandam, is a self-help group that strives to support and uplift the Palmyra palm community of Kanyakumari. They provide training to the women on making craft and value-added products from Palmyra. The society exports the products to many countries. Kadhi provides licenses to climbers, which further assist them in securing loans, insurance and pensions.

In recent times, tourist demands have focused on unique quality assurance and responsive supply chains. Service providers are also keen on building satisfaction, loyalty, and value for the product (Tasnim et al., 2023). In this study, by optimizing the resources in the selected village, the tourism planners include productivity, competitiveness, and sustainability, which are considered core factors of value chain integration and create linkages between handicraft artisans, climbers, self-help groups, private players, and the government to provide quality service and authentic experiences for tourists (Bharat & Suresh, 2023) and (Prados-Castillo et al., 2023). This study optimizes the resources in the selected village and creates links between handicraft artisans, climbers, self-help groups, private players, and the government.

7. Conclusion

The anecdotes of the Palmyra heritage trail routes exemplify a testament to displaying the real image of the destination and the condition of the community. The itinerary created serves as a model, complementary to the tourist offering, shapes the destination image, and attracts special interest tourists to engage with and experience the tangible and intangible heritage. We have created these itineraries by analysing the destination's unique selling proposition, which includes local food, handicrafts, traditional knowledge, sustainable approaches, conservation methods, rituals, and cultural practices. Identifying preserved identity, considering intangible products to generate economic value, involving younger generations as planners, using resources responsibly, passive usage and consumption, choosing quality over quantity, and retrofitting solutions are some challenges faced in developing these heritage trail routes. The outcome of this trial revealed nuances of the heritage tourism route that engages the tourist to directly participate in the livelihood activity of the local community, acquire knowledge on the transdisciplinary value of Palmyra palm, and aim to reduce adulteration. It also addresses their social problems, paves the way to ameliorate their present status, sustains livelihoods, generates revenue, and safeguards the Palmyra ecosystem and empowers the community. Further, it builds capacity in the community to withstand unity to yield recognition and rewards. The tourists who participated in the trail were more focused on sensationalism and existential questions than they were on relaxation. This motivates the community to connect with them. The Tamil Nadu Tourism Development Corporation recognized the trail and chose district-

level entries to compete for the Rural Tourism Award 2023, according to the Ministry of Tourism (Ministry of Tourism, 2023). The study provides a pathway to develop a successful rural community-based tourism model in selected locations for the long run employing the community to actively participate in tourism activity beyond organizing heritage trails and also recommend the government to implement tourism policies to sustain their livelihood and to improve their living conditions. Future studies related to value creation, mutualistic or symbiotic relationship between visitor and host, destination development, the impact of tourism in the selected destination, tourism and sustainable livelihood practices, and memory cape of the destination can proactively develop solutions with the support of exploration obtained by the present study.

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