

Changing Patterns of Tourism along the Disaster-prone Eastern Coast of India

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Abstract

This study focuses on the transitioning socio-economic setup of regional tourism-based economies along the Eastern Coast of India. The changing patterns of the tourism ecosystem in this region are predominantly triggered by occurrences of tropical cyclones merging in the Bay of Bengal. The disruption caused in the regular tourist flow and its subsequent impact on the dynamics of the prevalent socio-economic structure in the region has put a question mark in front of the existing linear growth model of the tourism industry. Therefore, the purpose of this paper is to focus on the development of the tourism ecosystem within a circular economy, considering relevant parameters that influence the transition towards circular economic growth. A bi-directional approach comprising questionnaire surveys followed by Delphi technique was considered to document the status quo of tourism and disaster management sectors. The findings reveal several existing tourism practices and highlight the underlying paradoxes associated with these practices. The study also emphasizes on the need to assemble and build on both micro and macro datasets for empirically analysing and working systematically towards a circular economic development model, driven by growth in businesses, improvement of social standards, and environmental regeneration.

Keywords

Coastal tourism, disaster management, circular economy, Delphi technique

1. Introduction

Tourism plays an essential role in the Indian subcontinent because of its economic and employment potential and its social and environmental implications. In particular, coastal tourism along the disaster-prone Eastern Coast of India depends heavily upon the attractiveness of the destination and its natural resources. The Eastern Coast is also, particularly susceptible to frequent occurrences of cyclones originating in the Bay of Bengal (Murty, Flather and Henry 1986) (Dube, et al. 2000). It is crucial to remember that tourism has an adverse effect on the environment and may put a great deal of strain on available resources. It heavily puts strain on food, energy, and water resources in addition to land use. Additionally, tourism-related activities increase the production of garbage (solid waste and wastewater), as well as noise and air pollution. These issues are made worse by the geographic and temporal concentration of travellers, as well as the possibility that certain locations may not be able to sustain such pressures due to pre-existing socio-economic vulnerabilities (Adger, Hughes, Folke, Carpenter, & Rockstorm, 2005) (Boruff, Emrich, & Cutter, 2005) (Birkenholtz, 2012) (Balica, Wright, & Van der Meulen, 2012). Due to the growing number of possible threats and the sector's transitional structure, the linear development model used in tourist activities up until this point is being questioned.

The circular growth model is a cutting-edge idea that primarily focuses on how businesses might adopt CE

manufacturing principles. However, this emphasis on producing physical goods undervalues the tertiary, service-dominated industries, including travel and tourism, and their contribution to the shift to a global circular economy. The transition to a circular economy is seen as the solution to urgent and developing global problems including the climate catastrophe, resource depletion, and loss of livelihood due to environmental degradation. Consumers (travellers) have an active and integrated part in the tourism system and are significant co-producers of tourism experiences, according to the tourism industry (Barenholdt, Haldrup, Larsen, & Urry, 2004). (Sorensen, Jensen, & Hagedorn, 2018). As a result, the development of circular economy concepts in tourism may be greatly influenced by travellers (CET). Here, we provide the results of an exploratory Delphi research that sought to uncover potential visitor behaviours that promote CET (Bispo, 2016). Consequently, the emphasis is on what people do rather than on products or industrial methods (Pantzar & Shove, 2010). The results point to present and potential circular economy tourism activities (CETP) as well as complexity, contradictions, and obstacles to the further development of these practices. This study is a holistic and systematic approach to develop a circular economic model, applicable on disaster-stricken, tourist dependant regional economies along the Eastern Coast of India.

1.1. Background Study

A circular economy is one that is built on non-toxic renewable resources and renewable energy. It tries to reduce waste by reusing goods, components, and resources and extending the useful lives of these items (McArthur, 2013). Tourism has historically been based on a "take-make-dispose" logic, leaving environmental impacts because it implies travel, frequently relies on inexpensive and easily accessible resources, leaves solid waste and wastewater, and causes other environmental issues, according to (Fusco Girard & Nocca, 2017) (Manniche, Larsen, Broegaard, & Holland, 2017). Because tourism encompasses several interconnected, complementary, and rival industries and is primarily concerned with hedonistic consumption, developing a CE system in this industry is complex. Due to the fact that people create their own travel experiences, travellers might influence the growth of the circular economy in tourism through their actions. Due to the interconnectivity of many spatial behavioural characteristics including practical actions, performances, representations, and conversation, practices display a temporally shifting pattern (Warde, 2005). They are established procedures for moving people, handling objects, treating people, describing things, and comprehending the world (Reckwitz, 2002). According to (Pantzar and Shove, 2010), practise is framed when it is combined with material (things), skill (bodily knowledge or competence), and image (mental processes, symbolic meaning). This offers a framework for comprehending the evolution of tourism practices. In the context of tourism, material refers to the items, services, locations, people, cultures, etc. that visitors interact with. The knowledge base related to topics like "What should be done" or "How to execute" used in various tourism contexts is referred to as skill, which more frequently is referred to as competence. Images and symbols for various travel-related goods, services, vacation packages, locations, and experiences may be included in the picture or meaning. According to (Pantzar and Shove, 2010), these factors are integrated to create tourist practices, and new practices arise when these aspects alter and integrate in novel ways. The focus of a tourist practise study might be on (1) individual practices connected to particular services or goods, such as religious beliefs, or (2) collections of practices that make up tourism holidays, such as knowledge-based activities, religious beliefs, etc. While businesses (and other actors) are crucial for creating components that support visitors' habits, CETP will only succeed if travellers help to integrate the various components.

2. Study Area

India is a vast continent with incredibly varied topography and climate. As a result, the country is vulnerable to a variety of climate-related calamities, particularly those that include water, such as floods,

INDIA
Cyclone Occurrence Map (Coastal India)

Scale: 0 100 200 300 400 500 km

States and Union Territories shown: JAMMU & KASHMIR, HIMACHAL PRADESH, PUNJAB, HARYANA, RAJASTHAN, GUJARAT, MADHYA PRADESH, UTTAR PRADESH, BIHAR, WEST BENGAL, JHARKHAND, CHHATTISGARH, ODISHA, TELANGANA, ANDHRA PRADESH, KARNATAKA, GOA, MAHARASHTRA, DADRA & NAGAR HAVELI, DAMAN & DIU, LAKSHADWEEP, KERALA, TAMIL NADU, PUDUCHERRY, ARUNACHAL PRADESH, ASSAM, MEGHALAYA, MANIPUR, TRIPURA, MIZORAM.

Legend:

- Town/City
- State Boundary

Maximum Sustained Wind (MSW) in Knots*

Light Green	34-47
Yellow-Green	48-63
Orange	64-90
Red	91 or more

*Maximum Estimated 3 minute average Maximum Sustained Wind (MSW) in knots that affected coastal districts of India during 1961-2008 (IMD, GGI)

Note :

- Number of C.S. (S.C.S.) between 21° N and 22° N as shown are upto 90° E, hence the number crossing Indian coast upto about 89° E will be less

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The spelling of names in this map have been taken from various sources.

In point of fact, the entire coastline is also a powerhouse of tourist attractions, comprising biodiversity hotspots, architectural marvels, and pilgrimage sites alongside scenic beauty, which is present in abundance. Systematic tourism development in the Eastern coast by the concerned authorities along with public participation and cooperation can contribute towards the socio-economic development of these areas (Subash, 2015) (Rout, Mishra, & Pradhan, 2016). On the other hand, it can increase the attractiveness quotient for the modern day tourists and bring in foreign currencies and contributes to the

GDP of the country. Therefore, the eastern coast of India is considered suitable for detailed study in the proposed research topic.

2.1. Methodology

A two-way method was chosen to find probable CETP. In order to determine the Circular Economy indicators in the tourism industry, responses to questionnaire surveys (intended for potential visitors) were gathered. After that, a Delphi survey was conducted to gather expert perspectives on (a) the traits of present and future CETP and (b) the possible drivers and impediments for such practises. A panel of specialists in tourism and catastrophe management, comprising members of the industry, managers of organisations, and reviewers, participated in the study. They were all requested to share their thoughts on Indian tourism in disaster-prone areas because they are all from the Indian subcontinent. Forecasting trends and market circumstances is the goal of Delphi studies in tourist research. There were two rounds in the Delphi process. Initially, seven pertinent specialists were found and contacted. Three specialists in the field of disaster management were chosen, while two experts in the management and improvement of tourism, as well as two hotel operators, were chosen for the Delphi research. In the first round, respondents were introduced to the idea of CETP, and responses to open-ended questions about the two major views were gathered. For each of the two elements, the answers were reduced into lists of several categories. The same experts were asked to choose the top five current trends, future trends, hurdles, and drivers during round two, listed in the "Findings" section.

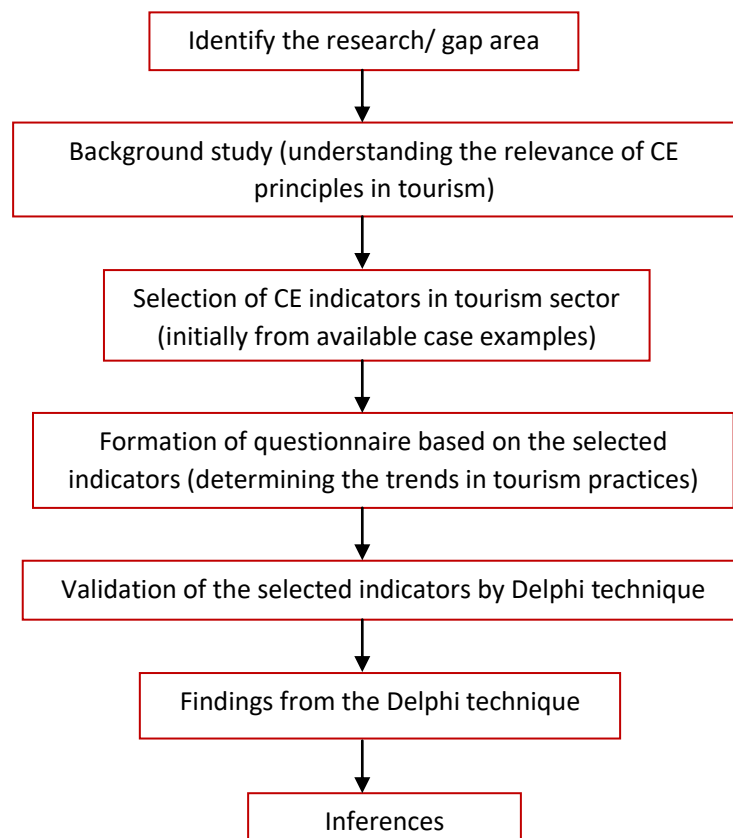


Figure 2 Methodological framework for the study. Source: Authors

3. Findings

First off, there was a wide range of expert viewpoints in the first round of the Delphi research. Four of them made reference to a variety of packaged tourism practices, including specific holiday kinds like nature tourism, active vacations (parasailing and hiking), and staycations. They also made reference to

certain tourism loops, which mean that if a visitor is travelling to one destination, he or she will also visit the other locations. The initial destination may serve as the main rail hub or entry point to further locations. The case of Vishakhapatnam can be cited as the major example. Others suggested unidirectional practices, for example religious tourism in Puri. This has a particular contextual significance that is driven by particular elements that are exclusive to the Puri temple authority. This distinction may be seen in the case of lodging, rental transportation alternatives, trash management techniques, and product recycling.

Second, there was no indication of expert agreement on any of the topics. The use of sharing platforms was recognised as one of the top current trends in the second round, followed by an integrated strategy including both sectors. Another significant Delphi-derived movement was the improvisation of active vacationing. The use of more environmentally friendly transportation (such as trains instead of aeroplanes), battery-powered rickshaws in place of gasoline or CNG-powered cars, public transit that allows for greater platform sharing, and reducing food waste were the most favoured future practices.

Thirdly, a single CETP might not lead to a bundled CETP since analytically speaking, tourist practices include both single and bundled behaviours. For instance, the second-most significant future trend and the top present trend, respectively, is increased air travel as a result of the use of accommodation-sharing websites like Airbnb (by both Airbnb owners and tourists). As a result, in an ad hoc situation, it does not really lead to packaged CETP. Bundled CETP, on the other hand, may emerge if it is paired with other modes of transportation, such trains (the top-ranked future trend).

Fourth, while themes and recommendations have been received to identify existing and future tourist habits, the majority of them either tacitly or expressly propose that supplier-side activities also play a part. Use of sharing platforms and environmentally friendly modes of transportation, for instance, necessitates that these services are provided by someone. Therefore, in the future, the circle of consumer and producer obligations may be utilised to create CETPs that are more suitable.

3.1. Inferences

When considering the proposed drivers and barriers for CETP, the joint involvement of visitors and other players is also evident. The top drivers include changing consumer attitudes toward environmental concerns related to tourism, energy system optimization in the sector, legislative efforts to assist environmentally friendly modes of transportation, and political environment. The biggest obstacles include rising numbers of travellers worldwide for whom travel is largely a hedonistic activity, cheaper air travel choices, and a lack of legislative efforts promoting CET innovation. Tourists, business, and the government are all thought to have an influence on both drivers and obstacles. The provision of CETP material (products, services, and locations), images (through marketing), and skills (knowledge base about CETP) is a key responsibility of industry actors and policymakers, whereas tourists, through their practices and in light of their images, skills, and access to material, choose, pick up, and develop new practices. The bundled and compound nature of CETP indicates that supplier-side practices are crucial, but it also implies that focusing exclusively on how industry may develop CET production practices (the dominant approach) provides a one-sided and extremely constrained picture of the potential future development of CET. Overall, despite the lack of a clear consensus among the experts, a pattern emerges in which shared practices, alternative modes of transportation (other than flying), proper waste management, as well as various active holidays and the reduction of food waste, are thought to be the more pertinent trends in CETP.

4. Conclusion

The results of the Delphi analysis suggest that there are several single and bundled CETP development options. The study also showed that even significant single CETP may not result in bundled CETP. This is crucial to understand when it comes to well-known sharing platforms like Airbnb, which need to be

combined with other CETP, such other modes of transportation besides flying as well as resource and waste management techniques. The study also showed a lack of agreement on pertinent CETP and how to generate them. This may be because the subject is still developing, but it might also be because specialists' backgrounds have an impact. For instance, industry representatives may perceive different sorts of answers than those proposed by opinion makers. Future CET developments may become difficult to define as a result of this. The data also point to the complex character of CETP, which means that while studying and improving CET, neither the supply side nor public actors nor visitors can be disregarded. The study's recommended CETP remedies are highly workable and can be implemented in due course. There is no indication that technical advancements will make these sorts of tourism behaviours CET friendly in the near future; instead, local development goals, legislative regulations, and business model innovations are supporting this development. However, the Delphi survey suggests that tourist service providers brace themselves for a future with novel behaviours that threaten the status quo. This study has sparked a debate regarding the function of tourism behaviours in a CE and brought to light important paradoxes and open-ended questions. The study does suggest a number of pertinent directions for further investigation, despite the low number of experts in the Delphi study coming from a single region, which is a limitation. These include studies on CETP complexity concerns and the linked roles of visitors, private actors, and public actors. They also cover concerns about the evolution of packaged CETP, particularly since that sharing economy platforms support more independently planned, brief trips (for example, by air). In order to allow a better level of consensus regarding potential solutions and pathways towards more environmentally sustainable tourism, the study generally advises that additional research is required about visitors' activities and tourism's confluence with CE. Last but not least, tourism is an activity that takes place on a local as well as a global scale, allowing for connections between various players at various levels, which have a variety of effects. To provide a more comprehensive framework for integrating CE in the tourist industry, future compound and packaged CETP as well as research on such CETP must take these links into account.

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