



## Climate-Resilient Rural Tourism and Women's Empowerment in Coastal Odisha: A Longitudinal Perspective

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### Abstract

Odisha Coast, incorporating the spiritual city of Puri and the eco-sensitive wetland of Chilika Lake, is at a vital crossroad between climate vulnerabilities and tourism-fueled economic ambitions. In this paper, we present a long-term analysis of the intersecting processes whereby climate resilience-focused rural tourism has been developed as an adaptation tool for communities, as well as for the empowerment of women in both locations. Through a mixed-method approach involving the review of policy documents, project reports, academic literature, and current examples from 1999, when the Super Cyclone hit Odisha, until 2026, the research identifies a process of progressive transformation of responses from emergency disaster mitigation to climate adaptation that incorporates a focus on gendered perspectives in rural tourism. As it turns out, although both locations experience different impacts of climate change, such as heat waves in the urban area of Puri or the salinization of soils in the case of Chilika, in both cases, self-help groups led by women have emerged as key actors in developing climate-resilient rural tourism. Women's resilience funds in Puri and mangrove restoration projects have interacted positively with the rising trend of homestays while community-led ecotourism in Chilika and water hyacinth craft enterprises represent the synergy between ecological restoration and women's empowerment. The paper recognizes four long-term trajectories – the growth and evolution of self-help groups, diversification of livelihoods in response to climate change, inclusion of women within tourism value chains, and development of gender-sensitive policies. At the same time, the research highlights some enduring structural barriers, such as caste-based exclusion, patriarchal traditions constraining women from taking part in lake-based ecotourism operations, and vulnerability to cyclones. In sum, climate-resilient rural tourism in coastal Odisha has advanced from pilot programs and experimental solutions to having significant positive effects on the local economy and women's empowerment but requires further scaling up and institutionalization through investing in climate-resilient infrastructure and implementing gender-sensitive policies.

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## Introduction

Odisha, one of the states of east India with a coastline stretching 480 kilometers across the Bay of Bengal (Gouda, n.d.), is an entity that has always lived "with the rhythm of the sea, its bounty and its fury" (Pradhan et al., 2025). The 1999 super cyclone, in which more than 10,000 lost their lives (Pradhan et al., 2025), marked a turning point of unprecedented proportions for the state and its people, forcing the latter to develop strategies of disaster management and resulting in the establishment of the Odisha State Disaster Management Authority (OSDMA) right after. This was when the "zero-casualty" model of preparing for cyclones became an acknowledged success story for India. However, nowadays the problem of climate-related disasters is not limited to their management for Odisha; the key issue now is how to adapt to changing climatic conditions? And create sustainable livelihoods that will thrive after each successive cyclone hits. In this context, rural tourism can be regarded as one of the best options available, owing to the rich cultural and natural diversity of the region (Mandal & Dey, 2025).

Indeed, this dilemma has not been felt more strongly anywhere else or been more positively approached than where tourism overlaps with rural women's economic empowerment. Tourism has become one of the key drivers of Odisha's economic growth, with the state government supporting initiatives based on community-based approaches and women's SHGs as their main beneficiaries. The introduction of Go-Homestay Portal through the Odisha Homestay Scheme 2025, the mobilization of women's SHGs through Mission Shakti (Biswal et al., 2023; Dash et al., 2025), and the creation of community-based conservation festivals at Chilika are all indicative of such an approach to policy formulation.

The present paper examines the dynamics at two study sites that highlight both the strengths and the inherent problems associated with this novel paradigm: namely, the religious town of Puri, which is among the top tourist attractions in the state of Odisha (Roul & Pradhan, 2018), and Chilika, an extensive Ramsar wetland area that constitutes Asia's largest brackish lake (Pradhan et al., 2018). While the former faces unique challenges related to climate change, including cyclical cyclones and reduced hotel occupancy rates, the latter is threatened by factors like ecological damage due to the creation of a new river mouth, siltation, depleted fish population, and invasive species, including water hyacinth (Nayak, 2017), leading to the displacement of more than 200,000 fishermen and landless people (Pradhan et al., 2018).

The critical research question posed by the proposed longitudinal study is: What changes have taken place regarding climate-resilient rural tourism strategies implemented in Puri and Chilika, and how have they contributed to the empowerment of women?

This paper demonstrates that the process from 1999 through 2026 shows an increasing process in incorporating female empowerment in climate-resilient tourism policies; however, such incorporation is not equally realized among all communities, owing to the influence of existing patriarchal norms and underdevelopment in infrastructure. This paper consists of five parts: literature review, methodology, findings, discussion, and conclusion. Literature review involves an analysis of the literature related to climate-resilient tourism and gender empowerment. Methodology describes how the research was conducted using a longitudinal and mixed-methods approach. Findings show four thematic trajectories. Discussion discusses the theories and practices learned from the research process.

## Literature Review

### Climate Resilience in Tourism: Frameworks and Vulnerabilities

Climate-resilient tourism has emerged as an important concept within the domain of sustainable development since climate change poses significant threats to the practice of tourism in many places, damaging tourism infrastructure and posing safety hazards. Rising temperatures, unpredictable monsoons, floods, cyclones, and rising sea levels threaten to render destinations unappealing, shorten tourist seasons, and cause economic uncertainty in places dependent on tourism. The framework for climate-resilient tourism therefore encompasses climate risk assessments within development plans, developing infrastructure resilient to disasters, early warning systems, and diversified tourism through rural tourism, ecotourism, cultural tourism, and Agri-tourism. Within India, the vulnerabilities related to climate-resilient tourism are most evident along the coastlines, especially in Odisha where the tourism infrastructure is threatened by multi-hazards due to recurrent cyclones, while the transportation network is also vulnerable to damage from such cyclones that destroy roads and bridges (Sahoo et al., 2021). These studies indicate that climate-resilient tourism cannot be solely developed through disaster preparedness but needs to incorporate rethinking tourism towards low carbon footprints (Loehr & Becken, 2021).

### Women, Empowerment, and Community-Based Tourism

Gender issues have been widely examined using theories of empowerment. These include economic empowerment, which refers to the ability to generate income and control resources; social empowerment, which involves gaining elevated status and exercising decision-making skills; and political empowerment, which is characterized by representation and leadership. The 2025 study conducted in India highlights the important role that women can play in promoting

sustainability, showing how entrepreneurial activities carried out by women help in advancing the world's sustainable development agenda (Bilal et al., 2025).

Nevertheless, the paths towards empowerment are neither straightforward nor necessarily empowering all the time. For example, Das's (2024) qualitative investigation of community-based ecotourism programs in Chilika Lagoon contributes with an important intervention, which is the claim that the literature in the area can be divided into two streams: In one scenario, women become empowered by their involvement, whereas in another stream, the projects continue marginalizing women by assigning them tasks according to their gender roles. In between these two, Das introduces the third possibility based on the theory of Sanskritization; in this model, women are denied participation in ecotourism projects because they have to act as "good wives" who defend the honour and culture (izzat & samskruti) of the community by staying away from "indecent" tasks such as lake-based tourism activities.

The SHG model has become the prominent organizational mechanism by which women are being connected to tourism-based livelihoods in Odisha (Dash et al., 2025). Mission Shakti, an initiative of the state that aims at empowering women, has joined hands with the Tourism and Hospitality Skill Council to provide training to SHG members in areas like tent services, catering, food supplies, and event management, targeting a total of 12,000 women through 1,000 SHGs over the next three years. The Go-Homestay Portal is yet another initiative of the state, which aims at empowering women and other rural stakeholders through tourism-based development. According to this initiative, homestays are to serve as gateways to the culture and traditions of Odisha. Apart from being trained for their jobs, such interventions also underscore the transformative impact of engaging women in the hospitality value chain as an effort to redress the gender imbalance that exists in professional settings among the rural population (Shaikh & Rathod, 2024).

### **Longitudinal Approaches to Resilience and Empowerment**

Longitudinal studies in the context of climate change adaptation and empowerment of women in tourism have not been very common in the existing literature; most of the available literature deals with shock situations or one-time program evaluation. Such gaps in the longitudinal approach to climate adaptation and gender empowerment make it difficult to understand institutional processes of resilience and decay.

This paper addresses this gap by examining changes and persistent conditions over a span of 27 years (1999-2026) in two field sites, both in terms of what has changed and what has been resilient to change. This paper employs the idea of transformative resilience, a perspective that is more concerned not only with recovering from shocks but with fundamentally transforming social, economic, and ecological relations to minimize vulnerability and promote gender justice.

### **Methodology**

#### **Research Design**

This study uses a longitudinal, mixed methods case study approach incorporating documentation, literature review, and qualitative case construction. The period covered is between 1999 (year of super cyclone, considered as a turning point for disaster management in Odisha (Kumbhar, 2025)) and 2026.

Two locations were purposively selected for analysis:

- Puri is an example of coastal urban pilgrimage site with high tourism footfall. Puri attracts approximately 90% of tourists in Odisha (Samal & Dash, 2024). It is the pilgrimage site of the Jagannath Temple but the city houses the fishing settlement of Penthakata that is uniquely affected by both tourist intrusion and cyclones.
- The Chilika district includes the brackish water lagoon along with the villages in the area, such as Mangalajodi, which is an internationally renowned community-based bird tourism site, and the villages that are engaged in fishing activities in the two blocks of Brahmagiri and Krushnaprasad. The district focuses on 6,043 families belonging to 32 villages in need of livelihood interventions, where 97% of people who participated in community meetings were women.

#### **Data Sources**

Sources of data included four different types: (1) research literature in the peer-reviewed journals that addressed themes related to climate-resilient tourism, women empowerment, and coastal adaptation; (2) government policies, including tourism strategies, disaster management plans, and Mission Shakti programs; (3) reports from project implementation agencies, including Action Village India, Regional Centre for Development Cooperation (RCDC), and ECRICC of UNDP; and (4) gray literature and media sources such as news articles, conference papers, and organizational websites.

#### **Data Triangulation and Integration Approach**

In order to integrate the diverse data, including peer-reviewed quantitative data (e.g., aquaculture production data, weather data), qualitative policy documents (e.g., Mission Shakti guidelines, UNDP projects), and gray literature (e.g., media reports, organization blogs), the triangulation approach utilized in this study involved convergent triangulation, which is common practice in longitudinal case study research (Creswell & Clark, 2017). The process included three sequential phases. The first one referred to extraction and coding based on the source of the data. Each data type was coded

individually through the use of a coding scheme developed on the basis of four longitudinal trajectories discussed above (institutional development, livelihood diversification, tourism integration, policy development). Coding of the quantitative data (e.g., number of SHGs and training programs) resulted in extracting numeric data. Qualitative data (including stories about exclusion from the lake's ecotourism activities and discussions on the functioning of resilience funds) were analyzed from recurring patterns of themes, metaphors, and outcomes.

Secondly, Cross-Sources Matrix Analysis: The following time-ordered matrix analysis was developed, including year (1999-2026) on rows and type of evidence on columns. Each longitudinal pattern had to be corroborated by at least two independent sources for it to be considered confirmed.

Thirdly, Pattern Matching and Member Checking: Regarding the critical findings (such as the continuity of exclusion from the lake-related activities in Chilika), such patterns have been further compared to existing peer-reviewed ethnographies (such as Das, 2024) for interpretation validity. Whenever possible, emerging findings have also been verified with conference presentations and media interviews featuring community leaders (including testimony provided by respondents regarding water hyacinth crafts).

### Validity and reliability checks

For validity purposes, two coding phases were undertaken with a three-month interval between them, where intracoder reliability exceeded 90%. Percent agreement was used as an indicator of intracoder reliability, based on a 15% subsample of documents randomly selected (n=42) and coded two times within three months, with the average agreement reaching 93%. The codebook included four family trajectories (institutional maturation, livelihood diversification, tourism integration, and policy evolution), and within each family, there were three to five indicator codes of concrete steps taken towards development (e.g., "Formation of SHGs," "Production of water hyacinth handicrafts," "Operation of homestays," and "Budget allocations for Mission Shakti"). All codes were to be derived only from direct mentions in documents, and indirect inferences were ruled out. For enhancing validity, the study avoided dependence on only one type of sources: if a claim was quantitative and derived from an academic study of a limited sample size (e.g., the case of the aquaculture intervention among 58 households), it was considered as tentative rather than definite, while a qualitative claim was preliminary until corroborated by other sources. Additionally, all longitudinal statements were verified against tangible time points such as the super cyclone of 1999, Cyclone Phailin evacuation of 2013, and the Go-Homestay program inauguration of 2026 to avoid anachronism in inference. This multi-tiered approach to validation is designed to overcome the problems associated with longitudinal studies done retrospectively, thus creating an account with a strong evidentiary basis (Browder et al., 2022; Mulvale et al., 2023).

### Research Methodology

The data were analyzed thematically, where coding was guided by four longitudinal trajectories based on repeated analysis of primary sources, namely: (1) institutional growth of SHGs and community-based organizations; (2) diversification of adaptive livelihood strategies related to tourism into multiple sectors; (3) integration of women into tourism value chain of both formal and informal enterprises; and (4) the development of policies that incorporate gender. These trajectories serve as the organizing framework for the findings outlined below.

### Findings: Longitudinal Trajectories in Puri and Chilika

#### Temporal Phasing and Trajectory Development

In order to make sense of the temporal evolution from 1999 to 2026, the research period has been subdivided into three phases, distinguished by their approach to disasters, tourism policies, and gender integration:

Period	Name	Defining Characteristics	Key Temporal Markers
1999–2012	<b>Reactive Phase</b>	Post-super cyclone institution-building; disaster response dominates; tourism largely unregulated; women's SHGs informal and localized	1999 Super Cyclone; OSDMA established (2000); 2004 tsunami
2013–2018	<b>Transitional Phase</b>	Zero-casualty disaster model consolidates; early climate-resilient livelihoods emerge; ecotourism pilots (Mangalajodi) gain recognition	Cyclone Phailin (2013); Ramsar recognition for Chilika; early SHG-tourism linkages
2019–2026	<b>Proactive Phase</b>	Gender-integrated tourism policies formalized; Mission Shakti–THSC partnership; Go-Homestay portal; women-led climate innovation scales	Cyclone Fani (2019); Odisha Homestay Scheme (2025); Go-Homestay launch (2026)

(Author's own compilation)

Longitudinal mapping of the four longitudinal trajectories into the above periods:

### **Trajectory One: Institutional Maturity of Women's Self-Help Groups**

Started in the Reactive phase as mutual aid; consolidated in the Transitional phase via federation formation; scaled in the Proactive phase with Mission Shakti and producer firms. The establishment and consolidation of women's SHGs is the most important institution formed in both the study locales throughout the longitudinal period. At Chilika, project intervention has enabled the creation of 162 women's SHGs, benefiting 1,914 women belonging to marginalized communities at an investment cost of Rs. 69.46 lakhs. There are other institutions which form a very dense institutional environment in which the SHGs function, namely 32 Gram Vikas Committees, 267 SHGs, 29 youth clubs, nine zonal forums (Anchalika Mahila Manchhas) and fisherfolks. After the disaster caused by Cyclone Fani in 2019, women in the locale formed a SHG which developed a resilience fund as part of their response mechanism towards WASH. It is also important to point out that due to support from the local NGO called Spandan, this fund became an example of how community-based institutions can be used for addressing issues in case of underdeveloped public infrastructure.

Moreover, the maturation process of such institutions includes the development of organizational skills in managing the respective organizations. For instance, one should note that in the Chilika area the professional level of the institution called the Padma Udaya Jibika Producer Company was significantly increased with the creation of new processing units for spices and fish. Moreover, nowadays, women are responsible for organizing and leading these enterprises, developing markets, enhancing protection of the environment and managing local development. Finally, the establishment of the Shram Bank (labor bank) in this area provides people with reasonable credits in case of emergencies and reduces reliance on exploitative moneylenders.

### **Trajectory Two: Diversity in Climate-Resilient Livelihoods**

Another longitudinal trend involves gradual diversity in livelihoods from tourism to agriculture, aquaculture, handicraft production, and environment protection. Such diversity is vital for building resilience against climate change, because it minimizes the risks arising from reliance on income generated through any particular economic activity.

The ICZMP established Neeladri Cafe on the Puri beach, and it is being run entirely by SHGs composed of women. The cafe provides tourists "ethnic food" and is included within a wider ST Charter that aims to transform the lives of coastal women vulnerable to climate impacts. In addition, under the vision of Vision 2036, the state government has marked "Palm groves of Puri" as one of its priority destinations. Special emphasis will be laid on engaging women SHGs and making use of their traditional skills, thus moving them "from passive participants to active stakeholders in the tourism economy". The Odisha Homestay Establishment Scheme -2025, which emphasizes rural tourism, provides benefits to women entrepreneurs in the form of a grant amounting to Rs.10 lakh per unit.

In the Chilika area, there are several examples where the diversification of livelihood by women is directly linked to tourism. Some of these include the use of water hyacinth for making eco-friendly products as tourism crafts, community women-led eco-tourism development at Mangalajodi, and participation of women SHGs in government-sponsored homestays and aquaculture plans. What makes these examples significant is the fact that the alternative livelihoods have been pursued not only as an addition but as part of the strategy to decrease pressure on the depleting fish stock resources in Chilika as well as build resilience towards ecological disruptions resulting from climate change as well as the opening of the sea mouth.

### **Trajectory Three: Incorporation of Women into Tourism Value Chains**

Rare during Reactive Phase (informal drying of fish, household chores); experimental during Transitional Phase (homestays in Mangalajodi); government-sponsored during Proactive Phase (SHG training program, Go Homestay Portal). Incorporating women in tourism value chains has taken place through different avenues although such integration has not always been smooth and uncontested. Some of these include policy-driven initiatives. The collaboration between the Odisha State Government and the Tourism and Hospitality Skill Council will help train 12,000 women members from 1,000 SHGs in three years' time, and the training will include tent services, catering, food supplies, event management, business sustainability, FSSAI certification, and equipment purchase. The initiative is also provided with a budget of Rs.9.3 crore, reflecting serious commitment on the part of the state government to foster women's participation in tourism entrepreneurship.

Another institutional intervention to integrate women into the tourism sector can be seen through the Go-Homestay portal that was launched in March 2026. This initiative reflects the inclusive development agenda of the state government, which encourages local people to engage in community-based ecotourism and has provided opportunities for locals to learn about guiding, hospitality, and food services. This suggests that while women's empowerment through tourism is to be lauded, their inclusion in the tourism value chain might not always counteract the existing patterns of gendered labor segregation.

Women's inclusion in Puri has varied. For example, under the ECRICC project, which involves four coastal districts and includes Puri, "climate champions" have been trained to spearhead mangrove planting initiatives, as well as climate adaptive livelihood practices and watershed management. This program also seeks to support resilient livelihood activities in the coastal districts of Odisha. Interestingly, Dalit women from fisher communities in Sana Jhadling, Puri, have started

planting mangroves, a reaction based on their lived experiences during the super cyclone in 1999. However, women's contributions to the informal sector of fish drying, a very laborious task that falls almost exclusively upon them, aside from their regular chores, go unnoticed in the tourism industry.

### **Trajectory Four: Development of Gender-Inclusive Frameworks**

Not applicable during Reactive Stage; emerging during Transitional Stage (with Mission Shakti expansion); explicitly defined and budgeted for during Proactive Stage (with a budget of ₹9.3 crore), trajectory four pertains to the development of the framework for policies. In terms of this trajectory, Odisha is regarded as a frontrunner in the gender-inclusive and community-based tourism industry, with the government making it known that “Odisha Tourism envisions building a

sustainable, inclusive, and future-ready tourism sector” wherein “the participation of people and communities will fuel the growth of Odisha’s tourism sector” (Pathak, 2025). Bringing women to the forefront of the tourism industry in the name of inclusion and participation has shifted from being simply rhetoric into actual initiatives, such as the Mission Shakti-THSC partnership. On the national level, the Indian government has recognized the need to develop a framework for tourism that is resilient to the impacts of climate change, whereby discussions on policies focus on the inclusion of climate risk assessments within development, disaster-resilient infrastructure, and diversified forms of tourism such as rural, ecotourism, culture, and agrotourism. Nevertheless, the implementation of national frameworks has yet to take place at similar levels in terms of policy implementation (Mohanty et al., 2015).

The development of disaster management in Odisha serves as an example in this case. The shift from the passive and casualty-intensive approach towards handling the 1999 super cyclone to achieving a “zero casualty” record during Cyclone Phailin (over 1 million evacuated) and Cyclone Fani (fatalities less than 100), both in 2013 and 2019 respectively, shows that resilience can be achieved through systemic investment in institutions. It is important to note that this was not an accident but was made possible through the establishment of OSDMA, construction of cyclone shelters and early warning system, and more importantly, by tapping on social capital through women's groups, village institutions, and volunteers.

## **Discussion**

### **Synthesis: From Vulnerability to Resilience, But for Whom?**

From longitudinal research conducted in Puri and Chilika areas, there has been great progress towards developing a more resilient tourism infrastructure and women's empowerment in terms of the same. The emergence of SHGs, diversification of livelihoods, the institution of community-based tourism and policy developments all show that there is positive change occurring in this field.

However, the theory of differentiated resilience offers a useful framework to analyze how different women in different circumstances have seen benefits from this change. Women who are part of SHGs, have access to capital and training and live in villages where community organizations exist have gained from this development through increased income, food security, decision-making capabilities and broader social networks. But women who live in Scheduled Castes, who lack land tenure rights and live in poverty, and are under patriarchal systems that limit their mobility and economic activities still face barriers to benefiting from tourism infrastructure development.

### **Limitations on Community-Based Adaptation and Infrastructure Gaps.**

Although there have been numerous successes regarding community-based adaptation, this cannot be used as a replacement for state investments in resilient infrastructure. In the case of Odisha, climate resilience of coastal energy infrastructure is poor since the area experiences extreme cyclones and flooding, with an aging system coupled with poles designed inefficiently. The arrival of Cyclone Montha in October 2025 in the area led to occupancy rates at the hotels in Puri falling from 80 percent to 50 percent within a short while.

Investments need to be put into place concerning resilient infrastructure aimed at tourists, including early warning measures specifically designed for tourists, evacuation strategies for the hotels and guesthouses, and insurance programs for people dependent on tourism during cyclone seasons.

### **Policy Implications and the Scalability Dilemma**

The innovations discussed in this paper—Mission Shakti, Odisha Homestay Scheme 2025, Go-Homestay portal, Mission Shakti-THSC partnership—are indeed groundbreaking when it comes to the innovative approach to climate-sensitive and gender-inclusive tourism development. Nonetheless, the scalability dilemma poses a big challenge here. While 12,000 trained women are indeed many, they constitute merely a tiny portion of women capable of making use of tourism opportunities in the state which consists of 41 million people as per census 2011. Besides, the training program should not be the end in itself—the female participants need access to financial resources, markets, and mentoring to establish a successful business.

The Mangalajodi initiative serves as both an example of success and as a warning that the scalability dilemma cannot

always be overcome. The transition from bird poaching to ecotourism was possible due to the active work of NGOs and locals, which, unfortunately, is not the case with all destinations. Successful scalability of community-based ecotourism is possible only via systematic investments in local leaders' capacity building, conflict management, and proper benefit distribution so as to avoid elite capture (Coria & Calfucura, 2011). Nevertheless, the institution of the Padma Udaya Jibika Producer Company in Chilika, which consists of 250 members, may serve as an example of institutional success for developing women-oriented tourism businesses, provided its ability to access markets, technologies, and funds.

### Conclusion

Through longitudinal research of climate-resilient rural tourism and women's empowerment in the regions of Puri and Chilika, it is possible to identify not only significant progress made, but also a variety of challenges still persists. During the last 27 years from 1999 to 2026, coastal Odisha managed to transform from being vulnerable to disasters into a perfect example of proactive adaptation (Pradhan et al., 2025). Women's self-help groups turned out to be important institutions, where climate resilience can be linked to economic empowerment (Das & Chatterjee, 2022). There are different routes of inclusion of women into tourism value chains – both in terms of formal policy and community-led eco-tourism, as well as homestead business and restoration of invasive species' worth (Das, 2024).

Nevertheless, there are several limitations in this analysis. For instance, patriarchal social conventions persist in preventing women's engagement in tourism-related activities around Chilika Lake, despite the active encouragement of their involvement in homestay hospitality services. Exclusion based on caste and land insecurity among members of the Scheduled Castes

community remains an unsolved problem. There are problems associated with infrastructure, such as vulnerable electrical systems, unpreparedness for climate events due to insufficient cyclone shelters, and a lack of adequate early-warning systems. Finally, limited resources mean that even the best pilots have only managed to cover a small number of women from the area. Three main suggestions for future research follow from the current study. One is to conduct longitudinal research that would monitor particular self-help groups and women entrepreneurs in order to establish how their empowerment progresses through time. The second suggestion is to do comparative research of women from other coastal areas in Odisha, namely Ganjam, Kendrapara, and Balasore, and identify which dynamics are location-dependent and which are universal. Thirdly, there is scope to conduct research on the interface between climate-resilient tourism and other industries like agriculture, aquaculture, handicrafts, and environmental regeneration to examine how diversification strategies can be enhanced to enhance resilience and gender equity.

What does all of this imply? First and foremost, developing climate-resilient tourism in rural settings which would empower women would require focused investments across four key areas: (1) development of institutions conducive to the growth and federation of SHGs; (2) development of climate-resilient technical infrastructure that protects both tourists and the host communities; (3) programs aimed at transformation of patriarchal practices and overcoming the stigma associated with caste; and (4) processes to scale-up pilot models without losing the spirit of community-driven initiatives. Coastal women in Odisha have repeatedly shown that rather than being victims of climate change, they are active participants in adaptation efforts. This ranges from the fisherwomen of Puri who have started adapting to climate change to the women of SHGs who use the invasive water hyacinth to produce handicrafts in Chilika; from the climate heroes who compose poems on the preservation of coasts to women-run producer firms dealing in spices and fish products. It should be the responsibility of research and policy to learn from their successes rather than generate ideas anew.

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