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Reflections from Chilika - V2V Field School: Prospects for a More Inclusive Eco-tourism Sector

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V2V Working Paper Series

V2V Global Partnership "Working Paper Series" aims to facilitate the exchange of ideas, mobilize knowledge and generate broad-based discussions on vulnerability-viability themes within the context of small-scale fisheries. The Working Paper Series will provide a collaborative and interactive platform for academics, practitioners, representatives of civil society, and individuals interested in making written contributions to the theoretical, methodological, practical, and policy aspects of small-scale fisheries, both locally and globally. To contribute to the V2V Working Paper Series, please contact v2vglobalpartnership@gmail.com.

Reflections from Chilika - V2V Field School

Small-scale fisheries (SSF) are important social-ecological systems across all parts of the world. Strongly anchored in local communities, SSFs reflect a way of life, and they provide critical contributions. Yet, their efforts and their existence are often overlooked as many SSF communities remain economically and politically marginalized, are highly vulnerable to change, and remain invisible in policy debates. Nonetheless, the continuity of many SSFs suggests certain strengths and forms of resilience. A holistic understanding of what causes vulnerability, as well as what makes fisheries social-ecological systems viable and through what processes is required. This understanding needs to be place based and situated within the SSF context, and the processes surrounding it must be long-term, collaborative and iterative.

The Chilika - V2V Field School aims to provide a creative platform for graduate students and early career scholars and practitioners to deliberate and learn about concepts, approaches and methods helpful to achieving transitions from vulnerability to viability within SSF social-ecological systems. The Field School takes place every year in the Chilika Lagoon, Bay of Bengal, India, where participants gain firsthand experience and creatively engage in furthering their understanding and knowledge of vulnerability to viability transitions, and experiment with concepts and approaches that are novel, transdisciplinary and problem-oriented. The Reflections from Chilika - V2V Field School is part of the V2V Working Paper Series that exclusively focuses on documenting the main learnings, insights, reflections gained by the Chilika - V2V Field School participants during their weeklong journey with the fisher communities of Chilika Lagoon.

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1. Introduction

The first formal definition of 'Ecotourism' is generally attributed to the Mexican architect Hector Ceballos-Lascurain, who described the newly emerging form of tourism as "environmentally responsible, enlightening travel and visitation to relatively undisturbed natural areas in order to enjoy and appreciate nature (and any accompanying cultural features both past and present) that promotes conservation, has low visitor impact, and provides for beneficially active socio-economic involvement of local populations" (Ceballos-Lascurain 1996). According to this definition, besides economic benefits of the local population, ecotourism involves both cultural and environmental tourism. Since this initial conception, many other definitions of ecotourism have been proposed, most of which consider that ecotourism should contribute to environmental conservation in a way that includes meaningful participation of communities, should provide economic and other benefits the host community, and should be self-sustaining.

Also sometimes called cultural tourism or sustainable tourism, Stronza (2001: 274) formally defined Ecotourism as, "a form of tourism that is consistent with natural, social and community values. It allows both hosts and guests to enjoy positive and worthwhile interaction and shared experiences. Instead of condemning the impact of tourism on local communities, there is a tendency to applaud ecotourism as a panacea for achieving a wide array of social, economic, and environmental goals." Researchers from different disciplines like anthropology, geography, social sciences are today paying increasing attention to forms of tourism such as ecotourism, cultural tourism, community-based-tourism, or simply alternative tourism.

Ecotourism is inspired by the culture and natural history of a particular area, and can generate revenue for the state, while providing economic opportunities to local residents. However, ecotourism can also be exploitative, mobilizing terms such as "wilderness" or "exotic" to market natural geographies and Indigenous populations. Not only are these terms themselves contentious, but bringing tourists to remote

areas through ecotourism can disrupt already vulnerable cultural practices and environments (Cater 1993: 85). It is to be noted that ecotourism partnerships between Indigenous communities and outside agencies, however noble they may sound on paper, often encounter conflicts and power imbalances. Such ecotourism partnerships strive to integrate mechanisms that ensure that the benefits produced by ecotourism benefit the local Indigenous communities rather than external agencies, but are not always successful (Grieves, et.al., 2014).

According to Subramaniam (2008) ecotourism has a vital role to play in sustainable development in India specifically by helping develop an agenda for the inclusion of non-urban communities in development programs, in which they have generally been underrepresented. In order to achieve this, a shift in attitudes is required: from regulation control to empowerment, from patronage to partnership, and from linear government-led structures to alliances with diverse stakeholders.

1.1 Chilka Lagoon: A paradise for ecotourism

Situated in the state of Odisha in India, Chilka Lake is Asia's largest brackish water lagoon, and it extends from Bhusandpur in Puri district in the North to Rambha-Malud in Ganjam district in the South.

Tourism in Chilika began roughly in 1992. According to the Satapada Boat Association, in the initial years, the area drew mainly international tourists, but gradually Chilika started attracting locals and tourists from other parts of India mainly with an interest in viewing dolphins. In 1996, a few Tourist Boat Associations were formed under Puri's Administration with the District Magistrate's permission (Figure 1-B). Different species of Irawaddy dolphins (*Orcaella brevirostris*), including those locally known as *Buhasuni* and *Khera* are present in the lagoon, though locals report a decrease in numbers over the past several years.

1.2 Themes

In this paper, we focus on the following five aspects of social-ecological systems in the context of Chilika Lagoon. Each section contains summaries of our conversations and observations before concluding with a reflection on the section theme. The Emerging Issues theme serves as a conclusion as it identifies common threads between the first four themes and opens up avenues for further exploration.

a. Ecological and Environmental attributes
b. Economic and Developmental attributes
c. Governance and Management
d. Socio-Cultural and Gender aspects
e. Emerging Issues

We held two primary conversations that drive the majority of the insights this paper puts forward. These conversations were with the Satapada Boating Association, and a group of leaders in the island village of Berhampur. While it must be noted that we spoke directly only with men, the conversations were complemented by our attendance at meetings with local women's groups, and at a panel meeting of local leaders from around Chilika. The unstructured conversations were mediated by three *Oriya* language speakers from our group, who collected and communicated our questions to the best of their abilities. In this paper we have also drawn on supplementary governmental documents available online.

This paper is intended to provide possible pathways for robust research, from which actionable steps may be taken. It is an impression of Chilika organized around ecotourism and the challenges and opportunities that need further research.

2. Ecological and environmental attributes

Focusing on the changing environmental conditions in Chilika, this section reflects on the multiple actors in the ecotourism industry, and suggests that they must consider the mutually sustaining relationships between the natural and human elements of Chilika if it is to become more environmentally sustainable.

Chilika is the largest wintering ground for migratory birds from the temperate region in India. It is a hotspot of biodiversity, and some rare, vulnerable and endangered species listed in the IUCN Red List of threatened animals reside in the lagoon (IUCN 2022). However, the impacts of intensive development in the watershed, such as erosion and siltation, led to ecological degradation of the lagoon, and it was included in the Montreux Record (threatened list of wetlands) in 1993 (Ramsar 2007). In response, the government undertook a number of ecological interventions, including construction of a new sea mouth in September 2000. Further, policy changes occurring around that time relaxed regulations related to large scale aquaculture and fishing rights for Indigenous groups, enabling the rise of aquaculture in Chilika including in areas that encroached on traditional fishing territories. The introduction and development of tourism, which is focused on the wildlife and natural beauty of Chilika, sits in direct relation to these changes unfolding.

2.1 Geomorphological shift

After the sea mouth was created at Sipakuda in 2000, the ecology of Chilika Lagoon changed drastically, largely through the influx of seawater that altered the salinity of the lagoon. While the new sea mouth has shifted several kilometers back towards its natural place, and the government has implemented plantation initiatives, the coast continues to be subject to marine erosion, which has gradually reduced the elevation of the sandbars and enabled a cyclical opening and closing of new mouths. These forces are altering the ecology of the lagoon, which has direct implications for the people relying on its natural resources for their livelihoods.

2.2 Changing ecological characteristics

The alteration of the lagoon water salinity resulting from the influx of seawater at the new sea mouth has caused a decrease in fish abundance and biodiversity. This threatens the food and income security of the fishers, who are forced to move into other professions and sometimes migrate as a labour force. While fishing communities are suffering financially as a result of these changes, the tourism sector is also impacted as the main attraction for the tourists, the Irrawaddy Dolphins, rely on fish as a food source. Indeed, both the Boating Association and Berhampur villagers have reported that their numbers have decreased, although the Chilika Development Authority (CDA) reported that their numbers have remained steady (CDA 2021).

2.3 Expanding tourism services

Ecotourism on the eastern side of Chilika Lagoon revolves around boat rides to spot Irrawaddy dolphins and trips to the closed sea mouth and sandbars at Sipakuda. While dolphins represent a major tourist attraction for Chilika Lagoon (Figure 1-A), the expansion of ecotourism activities pose a threat to the health of dolphin populations as the behaviour of some of the tour guides and tourists present risks to dolphin populations. As per the guidelines of the CDA/Forest department, tourist boats are required to stay at a distance of 200 meters from dolphins, and to turn their engines off when dolphins are present. However, the boat drivers are known to drive inside the dolphins' core habitat to cater to the demands of tourists who

wish to see and take photos of the charismatic species up close. The dolphins are often chased by tourist boats to make the experience more exciting for tourists. This subjects the dolphins to stress, noise pollution, and the risk of being injured by the boats. Tourist behaviour at times reflects a lack of concern or understanding for the dolphins and their habitats: tourists reportedly often throw packaged food items into the water to feed the dolphins.

Figure 1

Dolphin spotting is the most important tourist attraction on Chilika Lagoon

Note. A) Irawaddy dolphins (*Orcaella brevirostris*) are spotted swimming in the lagoon; B) A sign board of Tourist Boat Association, which is named after the dolphins of Chilika Lagoon

Source: The photos were captured during the Chilika - V2V Field School 2022 by Michelle Anagnostou and Pradyumna Behera

2.4 Pollution

While the new sea mouth has largely closed as it shifts towards its original location, the original sea mouth remains open. Both the original sea mouth and the location of the new artificial sea mouth and adjacent sand bars near Sipakuda have become a popular tourist attraction and picnicking spot. According to the Boat Association, due to the extensive tourism activity, the area is heavily littered with solid waste. The shores and sandbars of Chilika are home to terrestrial faunal species that are classified under various categories in the red data book of IUCN, such as golden jackals, hyenas, and fishing cats. The high presence of feral dogs feeding on food wastes on sandbars can pose a serious risk to already threatened wildlife in terms of increased competition for food and the spread of zoonotic diseases. The boat association also indicated that the presence of solid and sewage waste generated from lodges, hotels, and eateries associated with tourism in Chilika is also a major problem impacting water quality and fish habitat, and one which does not seem to be being addressed by any of the institutions involved in ecotourism activities. As one boat association member argued, “waste management is the work of the government people, the best we can do is to put a dustbin.”

2.5 Reflections

In order for the ecotourism industry to grow sustainably with the communities of Chilika, decision-makers within the industry must understand the importance of the health of the social-ecological system in sustaining dolphin populations and vice-versa. Both fishers and tourist boat drivers share the perception

that a healthy dolphin population is associated with both fish productivity and ecotourism opportunities, while declining fish populations and overall declining health of the ecosystem are associated with declining dolphin sightings, hence negatively impacting the tourism industry. Despite sharing this understanding, boat drivers – many of whom are fishers too – nonetheless engage in chasing the dolphins, which may suggest a feeling that the need to cater to tourists and the short-term, outweighs the need for the long-term stewardship of the dolphins.

The impact of changes caused to the lagoon by the new sea mouth cannot be overstated here. The creation of the new sea mouth altered the floral and faunal composition of the lagoon, while fish habitat and breeding grounds have been destroyed or degraded. According to local fishing communities, the number of species in the Lagoon have declined by half over the past two decades. The impacts of the creation of the artificial sea mouth, alongside other factors such as aquaculture and climate change, continue to cause environmental degradation of the lagoon. Below are several consequences of the shifted sea mouth identified in our discussions with community members:

a. Biodiversity loss
b. Introduction of weeds that further reduced the growth of the fish
c. Seasonality of species prevalence
d. Habitat degradation
e. Changes in species composition
f. Introduction of saltwater creatures to the lagoon

The cumulative impact of these changes on fish biodiversity and yield have resulted in a gradual shift of the occupational structure away from fishing as it has become a less viable livelihood option. At Satapada, the fishermen are simultaneously engaging in the tourism sector in addition to their fishing activities, yet according to a motor boat association member, tourism is also decreasing in response to the dwindling dolphin sightings. As the health of the social-ecological system declines, so do prospects for fishers to transition from vulnerability to viability, through, for example, diversifying their income sources through tourism. Unless the underlying systemic linkages between fish and dolphin populations, people's livelihood from small-scale fishing, and the fragility of Chilika's unique ecosystem are considered in a holistic way, the sustainable livelihood options available to vulnerable inhabitants of Chilika will likely continue to shrink.

3. Economy and development

This section looks at the economic dimensions of Chilika, reflecting on the imbalanced focus on dolphins over the culture of Chilika's residents in ecotourism, and suggesting that ecotourism needs to enhance both social and ecological value if it is to continue to be a viable source of income for the area.

Ecotourism has emerged as a unique form of tourism due to the recognition of the potential for environmental conservation strategies to simultaneously produce economic and other benefits to local communities. In order for eco-tourism to balance the needs of local economies, the demands of the growing number of tourists, and the importance of safeguarding the natural environment, cooperation between the indigenous people, tourists, the authorities and private actors is needed (Andersson et al., 2021). This cooperation is essential not only for promoting stewardship, but also for the conservation of natural and cultural assets. To understand how this cooperation might arise through ecotourism, we share observations and reflections on the perspectives of different stakeholders, including the village communities, tourism operators, and the relevant authorities. It must be noted that while we separate the tourism operators and the fishing village communities, this distinction is not a hard one, as many of those who work in tourism are also fishers.

Through our discussions with the residents of the Berhampur fishing village and members of the Satpada Boat Association we gained a perfunctory understanding of the lived experiences of the fisher community and the daily struggles that they face, as well as the view from members of the Boat Association, whose livelihoods depend greatly on tourism. Along with this, the Chilika Development Authority's tourism plan has been reviewed to gain insight into how the government visualises the future of ecotourism In Chilika. Below are the insights gained from each of these sources.

3.1 Villagers

Residents of the fishing village of Berhampur shared their insights on how ecotourism functions economically in the Lagoon. Some male members of the community are involved in tourism: they fish in the morning and work as tour boat operators in the afternoon, working a "double shift". While the option of an additional source of income provided by tourism is beneficial, there are concerns about how the changes associated with this shift and the increased tour boat activity in the lagoon might be contributing to the decline of fishing in Chilika. This could be due both to the impact of tourism activity on the ecological health of the lagoon, and to the potential for shifting livelihoods away from fishing and towards the tourism sector to erode the sociocultural identity of fishers.

While many villagers use traditional wooden boats for the purpose of tourism (Figure 2), there is some pressure to switch to more mechanized fibre boats, which would make the tourism more attractive. However, the villagers are concerned that this trend could lead to a loss of the traditional practice of boat building, and that the associated noise pollution negatively impacts the dolphins.

Figure 2

A number of wooden tourist boats on the shore of Chilika that once used to be fishing boats

Source: The photo was captured during the Chilika - V2V Field School 2022 by Siti Zainab Omar

3.2 Boat Association

The members of the Boat Association shared a concern that as a result of the decrease in fish in the Lagoon over the past several decades, the dolphins are also decreasing in number. As such, they don't see tourism

as a viable alternative to fishing because both sectors rely on the health of fish populations. Another major struggle faced by the tourism sector is the risk posed by cyclones. Odisha is a region prone to cyclones and floods, but their frequency has increased and is expected to continue to increase due to climate change (Bahinipati 2014; Singh 2007). As cyclones damage boats and have other negative economic and ecological consequences for local communities, they cause expenses that are difficult for communities to bear. Rising sea levels, and more volatile and unpredictable weather patterns also pose threats to the viability of tourist activities, including to certain types of businesses, like floating restaurants.

Tourism operators also feel threatened by the three major illicit networks, or 'mafia' as termed by the locals, that are operating in the area: the fake pearl mafia, the water mafia and the resort mafia. The 'pearl mafia' refer to the outsiders who sell fake pearls and cheat tourists visiting Chilika, leaving them with a negative image of Chilika. The 'water mafia' refer to the outsiders, including large corporations, encroaching on areas of Chilika through aquaculture operations. The 'resort mafia', refer to the illicit networks of tourist agents and operators who take the tourists away from the locally-run tourist businesses, as described below. These groups harm the livelihoods of tourist operators by siphoning off capital from within the communities, and creating a coercive tourism environment.

3.3 Government

Odisha is one of three coastal states under the federal government's ambitious Integrated Coastal Zone Management Project, one of the main objectives of which is the promotion of eco-tourism. Under this project, Chilika is the flag-bearer for eco-tourism for Odisha. The Chilika Development Authority (CDA), established in 1991 for the overall development of the Chilika Lagoon, is the implementing agency for this project.

The state government drafted a report on its vision and implementation plan for ICZM in 2015, in which they recognize the importance of prioritizing local communities and ecosystems in. their plans. A core vision of the plan is the development of the ecotourism sector to increase livelihood options for local communities without threatening the ecology and the local culture. The plan repeatedly emphasises the involvement of the local community in development of ecotourism related infrastructure (e.g., sit-outs, handicrafts and handloom centres, boats), which is to be later handed over to the local communities for operation and maintenance. However, members of the boat association indicated that infrastructure such as tourist camps are outsourced to private players, which takes capital out of Chilika, while other types of infrastructure, including those mentioned in the plan, have not been developed at all. The 2015 plan also did not consider the influence of the expanding aquaculture industry, which has brought non-fishers into the fishing industry, and is a major contributor to the declining overall health of the ecosystem.

The plan includes many components of sustainable cultural tourism on paper and the description of ecotourism provided by Odisha Tourism Development Corporation identifies the role of culture, nature, sustainable and green infrastructure, education, adventure, and most importantly, the well-being of Indigenous peoples. However, the reality on the ground reflects a disconnect between these laudable aims and the way eco-tourism is actually being practiced. Currently, the ecotourism sector focuses on dolphins as the sole attraction for tourists, which represents a missed opportunity to more meaningfully involve local communities and align tourism with conservation efforts. To achieve this holistic and ideal vision for ecotourism at Chilika requires translating the plan into action - something that simply has not happened yet.

3.4 Reflections

The sole focus of tourism in the area has always been on dolphins, which places pressure on dolphins and their habitat, and excludes women, since they don't drive boats. Hence, a promising avenue towards a more sustainable and inclusive eco-tourism sector may be through the promotion of social and cultural aspects of the communities of Chilika Lagoon, which have thus far remained untapped. This could involve promoting local arts and crafts, food and music, all which provide the potential for greater involvement of women and reduce pressure on Chilika's ecosystems. This could also contribute to building a greater appreciation of the traditional culture in the region, which might favourably shift cultural attitudes towards fishing life and the importance of fishers to the Lagoon as a whole. Further, government assistance to local boat associations and other local tourist businesses in the form of subsidies and licensing can help counter outside influences and build resilience of the local economy by keeping the capital within the system.

4. Governance and management

This section focuses on the potential for participatory bottom-up governance to address the criminal and fraudulent dimensions of tourism that are linked with systemic poverty, inequalities, and marginalization.

Many members of the local communities around Chilika are experiencing multidimensional poverty. Poverty can be conceptualised as having five key dimensions: lack of economic, human, socio-cultural, political, and protective capabilities (OECD, 2001). Political dimensions include one's ability to have a voice and an influence in decision-making processes and setting political priorities (OECD, 2001; Jentoft et al., 2018). This view underscores the role of policies and institutions in place at the local and regional level in poverty alleviation. Thus, to support transitions from vulnerability to viability through poverty alleviation, and better livelihood outcomes, it is imperative that the communities of Chilika, as marginalized groups, are able to have their opinions heard during policy creation, and have their legal rights, e.g., customary rights of access to fishing grounds, enforced. Currently, this is not the case in Chilika as the voices of local communities have generally been excluded from decision-making, and illegal activity that directly harms local communities continues. As people's lives become limited in these various, linked dimensions (Figure 3), it can put increasing pressure on vulnerable people to turn to participation in the illegal economy.

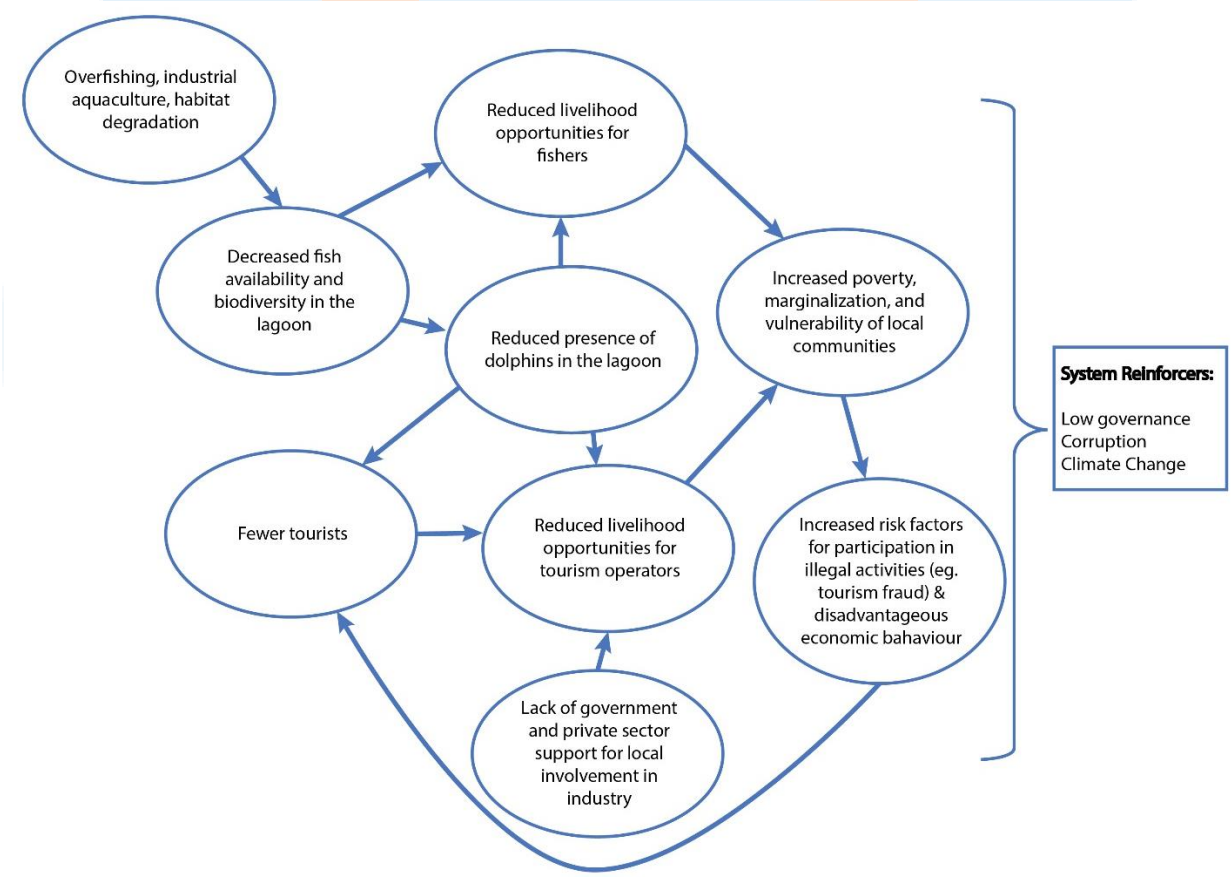
Chilika communities are highly dependent on fisheries as their main livelihood option. In addition to the traditional fishing communities (i.e. fishers by caste), there are also groups of people who were not previously fishers now residing and working in the area. Currently in Chilika, natural resources, such as fish, are often extracted in high quantities by non-fishers, including some supported by external private sector actors. Competition between fishers and non-fishers also leads to overfishing, which reduces catch yield. This is a challenge for the governance actors and requires the creation and enforcement of policies that can better protect the livelihoods of traditionally fishing communities.

Through fraudulent tourism practices in the area, agents lure tourists away from their planned excursions, such as dolphin viewing (by providing false information, such as about road closures) and take them to other nodes of their illicit network, such as a restaurant. Tourists are cheated of their money and sometimes robbed of their belongings, which leaves a negative impression of the area, and a loss in desire to return for other tourism purposes. The general feeling among the villagers and tourist operators is that the district administration is not doing enough to prevent illegal activities. The lack of intervention of the authorities and unwillingness to enforce relevant laws is indicative of governance issues, such as lack of enforcement, lack of transparency in decision-making and overall lack of prioritization of and support for the marginalized communities most affected by such activities.

Research findings indicate that poverty may lead to risk-aversion; a low willingness to adopt new technologies; and a high likelihood of discounting future payoffs, which results in economic behaviours that are potentially disadvantageous (Haushofer and Fehr, 2014). This appears to be the case in some of the fishing communities in Chilika, where many vulnerable community members take out repeated loans at high interest rates that they are unable to pay back, and thus become further indebted. Since many of the challenges faced by Chilika fisheries communities stem from structural problems such as poverty, inequality, and marginalization, upstream and participatory strategies that aim to mitigate root causes are also needed.

Figure 3

Conceptual diagram illustrating the various connections between drivers of vulnerability in the tourism and fisheries communities in Chilika Lagoon. These pathways are based on our observational and experiential learning through time spent with members of Chilika's fishing communities and tourism associations



Where local institutions for fisheries management are strong and where local people have rights over their resources, communities are more likely to contribute to the ongoing protection of ecosystems over the long term (e.g., Brooks et al., 2017). Reinforcing the customary rights of Chilika fishers is therefore expected to result in good outcomes for the ecosystem. This, in turn, helps support both strong fisheries and tourism prospects and diverse livelihood options. In addition, as the social, political, and environmental challenges faced by the communities are complex, multi-pronged approaches are needed to address them. This can include a combination of more participatory and bottom-up governance of the fisheries and the tourism sectors; government support of livelihoods and job creation within the tourism sector, for example, through

public policies supporting the design and implementation of employment programs; capacity-building of tour operators to support the practice of sustainable tourism; and more empirical research to understand the complex challenges faced by the communities. Further research is particularly important to support the government in using evidenced-informed approaches that put the well-regulated and socially and environmentally sustainable supply and trade of fish and fish products at the forefront of policy agendas.

5. Socio-cultural and gender considerations

In this section, we reflect on the images of Chilika that are circulated to promote tourism, and how they may be contributing factors in negatively shaping local and nonlocal perceptions of Chilika's inhabitants, and their entangled environments.

We discuss some of the perspectives about Chilika held by various groups. These perspectives are held in congruence and conflict with each other, and were gathered mainly from our conversations with the communities. We suggest that these perspectives are indicative of sociocultural attitudes through which peoples' relationships with Chilika are formed, and through which they might change. Noticeably absent here are the voices of women, who are not directly involved in the tourism industry.

5.1 Perspectives of villagers

Chilika is referred to as a mother to the villagers, who are mostly fisherfolk. Instead of seeing the lagoon as the place where they live and from which they earn their means, they have personified the lagoon through one of the closest human relationships. This indicates the immense importance of Chilika lake in the social lives of these villagers who are dependent on the lagoon in one way or another.

Famous Odia poet Radhanath Rao described this lagoon as "*marala malini neelambu chilika"*, *marala* means the birds, *malini* is the beautiful flock of birds, *neelambu* means blue water. This beautiful imagery of this lagoon is still very much alive in the minds of the local people; however, from our conversations with the local community members, it seems this picturesque image of Chilika is gradually fading as environmental degradation continues. They feel that they are not able to protect their mother Chilika; in return the mother is failing to protect them from economic, environmental and socio-cultural uncertainties. This spiritual connection with the lagoon underlies the concerns of the communities that they are unable to act on their responsibility to Chilika. Having witnessed the gradual degradation in the environment of this place, the changes in the personal and professional lives of the local people and a decline in intergenerational transmission of traditional culture, folk music, arts and crafts, the communities feel that Chilika needs to be helped because their lives and that of Chilika are interdependent. The villagers suggested that tourism may be a way to enhance awareness and respect for their traditional ways of life, and contribute to the preservation of their traditional arts and culture.

5.2 Perspectives of tourism agencies

The people who run different tourism agencies around the lagoon are mostly local people, some of whom are fishermen by caste, others who are from the non-fishing communities, usually from beyond the immediate Chilika area. In the socio-cultural context, there is a contradiction between the perspectives of the fishers and those of the people associated with the tourism agencies with respect to the Lagoon. Tourism operators tend to see the lagoon from a purely economic perspective, while fishers see it as a mother. These conflicting perspectives appear to exist simultaneously, and come to the fore when the tourism operators

speak about how tourism and fishing always go side by side; tourism cannot be a replacement for fishing. The complexity of these conflicting perspectives lies in the fact that some of the tour operators we spoke with are first and foremost fishers. Despite this, in practice, it seems that these same fishers-cum-tour-operators cater to tourists' desire to, for example, get close to the dolphins and disturb them, suggesting that their actions run counter to their own deeply held beliefs about Chilika.

As of now, there is no official promotion of local arts and crafts among the tourists during the boat trips. In most cases, there are no separate guides in the tour boats, though the boat drivers themselves may act as a guide, sharing stories (e.g., mythology, folk tales) about Chilika to the tourists. In certain cases, a separate government-licensed guide accompanies the boat driver, but these positions are currently not given to local people. Employing locals as official, government-sponsored tour guides would not only provide an additional source of income, but could provide an avenue through which locals themselves could spread awareness about their socio-cultural traditions, garnering interest and appreciation of their lives, livelihoods, art and culture among tourists.

5.3 Perspectives of government

In 2013, in order to showcase the tourism potential of Chilika Lagoon and the maritime traditions and cultures of Odisha, the State Govt established an annual festival called "Chilika Mahotsav" at Satapada (one of the three primary tourist entrance spots of Chilika Lagoon), to be organised jointly by the Department of Tourism and Culture, the Chilika Development Authority (CDA) and the Puri District Administration. The festival includes boat races by traditional Chilika fishermen, handicrafts fairs, an exhibition displaying the flora and fauna of the lake, and cultural functions featuring folk dances and folk art. There have also been theatrical depictions of the local people's daily livelihoods, cultures and traditions.

While the festival is an encouraging attempt by the State Government to preserve and share the traditional arts, crafts and cultures of Chilika fishing communities, the Chilika Mahotsav is attended mainly by local people. Social media publicity on the part of the government to attract tourists from other parts of India and abroad is limited, and there are no efforts to document artworks, their creators or the creation process.

5.4 Reflections

Images are powerful tools that are more than indicators of a truth or reality, but are rather mediators for the social fabric of life itself (Gage 2019; Butler 2009; Sontag 1977). Below we reflect on the different images of Chilika held and produced by different actors. We suggest that these images are representative of larger patterns of vulnerability in the area, and that they provide a means through which to examine the challenges and opportunities that ecotourism raises for transitions to viability.

We ground our focus on ecotourism around sociocultural identity and the creation of a sense of place: an 'image of Chilika'. In Chilika, fishing is more than a caste-linked profession; rather, it is a way of life. To be a fisher is an identity; to be a fisher in Chilika is to live *with* Chilika as an inseparable part of it. This is reflected in the conviction shared by the local tour managers, who are also fishers, that "tourism cannot replace fishing." The villagers refer to Chilika as their Mother, and described their memories of Chilika as a place of blue waters and birds. This image, however, is not the only one present in the area today.

Since the beginning of tourism in Chilika in the 1990s, the sector has mainly revolved around local tour guides catering to tourists responding to advertisements of Chilika's dolphin sightings. This image, created through posters of Miami-esque bottlenose dolphins and paddle boats displays an unpeopled Chilika. As the villagers of Berhampur pointed out, "Chilika is known for its biodiversity and dolphins, but we are

fishers." This image of Chilika appears to be produced and circulated by multiple groups, including the local tour association and the nonlocal eco-resorts and hotels. Despite both locals and nonlocals participating in its production, the image is at odds with the reality of Chilika.

The touristic image may come at a cost borne by the locals: the people who have lived with Chilika for centuries – and form a critical part of the social-ecological system – are not included in the popular valuation of Chilika for tourists looking for dolphins, gleaming waters, and a spectacle to capture and consume. This pattern of removing local fishers from the image of Chilika fits with the marginalization they experience within society more broadly, as reflected in the disregard for their voices in governmental decisions about the opening of a new sea mouth, and the detrimental impacts of industrial aquaculture operations on the ecosystem and fisher livelihoods.

The fact that local tour guides (who include fishers) are complicit in creating and circulating this image suggests that the risk of deviating from the image on which these groups depend for their livelihoods precludes the possibility of altering the marketed image of Chilika. There is no space for changing the way tourism is promoted if there is a belief that a more holistic image of Chilika may result in fewer visitors and less income, especially given the difficult economic situation of Chilika's communities. Thus, the image created for tourists is not a realistic reflection of Chilika but rather a reproduction of tried-and-tested 'marketable' images. It may also be the case that although fishers-turned-tour-guides are complicit in circulating a de-peopled image of Chilika, the power to produce these images is not within their grasp.

The possibility of creating a more holistic image to represent Chilika within the tourism sector relates not only to questions of power, however, but also to whether locals perceive the sector as a powerful space for producing positive change. The push to promote an image that is more likely to foster an improvement in the sociocultural conditions of the communities would require a belief that tourism as a sector has the capacity to act as a driver of social change. While future research would be required to more deeply understand the perceptions of the community in this respect, the general sense we observed was that in its current form, tourism does not provide such a mechanism. Members of the Boat Association, for example, identified their lack of agency and "smallness" in changing larger processes of tourism. However, there were also some indications of a desire from within the communities for a more inclusive and sustainable forms of tourism, as well as ideas on what this might look like. One fisherman who occasionally takes visitors on tours around the lagoon suggested that tour guides could act as wardens of both the communities and the ecosystem; educating tourists while protecting the fragile social and natural environment.

Some residents of one village expressed a desire to see tourism that brings visitors to their island and enhances villagers' lives, specifically mentioning the fostering of an appreciation and respect for their historical stewardship of Chilika, particular artistic and cultural practices, and the dignity of fishing life. For this to happen, there needs to be a cultural shift in how tourists 'consume' Chilika.

Such a shift may come about through changes in the circulated images that sustain and mediate peoples' senses of place, community, and identity. For example, by including the local community in the production and circulation of images, and in the images themselves, Chilika's touristic value might be broadened to include both the social and ecological dimensions of the Chilika system.

Broadening the sociocultural value of Chilika in this way may have positive implications for transitions from vulnerability to viability of these communities. Such transitions are fundamentally about trajectories, about the ways in which the future is created through the present. Images of Chilika shape how Chilika is anticipated by tourists, circulated beyond the locality, and produced within society. As such, images that depict a holistic vision of Chilika wherein communities are considered vital, alongside dolphins, blue waters, birds, and other human and non-human elements of the socio-ecological system, may be the first steps to actualizing a social attitude that protects and supports Chilika as a socio-ecological system.

Images are only one form of storytelling that affects how the future of Chilika is made in the present. Stories exist in both tangible and intangible forms, encompassing images and oral narratives. Understanding how these stories of Chilika are produced, by whom, where they circulate, how they are accessed, why they are made, and how they are received offers a wide avenue for future research that treats stories as formative agents in changing how Chilika is valued and treated by society at large, and in particular by those in positions of power. This research could involve the study of material culture, gendered images of place, access to resources, social hierarchies, social media, migration and dissemination of these images, and more.

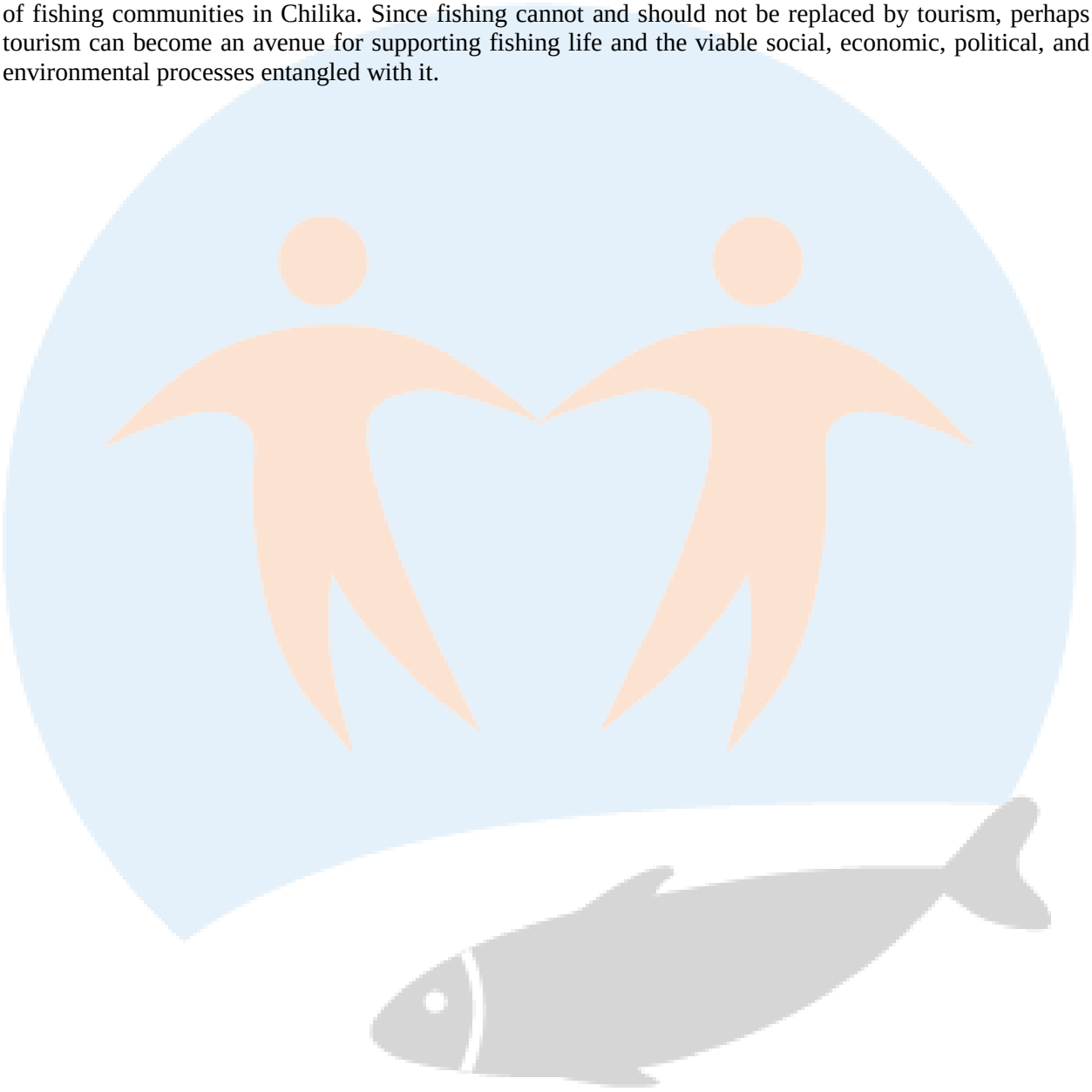
Creating a cultural shift in how multiple parties, both locally and regionally, perceive and value Chilika as a social-ecological system can begin with the tourism industry's depiction of place: by changing how the image of Chilika is framed both locally and regionally, tourism in Chilika might be able to shift away from a dehumanizing depiction of the natural world towards one that values the entangled social and ecological dimensions of the system. Ultimately, such a cultural shift depends on who has the power to create images and to have their perspectives heard and acted upon.

6. Conclusions: Emerging issues

For the communities in Chilika, fishing is more than just a source of income: it is an identity, a political-economic force, a practice of environmental stewardship, and an ongoing challenge in the face of significant ecological change. As such, for the fisherfolk in Chilika, a shift to tourism represents a reconstruction of their traditional ways of life. At the same time, tourism is both an alternative source of income for fishers who are struggling to make ends meet, and a speculative project by nonlocals looking to exploit the ecosystem. The mechanisms by which tourism exploits and contributes to the lives of vulnerable communities at Chilika warrants further research. However, as explored in this paper, we have begun to unravel some lines of inquiry that suggest (1) the multiple actors in the ecotourism industry should consider the mutually sustaining relationships between the nonhuman and human elements of Chilika if it is to become more environmentally sustainable; (2) ecotourism needs to move beyond the dwindling dolphin population to include the cultural value of Chilika if it is to continue to be a viable source of income for the area; (3) the criminal and fraudulent dimensions of tourism likely stem in part from structural problems, and to combat them requires deeper support for participatory bottom-up governance to address poverty, inequalities, and marginalization; (4) the images of Chilika that are circulated to promote tourism may be contributing factors in shaping local and nonlocal perceptions of Chilika's inhabitants and their entangled environments. These four lines of inquiry stem from our four themes: ecological and environmental attributes; economy and development; governance and management; and social, cultural, and gender attributes.

Taking these lessons together, a common thread emerges that suggests the future of Chilika's tourism must be driven by the inhabitants of Chilika if tourism is to begin positively contributing to the viability of the whole social-ecological system. This model puts the most vulnerable front and centre in decision-making for tourism. Building on the government's tourism plan, which sets out admirable yet unachieved aims, the establishment of a programme for further developing and implementing this tourism plan with local inhabitants of Chilika would help to bring those people most affected by tourism into the decision-making processes. To do this requires a holistic approach to the entire social ecological system in which a broad spectrum of agents are considered as drivers and potential allies in producing meaningful change. Such an approach requires further research that includes both human and nonhuman agents as active players in making and influencing change. Ecotourism is only one driver of change, and has the potential to become a driver for positive change, but only if the most vulnerable are able to play a more direct role in the future of Chilika.

To do this would require strengthened networks of solidarity between fishing groups negatively affected by tourism, and governmental support for their voice in resisting exploitative tourism practices. Coupling support for these networks with a more expansive approach to the touristic value (and revenue-generating potential) of Chilika may reposition fishing life as key to tourism, rather than in opposition to it. A particularly salient point that emerged repeatedly in our conversations was that efforts should be focused in the cultural sector, working to create tourist cultures that value the artistic practices, histories, and lifestyles of fishing communities in Chilika. Since fishing cannot and should not be replaced by tourism, perhaps tourism can become an avenue for supporting fishing life and the viable social, economic, political, and environmental processes entangled with it.



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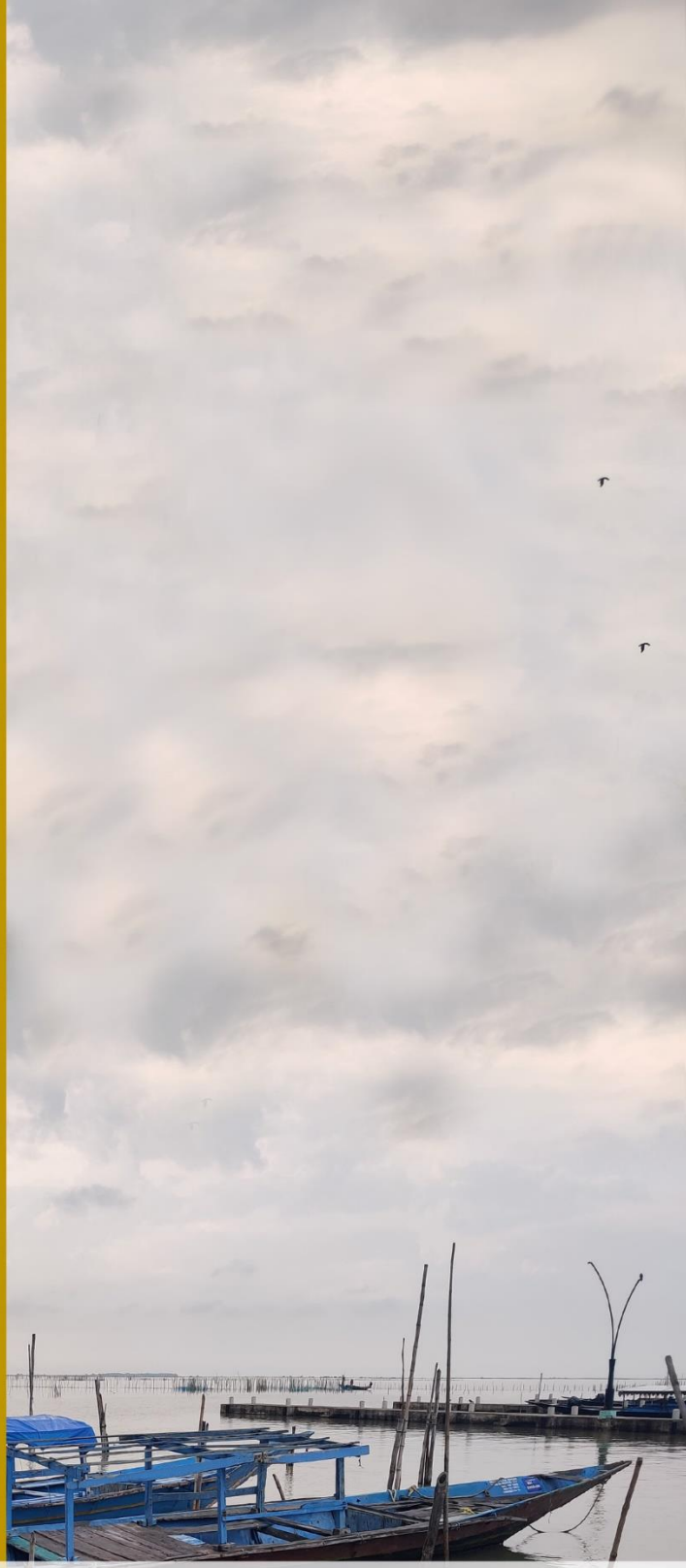

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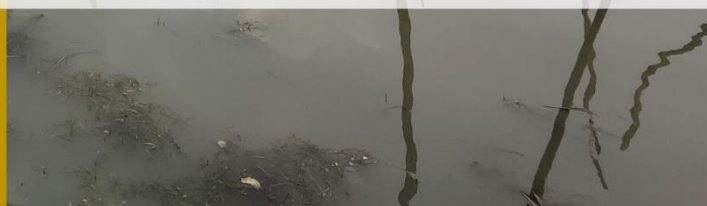

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