

## **Sacred Ecology of Sundarbans: An Ethnographic Approach to Exploring Local Ecological Knowledge and Folk Narratives of the Deltaic Sundarbans of Bangladesh**

**Tuli Guha Majumder\***

**[Abstract :** The study "Sacred Ecology of Sundarbans" utilizes an ethnographic approach to explore traditional wisdom and local folk narratives within the Sundarbans mangrove forest in Bangladesh. It aims to comprehend community perceptions and interactions with the ecosystem, challenging dominant narratives that attribute environmental degradation solely to local populations. This research includes thorough field investigations and interviews conducted across various areas and communities in the Sundarbans to achieve a more comprehensive and accurate understanding of specific folk narratives and their related practices. By examining folktales and oral traditions, the study highlights the coexistence of traditional knowledge with scientific perspectives, offering a more nuanced perspective on the human-environment relationship in the region. As climate change and human encroachment threaten the Sundarbans, these narratives play an essential role in fostering a sense of identity and resilience among its residents. Ultimately, the folklore of the Sundarbans goes beyond mere storytelling; it serves as a foundational narrative that reflects the complexities of human existence in harmony with nature's unpredictable forces, advocating shared responsibility for safeguarding both culture and the environment for future generations.]

**Keywords :** *Deltic Sundarbans, Sacred ecology, Mangrove, Climate change, Ecological knowledge*

### **Introduction**

The Sundarbans delta, straddling Bangladesh and India, is the world's largest mangrove ecosystem and a region where human life is intimately entwined with a dynamic natural environment. Central to this inquiry is the exploration of the spiritual and cultural significance the environment holds for the people of the Sundarbans, as well as how they navigate the unique challenges and opportunities presented by this ever-changing landscape.

Stories and rituals surrounding deities such as *Bonbibi*—the benevolent protector of villagers—embody the symbiotic relationship between humans and nature (Chakrabarty, 2021). These folk narratives, passed down through generations, are imbued with moral lessons that advocate for coexistence and sustainability, urging communities to live in harmony with the region's iconic tigers and other wildlife rather than in fear. The tales

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\* **Tuli Guha Majumder** : Assistant Professor, Department. of Archaeology, Jahangirnagar University, Email : majumder.ju38@gmail.com

also vividly portray the struggles of fishermen, woodcutters, and others whose livelihoods are inextricably linked to the land, highlighting the delicate balance between survival and respect for the powerful forces that shape the Sundarbans (Uddin, 2019).

As climate change and human encroachment increasingly threaten the region, these narratives play a vital role in cultivating a sense of identity and resilience among its inhabitants (Uddin, 2019). They inspire younger generations to cherish their heritage while facing contemporary challenges, ensuring that the enduring lessons of the past remain relevant amidst the tides of progress. Ultimately, the folklore of the Sundarbans transcends mere storytelling; it serves as a foundational narrative reflecting the complexities of human existence alongside nature's capricious forces, and it urges a collective responsibility to preserve both culture and environment for future generations. This study seeks to illuminate how the sacred ecology of the Sundarbans, as expressed through local ecological knowledge and folk narratives, offers not only insight into the region's cultural fabric but also potential pathways for alternative, community-centered approaches to conservation.

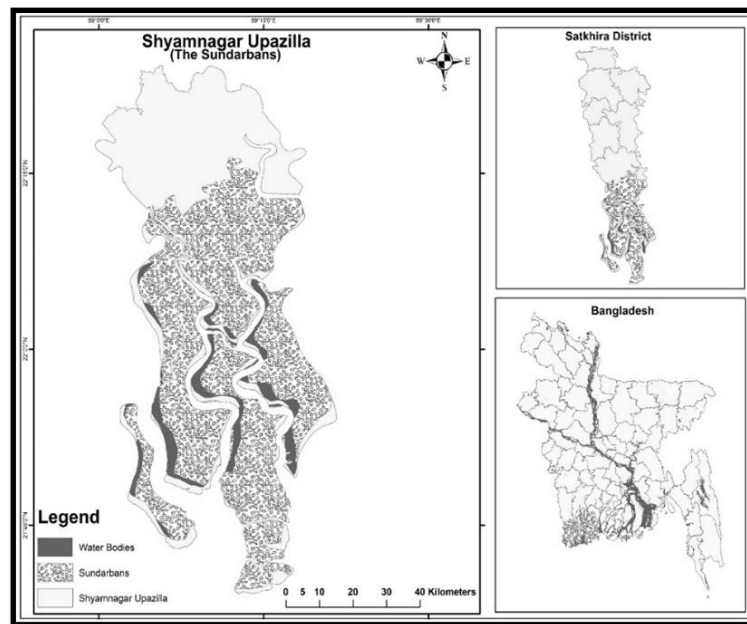
### **Objectives**

The objectives of the present study, "Sacred Ecology of Sundarbans: An Ethnographic Approach to Exploring Local Ecological Knowledge and Folk Narratives of the Deltaic Sundarbans of Bangladesh," are as follows:

- To demonstrate that the customs, traditions, and stories surrounding folk deities in the Sundarbans are infused with ecological insights, which reveal how local communities interact with and understand their natural environment.
- To critically analyze selected folk narratives and their associated rituals to explore the potential for these cultural resources to inform alternative approaches to conservation, and to integrate local perspectives for sustainable management of the Sundarbans ecosystem.

### **Study area**

The focus of the current study has been on a few particular zones of the Sundarban area. Sundarban, the world's largest mangrove wetland, spans approximately 1 million hectares, with 60% in Bangladesh and 40% in India (Jalais, 2007). This vital ecosystem plays a critical ecological role in tropical and sub-tropical coastal areas, offering protection against harsh weather, coastal erosion, and seawater intrusion. Additionally, it generates significant fishery resources and provides various forestry products, while also supporting a diverse range of fisheries. The Sundarbans mangrove forest is a large area of coastal wetlands located in Bangladesh and India. In Bangladesh, it spans several districts, including Khulna, Satkhira, Bagerhat, Patuakhali, and Barguna (Islam, 2013). In India, it is mainly found in the districts of South 24 Parganas and North 24 Parganas. This forest is renowned for its unique ecosystem and is home to a diverse array of wildlife, including the iconic Bengal tiger. The surveyed region was Shyamnagar Upazila in Satkhira District (Map 1). The coordinates of Shyamnagar are 22.3306°N 89.1028°E. The Sundarbans and Bay of Bengal to the south, Koyra and Assasuni upazilas to the east, Kaliganj (Satkhira) and Assasuni upazilas to the north, and the Indian state of West Bengal to the west all surround Shyamnagar Upazila. Raymangal, Kalindi, Kobadak, Kholpetua, Arpangachhia, Malancha, Hariabhanga, and Chuna are the principal rivers in this area. This topographical region includes the villages that were surveyed, such as Atulia, Bhurulia, Burigoalini, Gabura, Ishwaripur, Kaikhali, Kashimari, Munshiganj, Nurnagar, Padmapukur, Ramjannagar, and Shyamnagar.



Map 1: Location of Study Area

### Methods of the study

This study employed an ethnographic methodology to explore how local ecological knowledge and folk narratives shape the interactions between communities and the environment in the Sundarbans. The ethnographic approach was chosen to capture the nuanced, lived experiences and cultural practices of people residing in this unique mangrove ecosystem. The methods of my research will be divided into three stages. These are:

#### 1. *Pre-fieldwork research:*

- This stage comprised data recognition and collection from library and archival sources, which are readily accessible from the Asiatic Society, libraries of different Universities, and archives. Secondary data was collected from the forest department, different journals, newspapers, and different NGOs

#### 2. *Fieldwork:*

- a. **Site Selection:** Field investigations were conducted in various villages within Shyamnagar Upazila, Satkhira District, Bangladesh, which are situated at the interface of land and water in the Sundarbans region.
- b. **Collection of the oral record:** Data like epic, myth, rhyme, folksongs, tales, proverbs, sayings, etc. regarding the events of climatic variability what had been turned as an oral history collected from observation to permanent record (e.g. written, tape) survey.
- c. **Ethnographic Survey:**  
**Participant Observation:** Researchers lived in the community for extended periods, observing daily life, rituals, and interactions with the environment. This

immersive approach allowed for a deeper understanding of how ecological knowledge is embedded in everyday practices and ceremonies.

**Interviews:** Semi-structured and in-depth interviews were conducted with residents, including fishermen, woodcutters, farmers, and religious practitioners. These interviews captured personal narratives, beliefs about folk deities, and perceptions of environmental change.

**3. Post-field analyses and Documentation:** The research utilized electronic devices such as cameras, mobile tape recorders, and GPS tools to document rituals, festivals, and significant landscape features. Extensive photography was used to visually record ceremonies and sacred sites. This stage mainly focused on different methods of analysis and interpretation that complemented by the pre-fieldwork and fieldwork methods and their application.

### Literature Review

The Sundarbans' folk narratives with ecological insight have failed to attract the attention of detailed works. Mostly, the works are based on the documentation of Folk rituals, Customs, and deities. Previous research on Sundarbans folk narratives emphasizes the relationship between traditional beliefs, local communities, and tourism's effects. Notably, studies focus on the folk heroine *Bonbibi* and associated rituals, such as the Palagan, highlighting the adaptation of these traditions for tourist engagement. Additionally, the Sundarbans are explored as a landscape imbued with fear and awe, shaping the evolution of local deities and myths.

"Jungle Nama" is a poetic retelling by Amitav Ghosh (2021) that draws from a story within the *Bon Bibi* legend (Johurnama), which is well-known in the villages of the Sundarban region. This legend and setting are central to Ghosh's novel "The Hungry Tide." The message is that the excerpts from "Jungle Nama" provide a glimpse into the enchanting beauty and mystique of the Sundarban area.

Rafiqul Islam's (2013) Book "The Sundarbans: Folk and Folk Religion" discusses the folk tales, legends, and myths associated with such forest Gods in Sundarbans.

The other important ethnographical work on Sundarban's folk deities has been done by Camellia Biswas (2022), titled "Reimagining Human-Nature Interactions and Reclaiming Marginal Identity through Folk Narratives of Sundarbans". This article delves into the complex relationship between human communities and their natural surroundings, specifically focusing on the Sundarbans, a unique mangrove ecosystem in India and Bangladesh. It explores how folk narratives serve as powerful tools for reimagining these interactions, allowing marginalized identities to reclaim their stories and assert their connection to the environment.

Sufia M. Uddin (2019), in his article titled "Religion, Nature, and Life in the Sundarbans," argues that in their ritual and ethical practices, these Muslims and Hindus treat the Sundarbans as sacred land. It is sacred because it provides all they need to live a sustainable life.

Kakali Chakrabarty (2021), in her paper titled "The Cult of Bonbibi: A folk Paradigm in Deltaic Sundarbans," examines how The Cult of *Bonbibi* is a syncretic folk religion deeply ingrained in the culture and beliefs of people living in the Sundarbans mangrove forest region, particularly in the Bangladesh Sundarbans. *Bonbibi*, a figure revered as a forest deity, is worshipped by both Hindus and Muslims, who share rituals, narratives, and celebrations.

Most of the work is concentrated on the documentation of folk deities, primarily focusing on the main goddess of *Bonbibi*. None of these works is a methodological research study on how this traditional knowledge offers an alternative to the conservation approach.

### **Folk Deities in Sundarbans infused with ecological insight**

This section explores the reasons behind the Sundarbans' profusion of folktales as well as how the residents' life experiences are embodied by folk deities in their many ritualistic and ceremonial contexts. Both the deity and the devotee are viewed as inferior in this context, striving for upward mobility while adhering to the broader social and physical context. Particularly in societies that are institutionalized and becoming more homogenized, folklore is an essential source of culture in its expressive, discursive, and evolving form (Basu, 1966). Therefore, learning about a particular group's folklore can provide us with access to a dynamic and unstructured body of cultural information that has been produced through informal distribution and observation. According to Shambhobi Ghose (2023), "Folklore is a source of 'the geographic, social, economic, anthropological, and religious identities of a particular place.'" 'Folk narratives' as a term is thus also used here as an umbrella category to encompass myths, legends, and fables (Ghose, 2023).

#### **1.1. *Bonbibi* (Mother of Sundarbans)**

*Bonbibi* embodies both Hindu and Muslim traditions of belief, and is often viewed as a counterpart to Hindu forest deities such as *Banachandi* and *Banadurga* (Biswas, 2022). Most forest resource collectors in the Sundarbans, regardless of their religion and caste, worship *Bonbibi* before and after a trip to the forest (Basu, 1966). *Bonbibi* (Image 1) is usually accompanied by her brother *Shah Jongoli* and *Dukhey*, her young devotee. Munshi Mohammad Khater's *Bonbibi Johuranama* (1880) has become the basis for various palas and jatras that are typically staged after *Bonbibi*'s worship (Islam, 2013). It is possible that *Bonbibi* worship was first practiced four or five centuries ago by the Sundarbans forest peoples (Islam, 2013). The liberal nature of the *Pir Sahebs* and the growth of Islam in South Bengal led to *Bonbibi* being the goddess of a unified Hindu-Muslim community. During the month of *Poush*, the Munda tribes of Shyamnagar worship *Bonbibi* at the Ramzannagar Unions Mundapara shrine.



**Image 1:** *Bonbibi* (Mother of the Sundarbans) (Courtesy: Author)

### 1.2. *Dhakshin Ray* (God of the Tiger)

One such deity is the Sundarbans' *Dakshin Rai*. He was a medieval historical person whose divine manifestation has obscured his human aspect. *Dakshin Rai* is popularly referred to as the God of the Tigers in the dangerous Sundarbans (Image 2). There isn't a single brick temple dedicated to this god in the Sundarbans. The ground of the banyan and the margosa (neem) tree is often the puja location. In the middle of the woodlands and forests, the worship is conducted outside (Image 3). *Dakshin Rai's* idols are depicted everywhere riding tigers while wearing combat attire (Islam, 2013). The worship of *Dakshin Rai* is a communal and public event in the Sundarbans forest society (Mandal, 2018). His *Puja* is composed of goat sacrifice, *Kirtan*, and instrumental music. *Dakshin Rai's* adventures are recounted in "Rai Mangal Kavya" by a few medieval poets (Bhattacharyya, 2017).



**Image 2:** *Dakshin Ray* Associated with *Bonbibi*



**Image 3:** *Thaan* of *Dakshin Ray* (Courtesy Author)

### 1.3. *Kalu Roy* (Crocodile God)

The folk deity *Kalu Roy* protects against predators and untamed animals. To protect themselves from the deadly crocodile, those who depend on the Sundarbans' waters and forests revere *Kalu Roy*. Every legend involving *Dakshin Rai* mentions *Kalu Roy*. Both can be found combined in several Sundarbans temples and *thaans*. Tuesdays and Saturdays are the customary days for worshipping the crocodile deity (Image 4), *Kalu Roy* (Bhattacharyya, 2017).



**Image 4:** Village women are performing *Kalu Roy Puja*. (Courtesy, Author)

#### 1.4. *Makal Thankur* (God of the Fishes)

The Sundarbans fishermen revere *Makal Thakur* as their god. He resembles one or two stupas combined rather than a human. This stupa resembles a top, a groom's headpiece, or an upside-down pottery glass. *Makal Thakur* and "Kanyashma," the Mysorean village goddess, are somewhat alike (Islam, 2013). Fishermen revere her as well, although *Makal Thakur* is a god and she is a Devi. Fishermen in the Sundarbans worship this deity on the banks of rivers or canals before going fishing (Biswas, 2022). By placing tirkantas (reeds) on the ground, a fence is built around the altar on four sides. Offerings to *Makal Thakur* include flowers, vermilion-dainted *Bel* and *Tulsi* leaves, *Atap* rice, ripe bananas, and kid-friendly chocolates (Biobaku, 2017). Miracles involving a folk deity are frequently linked to the *thaan* of her worship; as a result, that location is considered auspicious and is designated as the deity's permanent *thaan* (Image 5).



**Image 5:** *Thaan* of Makal Thakur (Courtesy: Author)

#### 1.5. *Itu Puja* (Goddess of Grain)

*Itu-puja*, or worship, is a custom that provides prayers and devotional adoration to the gods. Celebrated during the harvest season (the month of *Agrahayan*), it is a well-known traditional event among Bengali Dalits (Biswas, 2022). The concept behind the worship of "Itu" or "Inyati", also known as the goddess of grain, is to preserve the seeds of winter crops such as rice and mustard and boost their productivity, thereby ultimately leading to the population's redemption in the afterlife (Islam, 2013). Reading or reciting the goddess *Itu's vratakatha*, or story, is one of the most important parts of carrying out this ceremony (Sen, 1995). Elderly women frequently perform these oral recitations and instruct the younger generation. Like many folk deities, the story itself lacks a set structure. In a basin filled with soil, where the various seed grains—rice, gram, pea, mung, mustard, sesame, and barley—are already producing sprouting seedlings, the goddess is worshipped (Image 6) (Chatterjee, 2014).



**Image 6:** A symbolic arrangement for *Itu puja* (Courtesy: Author)

#### 1.6. *Tusu* (Goddess of fertility)

Another harvest-related folk deity that is widely worshipped among the indigenous communities of the Sundarbans is the goddess *Tusu*. In his exploratory research of the Sundarbans' folk deities, Rafiqul Islam Khokan (2013) finds that the goddess *Tusu* evolved over many generations prior to and throughout the colonial era to achieve her current revered form. Mostly worshipped by the Munda of Shatkira, Jharkhand, and Odisha, among other ethnic communities (Islam, 2013). According to Mukhopadhyay (2021), *Tusu* is considered the farmer's riches, and her worship is included in the category of fertility cults. She is mostly venerated as a harvest goddess, according to Sundarban villagers' stories. The ritual is performed with a shora, a pot, or a ghot, also known as a lota. The shora is a wider vessel than the ghot, which is a middle-sized, spherical, spouted vessel composed of copper, brass, plastic, or earth (Image 7).



**Image 7:** Arrangement for *Tusu Puja* (Courtesy: Author)



### 1.7. *Shitala* (Goddess of Epidemic)

People worship a variety of folk deities in an attempt to protect themselves from ecological disasters in response to the continuous wave of catastrophic catastrophes (Wadley, 1980). People living in the Sundarbans are susceptible to numerous illnesses due to their harsh climate. Outbreaks of cholera, lung infections, endemic gastrointestinal problems, food poisoning, and skin conditions. Additionally, agencies are unable to build adequate medical facilities in the Sundarbans due to their inaccessibility (Sarkar, 2010). Due to life's precarious existential state, several folk deities have emerged, along with their worship rites and stories, which are seen to have enormous therapeutic and life-saving potential when followed by followers. *Shitala* is one of these goddesses, and her *thaans* are widely distributed throughout the Sundarbans and other rural areas (Image 8).



**Image 8:** *Thaan* of *Sitala* (Courtesy: Biswas, 2022)

### 1.8. Goddess *Manasa*

The ancient Indians began to worship serpents after imagining *Nag Devi* as the serpent goddess. Later, non-classical folk mythology, however, refers to *Manasa* as the goddess of the serpent (Sastri, 2020). She is referred to as *Padmabati* in *Manasa Mangal Kavya* (Dimock, 1962). According to the sixteenth-century poet Brindaban Das Kaviraj, "the populace was enamored with the worship of *Bishahari* (Poison Hari) at the time of Chaitanya's birth." At that time, *Debi Manasa* was revered as *Bishahari*, the goddess who eliminated or neutralized snake venom (Roy, 2020). In the Sundarbans region, *Manasa* is revered as a household idol for many generations and worshipped in a large number of common '*thaans*' (Image 8) and temples. '*Ranna Puja*' (Image 9) (cooking or kitchen puja) is the common name for the yearly *Manasa puja*. Outsiders are not allowed in the kitchen at this time (Biswas, 2022). Cooking must be done in a pure and uncontaminated manner. Conches are blown before cooking, and fresh fuel and firewood are used to build a fresh fire. Rice, dal, fish curry, pancakes, fried ripe banana balls, payas, fruit chutney, and other foods are prepared and kept in storage (Bhattacharyya, 1965).



**Image 8:** *Ranna Puja*  
(Courtesy: Author)



**Image 9:** *Manasa Thaan* (Holy seat) (Courtesy: Biswas, 2022)

### **Analysis of Local Knowledge and Folk Narratives of Sundarbans**

The study prioritized identifying and interpreting local ecological knowledge, including how it is transmitted through myths, stories, and ritual practices. Special attention was given to the roles of deities such as *Bonbibi* and *Dakshin Rai*, and how their narratives inform resource use and conservation ethics (Oring, 1986). This corpus of information cannot be compared to scientific knowledge, even if it is crucial to examine ecological components in the folktales to determine the degree of local people's environmental awareness. Separating "local" or "indigenous" knowledge systems from "scientific" knowledge systems (Dubi, 2017) and debating which is better is problematic in several ways. In any event, the local population survey showed that there is no requirement for such a dualism between knowledge systems. Most Sundarbans residents demonstrated scientific understanding of the ecology in which they lived, even while believing in the "reality" of the region's gods (Risley, 1891). They demonstrated an understanding of ecological ideas, including food chains, ecological balance, and stability (Nakata, 2002). They also understood that a healthy ecosystem needed species diversity. Particularly under the prevalent Western model of conservation, conservation is sometimes seen as directly at odds with forest inhabitants. Sharma (2021) argues that the Forest Department has used the majority of the local population's "non-indigenous" identity as a weapon to implement coercive, exclusive conservation practices in the Sundarbans. But as the Sundarbans folktales demonstrate, livelihoods don't have to be sacrificed for conservation.

While conceding that resource collecting needs to be controlled, *Bonbibi's* story promotes the idea of subsistence. *Dokkhin Ray* and *Bonbibi* both present equally strong arguments for the necessity of both using and conserving resources. The takeaway from this argument is ultimately a cautionary tale about greed. Thus, the blessings of *Bonbibi*, *Dokkhin Ray*, and *Bara Khan Gaji make Dukhey*, the impoverished son of a defenseless widow, affluent. However, despite having more than enough money, Dhona gets his retribution for going to the forest (Image 10). The opinions of the locals on conservation are similar to those that underlie the stories. They think it's crucial to preserve the forest and its fauna. They do not think that people should be completely removed from forests for the sake of conservation, but they are willing to learn new methods to use resources wisely. Like the most prominent species of the royal Bengal tiger found in the Sundarbans, several other species, such as snakes, are also crucial in illustrating the dynamics of human-animal interaction through mythology, folk deities, and traditional

ceremonies. *Manasa* worship symbolizes the snake and spreads a conservationist mindset through folklore. There are about thirty-seven kinds of snakes in the Sundarbans, and they are all known to be extremely deadly (Uddin, 2019). The human-snake conflict in the Sundarbans is more well-known than the human-tiger conflict; according to my interviewees, the number of human deaths from snakebite is three times higher than that of tiger attacks.



**Image 10** : Performance of the goddess *Bonobibi* story from “*Johuranama*” at Shamnagar village, Sundarbans. (Courtesy: Author)

People worship a variety of folk deities in an attempt to protect themselves from ecological disasters in response to the continuous wave of catastrophic catastrophes. People living in the Sundarbans are susceptible to numerous illnesses due to their harsh climate (Biswas, 2022). Common illnesses in the area include cholera, lung infections, ongoing stomach problems, food poisoning, and skin conditions. Essentially, the community's reliance on spiritual worship reflects its attempts to cope with both environmental dangers and health challenges. Agencies struggle to establish sufficient medical facilities in the Sundarbans due to the region's inaccessibility. In response to the precarious living conditions, various folk deities have emerged, accompanied by worship rites and narratives that are believed to offer significant therapeutic and life-saving benefits to their adherents.

#### **Alternative approaches to the conservation of biological diversity**

In recent years, the traditional methods of conservation, often characterized by the establishment of protected areas and species-focused initiatives, have faced numerous challenges, including climate change, habitat degradation, and the pressures of human encroachment (Arnold, 2018). As a response, innovative alternative approaches have emerged, each aiming to enhance and sustain global biological diversity. Another noteworthy method is the concept of ecological corridors, which seeks to connect fragmented habitats and enable wildlife movement between protected areas. Such

corridors serve as lifelines for various species, promoting genetic diversity and resilience against environmental changes. The establishment of these corridors necessitates collaborative planning among stakeholders across sectors, emphasizing the importance of multi-level governance.

Folk storytelling is a multifaceted cultural phenomenon that influences people's lives, relationships, cultures, and personalities while also assisting them in developing their connections with the natural world. The need to preserve folklore is acknowledged by numerous writers (Ghatak, 2013; Hasnain, 2021; and Dubi, 2017) as a significant document about the threat to biodiversity and how humans are responding to it. Using the ground-breaking phrase "sacred ecology," Berkes (2008) pushes the limits of the argument that regards ecology as essential to religious practice in a situation where the devotee depends only on his surroundings and ecology for survival.

However, several folk deities and their *kathas* that promote harmony between humans and the environment are regarded with some skepticism as representations of peril and strife, which see devotee groups as unstable and terrified. According to Biswas (2022), approximately 80% of the world's population depends on indigenous or traditional knowledge about the interactions between humans and nature that is ingrained in their oral traditions. According to Dubi's (2017) and Nagata's (2002) research, the Convention on Biological Diversity of the United Nations recognizes the importance of traditional and "indigenous knowledge to the conservation and sustainable use of biological diversity." This knowledge is considered to be a crucial component of the locals' social capital, enabling them to take charge of their lives and preserve harmony with the natural world (Jalais, 2010).

### Conclusion

The ethnographic exploration of the Sundarbans reveals that local ecological knowledge and folk narratives are deeply embedded in the daily lives and cultural practices of its communities. These narratives, centered around deities such as *Bonbibibi*, *Dakshin Rai*, and others, serve not only as spiritual guides but also as frameworks for sustainable resource use, cautioning against greed and advocating for harmony with the environment. Through rituals, stories, and oral traditions, residents have developed adaptive strategies to cope with the region's formidable challenges, including human-wildlife conflict, climate change, and recurring natural disasters.

By critically examining these folk narratives, the study advocates for a conservation approach that is rooted in local realities and perceptions, rather than imposed global models. Such an approach recognizes the Sundarbans as both a peopled and forested landscape, where the well-being of the ecosystem and its inhabitants are mutually dependent. Ultimately, the sacred ecology of the Sundarbans—expressed through its rich folklore and ritual life—offers valuable insights for developing more inclusive, culturally sensitive, and sustainable conservation practices that honor both biodiversity and cultural heritage.

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[সার-সংক্ষেপ : "সুন্দরবনের পবিত্র প্রতিবেশবিদ্যা: বাংলাদেশের বদ্বীপীয় সুন্দরবনের স্থানীয় পরিবেশজ্ঞান ও লোককথার একটি নৃবৈজ্ঞানিক অধ্যয়ন" শীর্ষক এই প্রবন্ধে সুন্দরবন অঞ্চলের মানুষ, সংস্কৃতি ও প্রাকৃতিক পরিবেশের পারস্পরিক সম্পর্ক বিশ্লেষণ করা হয়েছে। নৃবৈজ্ঞানিক গবেষণাপদ্ধতি বিশেষত অংশগ্রহণমূলক পর্যবেক্ষণ ও সাক্ষাতকার পদ্ধতির মাধ্যমে দেখানো হয়েছে যে, বনবিবি, দক্ষিণ রায়, মনসা, শীতলা প্রভৃতি লোকদেবী ও দেবতাকে কেন্দ্র করে গড়ে ওঠা লোককথা, আচার-অনুষ্ঠান ও বিশ্বাস কেবল ধর্মীয় অনুশীলন নয়, বরং স্থানীয় জনগোষ্ঠীর পরিবেশচেতনা ও জীবনধারার গুরুত্বপূর্ণ অংশ। এই লোককথাগুলো মানুষের সঙ্গে বন, নদী, প্রাণী ও প্রকৃতির সম্পর্কে নৈতিক কাঠামোর মধ্যে স্থাপন করে এবং সম্পদের সংযত ব্যবহার, সহাবস্থান ও আত্মসংযমের শিক্ষা দেয়। প্রবন্ধটি সেই প্রচলিত ধারণাকে প্রশ্নবিদ্ধ করে যেখানে পরিবেশ অবক্ষয়ের জন্য স্থানীয় জনগণকে একতরফাভাবে দায়ী করা হয়। বরং গবেষণাটি দেখায় যে স্থানীয় পরিবেশজ্ঞান বৈজ্ঞানিক জ্ঞানের বিরোধী নয়; উভয়ের সমন্বয়ের মধ্য দিয়েই টেকসই সংরক্ষণ সম্ভব। লোককথা ও মৌখিক ঐতিহ্য প্রজন্ম থেকে প্রজন্মে পরিবেশগত জ্ঞান, মূল্যবোধ ও অভিজ্ঞতা সঞ্চার করে এবং জলবায়ু পরিবর্তন, প্রাকৃতিক দুর্যোগ ও স্বাস্থ্যঝুঁকির বিরুদ্ধে সামাজিক স্থিতিস্থাপকতা গড়ে তোলে। অতএব, প্রবন্ধটি সুন্দরবনকে একটি জীবন্ত সাংস্কৃতিক ভূদৃশ্য হিসেবে দেখার আহ্বান জানায়, যেখানে জীববৈচিত্র্য সংরক্ষণ ও সাংস্কৃতিক ঐতিহ্য পরস্পরনির্ভরশীল।]