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From Indigenous Wisdom to Environmental Resilience: Ecological Knowledge, Sustainable Livelihood and Indian Literary Imagination

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ABSTRACT

This paper explores the tension between **environmental conservation** and the **livelihoods of communities** whose existence is connected to their ecological surroundings both in culturally and materialistic ways. Indian literary representations of forests, rivers, agricultural landscapes and the communities of the indigenous when seen through Eco critical perspective, the paper explores how the **traditional knowledge** offers a fresh perspective on sustainability. We cannot truly understand resilience by just focusing on technology and institutional policies. It is also necessary to consider the knowledge and daily practices of the communities living in these ecosystems. The Hungry Tide by Amitav Ghosh has a good relevance here as it portrays the Sundarbans in the way that highlights the balance between efforts to conserve, livelihoods of the locals, vulnerability towards the ecology and views on how to protect the environment. To highlight the point that one cannot really separate a community's livelihood and the deep understanding of the environment they live in. It's also important not to just paint romanticizing indigenous people but also to look at the challenges that fall heavily on them. Such as displacement, impact of modern development and environmental damage. This paper shows how Indian literature is a powerful tool to rethinking what **environmental resilience** really means, especially when it connects modern sustainability with indigenous wisdom. True sustainability needs more than just saving **ecosystems** but to actually consider the traditions and livelihoods of the communities than have deep roots in these landscapes.

Keywords: Eco-criticism, Indigenous Ecological Knowledge, Environmental Resilience, Sustainable Livelihoods, Human-Environment Relations, Conservation.

Introduction

The old idea of nature is something totally separate and different from us in what environmental writing is against of forest, river and wetland should not only seen as wild or empty places that are untouched by humans but in reality, they are filled with memory, culture, politics and livelihood (Huggan and Tiffin 2015). People relying directly on land and water to survive in the ecological fragile areas is where reality hits the hardest. It actually creates a debate between saving an ecosystem might

be essential by the method of protecting it can easily end up affecting the lives of the people who call it their home. The Hungry Tide by Amitav Ghosh holds this exact tension very well. The setting of Sundarbans, a landscape of mangroves, tides and mud flats where land and water constantly meet each other. It's a living force where the landscape itself decides how people move, work, survive and face danger (Ghosh 2004). The novel is so compelling because of the characters with completely different perspectives are tied to the land.



1. Piya Roy – American-trained marine biologist
2. Fokir - A local fisherman
3. Kanani Dutt – Urban Bengali outsider

Weaving all these people Ghosh creates and makes scientific studies, local wisdom and cultural memory collide and interact on equal grounds (Anand 2008). Ecocriticism provides us the perspective and puts in front of us an important question that is how do stories shape the relationship between us and the natural world? (Glottfelty and Fromm 1996) Early ecocriticism helped us put the physical environment on the literary map but postcolonial eco criticism made things deeper (Huggan and Tiffin 2015). It pointed out that one cannot talk about nature while ignoring poverty, colonial history and who in reality gets access to the resources. Now that perspective is necessary to understand *The Hungry Tide*. The Sundarbans is a lived in space that is shaped by human labour, migration, politics and deep-rooted culture (Panta 2024). Because of this to save the environment is not just an ecological issue but in reality, it is a social one. But how to protect such fragile ecosystem without damaging the lives of the people who rely entirely on it for survival is the question (Hussain and Bashir 2025). Fokir's knowledge is built over a lifetime amount of hands-on experience where he reads the tides, navigates the rivers and lives alongside river and the wildlife. But in contrast Piya's knowledge is formed through scientific training data and fax collection. Instead of just declaring only one way of experience is the best one, Ghosh makes both of them meet. The novel shows that understanding the world is not about finding one single truth but actually it's about the ecological knowledge can have more than one forms.

The title of the paper is not about replacing a so called outdated and primitive past with modern science but it's about expanding how and what we understand about the natural world. The ecological wisdom of the locals serves as the beginning point for the questions that the novel asks about sustainability and long-term survival. The term indigenous wisdom is to be used very carefully. This term here is used broadly to determine inherited and place based and practical environmental knowledge. The central argument comes down to 3 major ideas.

1. balanced ecological knowledge
2. Interconnected survival
3. Interconnected resilience

The major takeaway this paper highlights of the novel is ecological survival and human survival cannot be treated as different concerns.

Indigenous Wisdom and Ecological Knowledge

The relation between Piya and Fokir is the point where the novel explores different ways of understanding nature. Piya comes to Sundarbans with the perspective of a scientist. Everything she knows about dolphins are facts from marine observation, field work and tracking species the kind of knowledge that is backed up by the institutions. In contrast, Fokir's world works in a completely different way. He never read facts or any research but he knows the nature and the river in a completely different way. A way that Piya can only dream of at first. His perspective comes from years of experience of fishing, watching the water, steering boats and watching all seasons and leaving it each day. He himself belongs to the Sundarbans and is not just another man studying it. Ghosh does not just place modern science and local wisdom face to face against each other. Science still matters but local experience is irreplaceable.

Piya's training is not useless or outdated. The data she has is crucial if someone actually wants to study the dolphins but all the degrees that exist won't help Piya to safely read the water or navigate through the tricky tides without Fokir's practical guidance. Both the perspectives to see the world is necessary to understand the place (Ghosh 2004). Fokir's grasp about the environment isn't just textbook based knowledge, but it's actually built into his everyday life. It has originally developed from years of hands-on experience and not classroom. One cannot just replicate hands on experience with just abstract data. The informal oral understanding is also vital. Piya quickly realises the facts and data she has cannot go too far without Fokir's actual familiarity with the nature. He helps her to see the places that she would have completely missed by getting to the places that show how both are totally different in knowing the nature.

This particular approach points to something that's much vast than just the plot of the novel. Modern environment science is trying to catch up with the knowledge of the local communities that they have gained long time ago by relying on nature, who look at the tides, weather and the behaviour of the animals which a lab cannot simply reproduce. Although maintaining the characters importance and love for nature, Ghosh did not paint Fokir as a mystical guardian of the forest who reads the rivers out of romantic love for nature. He simply does it so that he gets food on his plate by the end of the day. Economic survival is the main reason he has built this kind of deep understanding of the environment. As all locals naturally are green and most of them assume all natural sciences as destructive the relationship between nature and humans is always shaped by the real material needs. Another important

and fascinating layer is added by the local legend Bonbidi. This does the job of clarifying that the power to understand nature does not just come from charts or hard experiences, but it lives in the folklore and the stories too. The myths surrounding Bonbidi a tool to fear and respect the dangers of the forest that in return helps to create a deep and strong bond between the people, forest the animals and the whole wildlife. This legend isn't some model to conserve the nature. Her powers are shown to show the bond between nature and humans is deeply cultural. People should not just treat the wild landscape just as a place to get the materialistic benefits but they inhabit the landscape through ancient rituals comma personal experience pieces, fears and religious benefits (Biswas and Channarayapatna 2022).

The entire world of the novel is built on these ways that have many layers of how the land is to be seen. Piya's perspective is based on science and facts full stops Fokir's is based on day on experience of hard labour and the act of survival. Nirmal tries to see the landscape through a political history and Bonbidi is included to offer a compass of cultural understanding and the very real dangers of the wild. All these perspectives have one thing in common. None of it can be considered entirely on its own. The mix of all these voices matters because the modern conservational politics made often goes hand in hand with the institutional authority. Who gets the authority to know the environment is an important question to be answered. This can be seen not only as philosophical but can also be looked upon as intensely political. It can also be stated that whoever holds the power that the authority recognises gets the chance to make a call on the rules of conservation, land rights, access to the resources and the development of the local. Ghosh here directly challenges the idea of legitimate wisdom that came from university or any governing agency. Fokir's view is as strong as concrete because it directly comes from mud, wild and the tides. Only by acknowledging the different forms of know how true environmental resilience can be built. The respect to nature alone is not enough here, the knowledge also has to be looked upon for the people's everyday survival. It would actually mean nothing if respecting the local wisdom does not support the ability of a community to eat, work and train which actually opens the plot's biggest challenge that is securing a livelihood that's sustainable.

Sustainable Livelihood and the Politics of Conservation

In the novel, the Sundarbans exist as both an ecosystem that's fragile and also as an essential human lifeline and this overlapping duality gives birth to the new

world's central political conflict. Although the landscape provides fish and home with resources and reverse and mangroves with land, the landscape is actually unstable and shifts a bit with every tide, cyclone and attacks from the wild animals. This conflict makes the question surface that when its ecosystem is what needs protection what would actually happen to the communities who are vulnerable and has nothing else to rely on to stay alive. The novel does not reject the idea of conservation. The tigers are endangered, the dolphins need protection and the mangrove forest is very fragile. But the novel also challenges the idea that the ecological Preservation can be separated from the economic state of the livelihood inhabiting it. The tension is clearly visible in the history of Morichjhapi. The state evicted when a low caste Bangladeshi refugee tries to settle in the Sundarbans in the late 70s under the umbrella of tiger conservation and Environmental Protection. The refugees were not simply inhabitants trying to settle in a new landscape but their presence became a part of a larger conflict that involved land, state authority and most importantly the political legitimacy.

This historical tragedy is used in the novel to actually expose so called green politics can be used as a weapon to displace the marginalized people. The settlers were desperate humans who were unfortunately caught between migration, state violence and ecological governance. This forces the readers to see the Sundarbans not only as a neutral natural park but as a deeply contested landscape. Although we should protect the fragile places but how this conservation can claim any legitimacy if its cost is human quietly dumped on to the most vulnerable margins. The Idea of sustainable living is not just an academic approach but it is an actual reality for the communities of the Sundarbans. It's not possible for a fisherman to stop fishing and a worker cannot walk away from the forest just because the ecosystem is weak. Without figuring out alternative ways for livelihood the strict Environmental Conservation politics directly has a heavy effect on the human survival. But unchecked exploitation can heavily destroy the system of the nature whose livelihood rely on. Sustainable livelihood can be achieved only with the balance between protecting the nature from heavy unchecked exploitation and meeting the basic needs of human lives. Fokir's relationship with the river it's not just spiritual but in reality, it's economic. Because his family totally depends upon the waters, he knows about it deeply. Both environmental knowledge and sustainable living are bound together. The dependence of the people is the very reason why people learn about nature. Moving forward in the novel not only romanticize the local life or to show survival as crime but

actually to create a balanced space where environmental care and human needs coexist.

The appearance of the tiger is a major symbol for this tension. Being an endangered animal that actually needs protection, it also is a predator that kills the villagers who enter the forest for work. Here the conflict is actually between two different vulnerabilities. The fisherman is vulnerable to physical danger and so is the tiger. It is actually vulnerable to extinction. Environmentalism not being biased should address both. An important question arises here: who should benefit from nature, who should carry the risk and who actually holds the power to make the decisions? Ultimately the history of the people displaced makes us remember that a sense of belonging is the most important factor that sustainable living requires. A landscape can have the rules of whom, workplace and also something that holds memory. A whole generational ecological knowledge often falls weak and fragile when people are subjected to displacement [Nixon 2011]. The support provided to human communities who live in such ecosystem and also preserving the natural resources is what can be called true sustainability.

Environmental Resilience and the Indian Literary Imagination

The environmental approach of the novel ultimately reaches a conflict that Ghosh narrates profoundly. That is, he brings down the duality to separate nature from culture and human survival from ecological vulnerability. The idea of painting Sundarbans as an untouched and pristine wilderness is what he rejects completely. He instead paints the landscape as a deeply lived landscape. Rivers are not just water bodies here but those actually are ways to commute and forest are not simple green spaces but they are actually high-risk workplaces. The animals are here presented as powerful cultural myths and also near biological species. Even the natural forces tide also act as a physical force that decides the rhythm of human existence. The core idea of resilience can be easily identified as adaptation. Human communities must follow the rule to keep constantly adapting to the unstable environment to survive. The Sundarbans itself survives because it also goes under constant changing and reshaping the islands and the waterways by shifting mud and water. But the adaptation also has limits which the novel remains the readers. When disaster strikes people with money and power can move or rebuild but the livelihoods who solely depend upon the very landscape are vulnerable and for them adapting is far more difficult. Resilience does not only go with toughness but actually it is a vast question of environmental justice.

This way of looking actually makes the novel an actual landmark in the environmental thought. The sustainability cannot be copied down from the western or so-called modern formulas but it has to have a connection to specific local histories. Sundarbans isn't any ordinary biodiversity reserve. It's a dense cultural landscape. Natural species has always been shaped by human hands through agriculture, religious rituals, migration or caste relation. The separation of human society and nature is not what's real. It's actually the ways of how people live in these Environments. The survival of a dolphin actually depends upon the local ecosystem but it is tracked by international science labs as endangered. The mangroves being some local community's backyard matters highly in global climate models. The Bengal tiger is a terrifying situation to cross paths with but it is also a Global Icon for conservation. This intersection is exactly what literature brings, proving only science simply cannot contribute enough to the Environmental Conservation. Because the erosion rates, the salinity levels or the quantity of species going down can be measured, the scientific data is crucial but literature fills the gap to capture what these changes actually feel like to the people who live Through these situations is where science struggles. Literature gives voice to the human feelings. It does not just maintain the count of people who came face to face with the tiger but it makes us feel the raw fear of how it would feel of looking a tiger in the woods. It makes us feel the grief one goes through after losing his home to the rivers or the trauma a whole community has to face because of the displacement and the hope people tend to cling upon to endure this particular pain.

Stories do what raw data simply cannot, it can make one feel the weight of the change. Amitav Ghosh in this novel did not use the nature or environment just as a backdrop for the human drama but instead he reminds us that the wild has a mind of its own. The tigers don't like to be managed by humans, the tides do not follow our plans and the dolphins love to exist entirely out of human interference. But human lives matter too because we deeply are tangled in the same system. The novel demands for a messy interdependence. This can clearly be stated when Piya and Fokir come together for work. It's not romanticizing the old school past but it's actually forging a future that respects the livelihood as much as the scientific data. This is why the book feels so crucial, especially as we face massive coastal erosion and climate change. But the real power lies in the questions like, who actually belongs to the landscape? Who gets the authority to speak? Every perspective is valid and has a conflicting claim. Every character has a fight of its own. The scientist is fighting for biodiversity, the fisherman for

his survival, the government for control and the displaced refugee for just a place he can call home (Princy and Natarajan 2026). But in contrast the nature is operating with the set of rules of its own and has no care for what falls in the favour of human interest. Literature is capable to catch these conflicting values under one umbrella and without searching for easy solution. Resilience it's not about who can win over the nature. The islands will always shift, the tides will always look for something to devour and the lives around will always be dangerously unpredictable. True sustainability is about learning how to live a responsible life and not about trying to eliminate the uncertainty.

Conclusion

The Hungry Tide offers a deep relationship between human, ecological knowledge and environmental resilience. It paints the landscape of the Sundarbans where both the human and natural world are fundamentally together but it also denies to accept the messy reality. This interdependence is always shaped by the power dynamics, economic conditions and the Haas vulnerability. When the dynamics between Piya and Fokir is looked upon, The blind spot of only relying purely on science comes forward. But Ghosh did not show Fokir as some mystical warrior who fights for the ecosystem. His deep connection with the water only exists only because he is under the responsibility to feed his family. The knowledge he has is a by-product of the necessity of earning a living rather than just romanticized harmony. The novel actually tries to redefine what resilience is. It's about a community trying to save its rights to work, remember and belong. It's not just mangrove forest in a storm. The Sundarbans is a cultural landscape that is alive, an economic engine for the locals and an archive with historical essence. Moving forward does not mean leaving one's tradition to attain modernity. But it is about knowing what are the pieces one needs to see the full picture. The cultural memory makes sure why the place actually matters and the practical map can be attained through the experience of the locals. A fence cannot be

drawn to lock vulnerable people out of their own homes. Ghosh ultimate takeaway on environmentalism is figuring out how humans and the natural world can survive and have a sustainable response towards each other.

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