Irrawaddy Dolphin, the Evanescent Beauty of Marine Life: An Ecocritical Study of Amitav Ghosh's *The Hungry Tide* Emblazoning SDG 14 and Blue Humanities

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Abstract

"But man is a part of nature, and his war against nature is inevitably a war against himself." – Rachel Carson. Unknowingly, human beings have waged war against nature when, out of a sense of supremacy, they disrupted the harmony with nature by creating the most developed and powerful human civilization, violating and destroying nature mercilessly. The anthropocentric approach makes human beings insensitive to other lives on this planet. Uncontrolled anthropogenic activities are responsible for the decline of Mother Earth's atmosphere. Consequently, in the 21st century, with frequent natural disasters and calamities, nature is fighting back against all the injustices and cruelties done to her. Therefore, climate change has become a global issue that poses a significant threat to human existence. Hence, to address the crises of the present world, in 2015, the United Nations declared Sustainable Development Goals (SDGs, 2015-2030), which include 17 global objectives concerning the well-being and harmonious co-existence of human beings and nature. The 14th goal of the SDG is for "Life below water" to protect marine ecosystems.

The Irrawaddy dolphin, or Orcaella dolphin, is an oceanic dolphin. The oceans, rivers, and lakes of Southeast Asia are the original habitats of this dolphin, but in 2005, Cambodia

declared it an endangered species. This species is protected in our country under the Indian Wildlife Protection Act. Ocean life will lose its ecosystem in the absence of this species. The celebrated Indian novelist and environmental activist Amitav Ghosh foresees the need for the protection of "Life below water" by placing the Irrawaddy dolphins at the centre of his adventurous novel *The Hungry Tide* (2004). Piyali Roy, an American marine biologist of Indian descent, comes to Sundarbans to research the endangered Irrawaddy dolphins. Under the guidance of a local fisherman, Fokir, Piya undertakes her journey in search of dolphins. She envisages different challenges during her research, yet she does not yield. Eventually, her love and care for dolphins won out when she could turn her dream project into a reality. This paper aims to study how this novel contributes to ecocritical concerns by exploring the assorted perspectives of environmentalism, the human-nature relationship, sustainable approaches, and Blue Humanities.

Keywords: Ecocritical concerns, Human-nature conflict, Human-nature bonding, Sustainable world, SDG 14, Life Below Water, Irrawaddy dolphin, and Blue Humanities.

Introduction

In the 21st century, when we are enchanted by the magic of artificial intelligence, considering it one of the greatest pathbreaking scientific inventions of this era, it is, on the contrary, the continuous occurrence of natural disasters around the globe that is becoming a serious threat to the survival of life on Earth. Consequently, the euphoria of technological advancement is eclipsed by an anxiety about the future of our planet, which substantiates the superiority of Mother Nature. Our planet is a mysterious place, and with time, it always surprises us by revealing new aspects and phenomena. As a result, at some point, existing human knowledge becomes insufficient, and we feel the need for new knowledge to bridge the gap between the past and the present. That is why continuous research is the only way to explore our Earth more closely and appropriately. Scientists have been researching tirelessly

to understand the actual characteristics of life on this versatile earth. Earth's ecology is the essence of life, and we need to make it out properly for the well-being of our planet. Nature functions in a harmonious co-existence of every natural element, both animate and inanimate. Unfortunately, violating the rules of nature, human beings have exploited Mother Nature to their best capacity in pursuit of a mechanized and technologically advanced society. Inevitably, our predicament in this era is that we are troubled by frequent climatic issues, environmental challenges, and natural calamities. Indeed, through all these natural hazards, nature is fighting back against all the injustices human beings have done to Mother Earth, and along with it, nature is also writing a new ecological and environmental narrative that demolishes man's supremacy by establishing the truth that in the lap of Mother Nature, all animals possess equal place. Therefore, if any species becomes endangered in nature, a particular ecosystem gets affected, and finally, things fall apart. Hence, resurrecting our perished environmental consciousness and ecocritical concerns, it is time for us to be more sensitive, careful, conscious, and protective of all life and inanimate elements on this planet, which will assure a sustainable world and a prosperous future.

SDG14: An Echo of Ecocritical Concerns and Blue Humanities

Addressing environmental crises to combat the challenges of climate change, the United Nations declared the 17 global Sustainable Development Goals (SDGs) in 2015, aiming to achieve them by 2030 to attain "peace and prosperity for people and the planet, now and into the future." The Sustainable Development Goals emphasize the interdependence of humans and nature. Global warming and various types of pollution, resulting from uncontrolled anthropogenic activities and the exploitation of nature, are responsible for climate change and the destruction of Earth's ecosystem. Therefore, to ensure the congenial coexistence of human beings, animals, and nature on this planet, the Sustainable Development Goals prioritize the need for the protection and conservation of wildlife. SDG 14 represents

"Life below water", which is taken to "Conserve and sustainably use the oceans, seas and marine resources for sustainable development". The United Nations has set 10 targets to fulfil SDG14, and these 10 targets are divided into two segments: outcome targets and implementation targets. The outcome targets consist of seven objectives, and these are the following: decrease marine pollution; preserve marine ecosystems; diminish the level of ocean acidification; ocean-friendly fishing; protect the territory of the sea coast and waterscapes; resource-efficient fishing instead of overfishing; and multiplication of economic development through eco-conscious use of aquatic resources. On the other hand, the implementation targets include three significant actions: developing scientific knowledge, enhancing research and technology to restore marine ecosystems; supporting local fishermen; and enforcing international rules and regulations governing the sea. Hence, SDG 14 efficiently and effectively heralds the importance of ecocritical concerns and blue humanities for an eco-friendly world.

Ecocriticism is a literary theory that examines the human-nature relationship to highlight environmental issues in the humanities, transcending the boundaries of environmentalism beyond the realm of science. In the book *The Ecocriticism Reader: Landmarks in Literary Ecology* (1996), Cheryll Glotfelty and Harold Fromm wrote, "ecocriticism is the study of the relationship between literature and the physical environment." As an academic discipline, Ecocriticism studies and analyses the representation of human-nature relationships through literature, culture, and other art forms. Ecocriticism is a dynamic field where literary thoughts find fresh air in the lap of nature, and where Mother Nature appears in green mosaic grown to narrate her magnanimous ecological autobiography to literature. So, it is an ecological and environmental analysis of literature, and an aesthetic and literary simulacrum of ecology and environmental issues. Ecocritical concern unveiled its manifestation in Joseph Meeker's book *The Comedy of Survival: Studies in Literary Ecology*

(1972). However, the term ecocriticism was first introduced by William Rueckert in 1978 in his essay "Literature and Ecology: An Experiment in Ecocriticism". Thus, the 1st wave of Ecocriticism found its way to reach the shore of British literary criticism and theory, and finally, it debuted as a promising literary theory. American environmentalist Rachel Carson's book *Silent Spring* (1962) and British literary critic Jonathan Bate's work *Romantic Ecology: Wordsworth and the Environmental Tradition* (1991) contributed significantly to the emergence of Ecocriticism as an academic discourse. The 1st wave of Ecocriticism mainly focused on human-nature relationships through the images of wilderness, the animal kingdom, and serene village life. However, the dawn of the 21st century saw the beginning of new aspects in the discourse of ecocritical concern, which can be identified as the 2nd wave of Ecocriticism. The 2nd wave goes higher with its study and analysis of urban landscapes, industrial and technological effects on nature, and interrelationships among nature, economy, and society. The book *Environmental Justice Reader: Politics, Poetics, and Pedagogy* (2002) by Joni Adamson, Mei Mei Evans, and Rachel Stein has been considered the exordium of the 2nd wave of Ecocriticism. Amidst the climactic chaos of the 21st century, Ecocriticism appears to rejuvenate the fraternity between human beings and nature. As an interdisciplinary field, Ecocriticism possesses a wide range of studies. It includes all emerging trends in environmental studies following cultural ecology, environmental humanities, blue humanities, green studies, ecopoetics, and many more. Therefore, as a discipline, it is still blooming.

SDG 14 is an ideal representation of blue humanism. Critically examining oceanic literature, Blue Humanities analyses the interrelationship and propinquity between human beings and waterscapes. Blue Humanities, a new branch of environmental criticism, emerged through the academic endeavour and scholastic research of Steve Mentz, Serpil Oppermann, and Margaret Cohen. St. John's University professor Steve Mentz's book *An Introduction to the Blue Humanities* (2023) and Cappadocia University professor Serpil Oppermann's book

Blue Humanities: Storied Waterscapes in the Anthropocene (2023) consolidated the theoretical approach of Blue Humanities. Along with that, Stanford University's professor Margaret Cohen's critical and scholarly works on the oceans and seas have been contributing glaringly to the prosperity of the discipline of Blue Humanities. Her most important works in this sphere are *The Novel and the Sea* (2010), *A Feminist Plunge into Sea Knowledge* (2019), and *The Aesthetics of the Undersea* (2019, co-editor with Killian Quigley). Blue Humanities seeks to understand the nature of affinity between human beings and water through the lens of history, literature, culture, and ecology. It studies the nature of waterbodies and how they contribute to the existence of human beings and other animals on this planet. Thus, Blue Humanities inaugurates a new route to environmental studies by implying a water-centric approach that speaks of marine ecosystems. It encompasses oceanography (marine science) and limnology (freshwater science) in order to observe and critically explain the declining state of waterscapes due to anthropogenic activities that accelerate climate change. Emphasizing a disanthropocentric approach, Blue Humanities writes a blue memoir and fluid narrative of waterscapes told from the viewpoint of water. Water is Life – this dictum finds its appropriate dissemination in Blue Humanities.

A Brief Overview of the Irrawaddy Dolphin

Irrawaddy dolphin (Orcaella brevirostris) is an orcaella genus of exquisite oceanic dolphin, predominantly found in South and Southeast Asia, particularly in countries like India, Bangladesh, Myanmar, Laos, Cambodia, Vietnam, Thailand, the Philippines, Indonesia, and Malaysia. The dolphin has derived its name from the Irrawaddy River in Myanmar, where they are found. Despite being a marine mammal, it is also found in rivers and lagoons, particularly in the Sundarbans, the Ganges, the Chilika Lake of India, the Mekong River in Vietnam, and Songkhla Lake in Thailand. Though it is found in the Ganges, it is a different species from the Indian Gangetic dolphins.

The Irrawaddy dolphin is a magnificent marine mammal with slate blue or slate grey skin. The distinctive features of this beautiful species are a dorsal fin, a high and rounded forehead, and a vanilla beak. The weight of this dolphin is usually from 90 to 200 kg, and their mature length is approximately 2.3 meters. Irrawaddy dolphins are shy in character. They are slow swimmers, and their circular swimming following each other intensifies the beauty of waterscapes. They love to be in small groups in a deep pool. Their food habit makes them dependent on fish, crustaceans, cephalopods, and fish eggs. The alluring appearance and playful behaviour of fluke-slapping, spyhopping, and spitting water have made the Irrawaddy dolphins a mesmerizing cetacean. The Irrawaddy dolphins mirror nature's harmonious coexistence and collaboration with human beings. They help fishermen by driving fish into fishing nets. As a reward for their cooperation and succour, they receive bycatch from fishermen.

Unfortunately, the pulchritudinous marine mammal, like the Irrawaddy dolphin, has been declared an endangered species by some countries. Anthropogenic activities, including fishermen's use of gillnets, accidental capture, illegal fishing, accidents involving fishing boats, capture for dolphinarium shows, noise pollution generated by marine vehicles, water pollution, overcrowded tourism activities, degradation of natural habitat, and climate change, are potential threats to the endangerment of this species. The countries of South and Southeast Asia are making individual and collaborative efforts through various national and international laws of the sea concerning marine life conservation to save this innocent cetacean. Indian writer Amitav Ghosh's fascinating novel *The Hungry Tide* (2004) is centered on a cetologist's observations and research regarding the unique adaptive functionality of the Irrawaddy dolphins in the Sundarbans rivers.

The Hungry Tide: A High Wave of Ecocritical Concerns

The Hungry Tide (2004) is one of the best novels by Indian author Amitav Ghosh. The novel is centred around Piyali Roy, an American-based cetologist of Indian descent. She studied Oceanography at the Scripps Institution of Oceanography in California. Piya comes to Sundarbans for a fortnight to conduct a short survey on marine mammals. For this purpose, she receives the help of local fisherman Fokir, who has abundant knowledge of rivers. The novel's subplot is based on the historical event of refugee resettlement issues on the island of Sundarbans, known as the Marichjhapi Massacre of 1979. The subplot focuses on the life of Nirmal, Nilima, Fokir's mother Kusum, and other minor characters. Thus, as a postmodernist novel, *The Hungry Tide* has multiple layers of meaning, as it skillfully handles many aspects simultaneously. Piya surveys the beautiful Irrawaddy dolphins of the Sundarbans rivers under Fokir's guidance. During her expedition, for a brief time, she gets the help of a translator, Kanai, to communicate with Fokir. Kanai is the nephew of Nirmal and Nilima. The novel concludes with Fokir's death in a storm during the dolphin survey, and as a tribute to Fokir, Piya formally continues the research with funds and sponsorship. That is how the novel becomes one of the best environmental texts of the 21st century.

The novel vividly presents the awe and fear of the Sundarbans mangroves with its portrayal of bloodcurdling royal Bengal tigers and grisly crocodiles of the tide country. In the dense wilderness of the mangrove forest, the Bon Bibi myth moulds the life and identity of the Sundarbans community. The people of Sundarbans worship Bon Bibi as a goddess. According to the myth, Bon Bibi saves mangroves from the bloodthirsty tiger-demon king Dokkhin Rai, and makes the islands of the Sundarbans a habitat for human beings. So, Bon Bibi is the protector of the inhabitants of the Sundarbans. The Bon Bibi myth is the epitome of the harmonious co-existence of human nature, as after defeating the demon-king Dokkhin Rai, Bon Bibi did not abolish him eternally from the tide country, but rather –

But Bon Bibi was merciful in victory and she decided that one half of the tide country would remain a wilderness; this part of the forest she left to Dokkhin Rai and his demon hordes. The rest she claimed for herself, and under her rule this once-forested domain was soon made safe for human settlement. (Ghosh, 2004, pp. 108-109)

Most probably, that is why the Sundarbans community calls Bon Bibi 'mother of mercy'. The Bon Bibi myth can be deciphered as a folk version of ecocritical concerns. For the understanding of ordinary people, this myth simplifies the fact that life on the planet is ruled by the intrinsic relationship of human beings with nature; so, we should not erase the wilderness to ensure our security, rather we ought to learn to live harmoniously with nature, because every agent of nature has equal rights on earth. To educate, the dwellers of the Sundarbans about the fact more clearly, the Bon Bibi myth also teaches all the laws of nature – "'Thus did Bon Bibi show the world the law of the forest, which was that the rich and the greedy would be punished while the poor and righteous were rewarded.'" (Ghosh, 2004, p.110) The laws of nature, preached by the Bon Bibi, resonate a sustainable approach to the world. It evokes in us the consciousness that we should not use natural resources excessively beyond our needs.

However, the novel also explores the human-nature conflict by depicting the enmity between the inhabitants of the Sundarbans and the black and yellow stripes. The tiger attack is a part and parcel of the life of the Sundarbans' community. This harsh reality is reflected in the novel through the incident of how, in rage as a vengeance, the villagers killed the tiger and at last burned it in ecstasy, which preyed on many villagers as it hunted. In this respect, as an environmentalist, Piya tries to awaken the environmental consciousness of insensitive people like Kanai – "'This is an animal, Kanai,' Piya said. 'You can't take revenge on an animal.'" (Ghosh, 2004, p.317) The very word "Hungry" in the title of the novel not only illuminates the hunger and poverty of the people of the tide country and refugees of Marichjhapi, but also it

reveals the hunger of the royal Bengal tigers who due to the deforestation and the degradation of the natural habitat of the Sundarbans mangroves are forced to come in the human habitat in search of food. However, besides the violence between humans and wildlife, the novel marvelously reflects the beautiful and friendly bonding between human beings and nature through the interconnectedness among the Irrawaddy dolphins, rivers, Fokir, and Piya.

Life Below Water in *The Hungry Tide*: A Chiaroscuro of SDG 14 and Blue Humanities

The novel's title, *The Hungry Tide,* initially reflects the fluid and flowing image of water. This novel is a pragmatic representation of water and its relationship with ecology, history, human life, society, economy, and culture. India has been considered a river-centric civilization since ancient times, and this truth is revived in *The Hungry Tide.* Rivers play a dominant role in shaping Indian life, identity, and culture. The Ganges, its tributaries, and other rivers flowing as veins are India's prime sources of life. Interestingly, here the Ganges is not merely a river, but it is also worshipped as the goddess by the Hindus. Thus, rivers embroider the creeds and religious beliefs with colourful threads of myths. Amitav Ghosh has brilliantly sewn that embroidery in *The Hungry Tide*, where he writes – "'In our legends it is said that the goddess Ganga's descent from the heavens would have split the earth had Lord Shiva not tamed her torrent by tying it into his ash-smeared locks.'" (Ghosh,2004, p.6). Here, rivers have been regarded as the mother of civilization, and the motherhood of the Indian rivers has been celebrated through mythology, literature, folk culture, songs, dances, and other art forms. Following that tradition, *The Hungry Tide* also seeks to define the river-human relationship, depicting the kinship among the great Ganges delta Sundarbans, its mangrove forest and wildlife, its rivers, and its dwellers. Implying the internal propinquity with tide and ebb, the Sundarbans is famously known as "'the country of eighteen tides' – athhero bhatir desh" (Ghosh,2004, p.108). Conspicuously illuminating the intricate relationship between the Sundarbans and its waterscapes, Amitav Ghosh divides this novel clearly into two parts: The

Ebb: Bhata, (Part One) and The Flood: Jowar (Part Two). With a realistic approach and artistic sketch, Amitav Ghosh presents the rivers of the Sundarbans, including Matla, Raimangal, and many more, in such an impressive way that in our vision we can see the drowning mangroves during high tide, and hear the sound of waves hitting the shore of the great delta. Magically, in the Sundarbans waterscapes, the salt and sweet water do not mix, and this uniqueness has made the Sundarbans an abode of rich fauna.

Piya remembered a study which had shown that there were more species of fish in the Sundarbans than could be found in the whole continent of Europe. This proliferation of aquatic life was thought to be the result of the unusually varied composition of the water itself. The waters of river and sea did not intermingle evenly in this part of the delta; rather, they interpenetrated each other, creating hundreds of different ecological niches, with streams of fresh water running along the floors of some channels, creating variations of salinity and turbidity. (Ghosh, 2004, p.131)

Thus, every page of *The Hungry Tide* luminously explores Blue Humanities and awakens a blue consciousness in its readers. The rivers of the Sundarbans witness all the injustice and sin that human beings have done to nature and the poor people of the 'tide country'. Thus, the rivers know exactly what happened to Kusum and the other refugees in the Marichjhapi Massacre in 1979. The rivers became red with the blood of the refugees, and their souls became one with the wilderness of dark mangroves; hence, Fokir could feel the presence of his mother whenever he visited Garjontola, an exact location in the river of the Sundarbans.

Being the true connoisseurs of Blue Humanities, Fokir and Priya display the pure bonding between water and human beings. Fokir's knowledge of the Sundarbans rivers is unmatchable. He knows every labyrinth of the secret creek, and every hidden route of the Sundarbans rivers – "Fokir could steer in such bad light: clearly, he knew this stretch of water well enough to feel his way along the river's edge." (Ghosh,2004, p.118). Fokir not only has a

profound knowledge of the rivers, but also has seasoned data on life below water. Fokir is an illiterate fisherman, yet he possesses a deep-rooted and meticulous knowledge of the Irrawaddy dolphins of the Sundarbans. He has such a great knowledge of dolphins that astonished a cetologist like Piya, who has been working on the Irrawaddy dolphin for many years around the world – "This baffled her still more: how could he have known that they would run into a group of Orcaella, right then and right in that place?" (Ghosh,2004, p.119) Fokir knows that during ebb (bhata) Orcaella dolphins come into the deep pool of Garjontola, and when the high tide comes, they leave the deep pool. His knowledge about dolphins is inherited from his childhood story told by his mother, Kusum, and his mother inherited the story from her father. Thus, the dolphins resonate the memory of his mother, and so, Fokir shares a closeness and affinity with this beautiful marine mammal-

These animals were also in my mother's stories: they were Bon Bibi's messengers, she used to say, and they brought her news of the rivers and khals. They came here during the bhata, my mother said, so they could tell Bon Bibi about everything they had seen. During the *jowar* they scattered to the ends of the forest and became her eyes and her ears. This secret her own father had told her, and he had told her also that if you could learn to follow the shush, then you would always be able to find fish. (Ghosh, 2024, p.332)

This childhood story of Fokir evokes two aspects. The first is how nature is associated with folk stories and how knowledge of nature is transmitted from one generation to another through oral tradition in Indian culture. The second is whether it is the Mekong River of Vietnam or the rivers of the Sundarbans, everywhere the Irrawaddy dolphins live harmoniously with human beings by helping fishermen catch fish.

Fokir's love for water is undoubted and obvious because he sings while navigating his boats through the currents of water, and seems merrier on the water than on land; Piya notices it nicely – "'Believe me', said Piya, 'he's very different when he's out on the water.'"

(Ghosh,2004, p.235) Piya recognizes Fokir's knowledge of rivers in front of his wife – "'Could you please tell Moyna,' Piya said to Kanai, 'that her husband knows the river well. His knowledge can be of help to a scientist like myself.'" (Ghosh,2004, p.228) Fokir reflects the nature of water through his character, because Fokir is as pure and clear as water, and like water, he always flows on the river. His name symbolizes the person who aimlessly wanders, detaching himself from the materialistic world. Fokir successfully follows the connotation of his name by dedicating his life to the rivers and being cool despite his poor financial condition. Fokir's profound affection and attachment to water are intensely manifested through Piya's observation of Fokir –

'It's like he's always watching the water- even without being aware of it. I've worked with many experienced fishermen before but I've never met anyone with such an incredible instinct; it's as if he can see right into the river's heart.' (Ghosh,2004, p.289)

Surprisingly, no one except Piya can perceive Fokir's real talent. Piya proudly shares Fokir's profound knowledge of tide country with Kanai – "'Fokir's abilities as an observer are really extraordinary.'" (Ghosh, 2004, p.290). Piya can neither speak nor understand Bengali, and the English language is completely foreign to Fokir, yet language cannot become a communication barrier between Piya and Fokir. Their love for water works as a common language for them. When to hurt Piya, Kanai says that the great problem between her and Fokir is that Fokir cannot understand Piya's language, Piya replies gloriously – "'There was so much in common between us it didn't matter.'" (Ghosh,2004, p.290) The most important similarity between Piya and Fokir is that both of them love the Irrawaddy dolphins. Their emotions, affection, and attachment to the dolphins are so deeply rooted in their heart that their heart do not require any language to communicate with each other. Fokir tells Piya – "'I came here time and again and it happened that the shush became like my friends. I followed them where they went.'" (Ghosh, 2004, p.332) Fokir and Piya are one soul and two bodies, and they become

one after Fokir died in the storm – "it was as if the storm had given them what life could not; it had fused them together and made them one." (Ghosh, 2004, p.416) Indeed, through his death, Fokir becomes also one with water, because, after the cremation of his body, the ashes of Fokir mingle in the rivers of the Sundarbans in such a way that no one will ever be able to separate them. Fokir's death reverberates the fact that the tropical cyclone or super cyclone is an inseparable part of the Sundarbans Delta, and here the storm shapes the life and existence of people. Through characters like Fokir and Horen, Ghosh unveils the life and hardship of the fishermen community in the Sundarbans. Due to storms, tiger attacks, and other natural calamities every year, many fishermen die, and thus the number of widows increases. In this respect, *The Hungry Tide* makes us remember John Millington Synge's one-act play *The Riders to the Sea* (1903), where Synge explores the interdependence of sea and the people of the Aran Islands, depicts the hardship of the fishermen community of the Island and their fragile and brief life, and analyses the role of the sea storm in fishermen's life.

The Hungry Tide is a deep pool where all the Irrawaddy dolphins of the globe appear together, swim in groups, and perform playful acts to mesmerize the readers. Amitav Ghosh wrote in the author's note that he had the opportunity to accompany the cetologist, Isabel Beasley, the student of "One of the world's leading cetologists, Professor Helene Marsh of James Cook University" (Ghosh, 2004, p.428) on a survey expedition of the Irrawaddy dolphins on the Mekong. That is why Ghosh could successfully present the vivid and authentic panorama of the Orcaella all over the world. In the novel, he presents Piya as a cetologist, and Piya asseverates Blue Humanities and the sustainable approach to Life Below Water. Piya's real name is Piyali Roy. Piyali is a famous river in the Sundarbans. So, Piya herself is an identity of water; she is the river, the peaceful home of the Irrawaddy dolphins. Through Piya, Ghosh depicts the origin and history of Orcaella in a scientific way. The Orcaella dolphins were first found in Kolkata in 1852 "in one of the salt lakes on the city's western outskirts"

(Ghosh,2004, p.246) when "an unusually high tide caused a sudden surge in the rivers of the delta. The wave travelled deep into the hinterland, flooding the swamps and wetlands that surrounded Calcutta." (Ghosh,2004, p.245), but unfortunately, they were wrongly identified as finned pilot whales by the English naturalist Edward Blyth. So, for Piya, visiting Salt Lake is "'a kind of cetacean pilgrimage'". (Ghosh, 2004, p.244) The next important place of cetaceans in Kolkata is the Botanical Gardens because here the first identifier of the Gangetic dolphin, William Roxburgh, "had written his famous article of 1801, announcing the discovery of the first-known river dolphin." (Ghosh,2004, p.245) Piya tells Kanai that the name Irrawaddy dolphin was given to Orcaella by John Anderson. Piya also shares with Kanai that her first encounter with the Orcaella dolphin was in a far inland village near the Mekong River –

This was Piya's first glimpse of *Orcaella brevirostris*: it was about a metre and a half in length, with a steel-grey body and a short dorsal fin. It lacked the usual bill-like dolphin snout, and its rounded head and large eyes gave it an oddly ruminative, bovine appearance. She named it Mr Sloane after a high-school teacher to whom it bore a distinct resemblance. (Ghosh,2004, p.329)

In the reservoir, Piya finds Mr Salone in trouble due to the lack of proper water and food. So, she arranges fish for the dolphin and feeds it. The next day, as a reward for Piya's benevolence, Mr Sloane recognizes Piya in the crowd. That is how Piya makes her initial bonding with the orcaella dolphins. Unfortunately, despite trying hard, Piya could not save the dolphin Mr. Sloane because – "Mr Sloane had fallen victim to the flourishing clandestine trade in wildlife. New aquariums were opening throughout eastern Asia and the demand for river dolphins was growing. Mr Sloane was a valuable commodity-" (Ghosh,2004, p.330)

Thus, as an ideal sustainable text and a true dictum of SDG 14, Life Below Water, *The Hungry Tide* raises its voice against anthropogenic activities that pose great threats to the existence of the Irrawaddy dolphins. Through Piya, Amitav Ghosh uncovers the worldwide

picture of the endangered state of the Irrawaddy dolphins. Piya reveals the truth about how gillnets are responsible for the endangerment of dolphins by referring to the death of a dolphin "in a gill-net near Phnom Penh". (Ghosh,2004, p.130) After Mr Sloane, Piya soon gets the opportunity to study the Irrawaddy dolphins because "a wildlife conservation group in Phnom Penh offered her a contract to do a survey of Mekong Orcaella … She took the job and moved upriver to the sleepy town of Kratie."(Ghosh, 2004, p.331) Therefore, after her continuous survey of the Irrawaddy dolphins for three years, Piya becomes an Orcaella specialist – "She had worked everywhere Irrawaddy dolphins were to be found: Burma, northern Australia, the Philippines, coastal Thailand – everywhere, in fact, except the place where they first entered the record-book of zoological reckoning, India."(Ghosh, 2004, p.331) Thus, Piya finds that the Irrawaddy dolphins have become an endangered species due to the degradation of their natural habitat caused by the growing anthropogenic activities in rivers.

In recent years the threat to Orcaella had grown even more serious. There was a plan afoot to blow up the rapids of the upper Mekong in order to make the river navigable as far as China: this would mean the certain destruction of the dolphin's preferred habitats. (Ghosh, 2004, p.330)

In Cambodia, the Irrawaddy dolphins face serious survival challenges due to the greed, cruelty, and insensitivity of human beings.

The once abundant population of Orcaella in the Tonle Sap, Cambodia's great freshwater lake, had been reduced almost to extinction. These dolphins were hunted with rifles and explosives and their carcasses were hung up in the sun so that their fat would drip into buckets. This oil was then used to run boats and motorcycles. (Ghosh, 2004, p.330)

Piya's extensive research gives her a paramount and profound insight into the status of the dolphins, which massively helps her plan and decide the prospects in the conservation of this beautiful marine mammal. What Piya finds as her research outcome is – "The Orcaella

population of the Mekong was known to be declining rapidly and was expected soon to fall below sustainable levels." (Ghosh,2004, p.329) When Kanai wants to know from Piya why the number of the Irrawaddy dolphins has decreased significantly, Piya replies – "'There seems to have been some sort of drastic change in the habitat,' said Piya. 'Some kind of dramatic deterioration.'" (Ghosh, 2004, p.289) *The Hungry Tide* is the sole novel in the early 21st century that propounds the need for a sustainable approach to Life below water by drawing the attention of environmentalists, zoologists, and wildlife conservation organizations to the endangered species, the Irrawaddy dolphins. This novel can be considered a prophecy because by publishing *The Hungry Tide* in 2004, Amitav Ghosh forecasts the need to take a sustainable approach to Life Below Water 11 years before the announcement of SDG 14. Hence, illuminating the discourse of a sustainable approach, *The Hungry Tide* becomes an epoch-making creation of Amitav Ghosh in the realm of environmental humanities.

Through Piya, we get a glimpse of the life of a cetologist that recapitulates Blue Humanities. When for the first time Piya meets Kanai as an estranger on her train to Canning, in a normal conversation with Kanai as a co-passenger Piya describes her work as a cetologist – "'Marine mammals are what I study – dolphins, whales, dugongs and so on. My work takes me out on the water for days sometimes, with no one to talk to – no one who speaks English, anyway.'" (Ghosh,2004, p.11) The life of a cetologist is undoubtedly hard. It needs a huge sacrifice, because a cetologist is bound to leave the comfort of home and spend year after year on the water. A cetologist is deprived of all the pleasures of life that every common man can enjoy; a cetologist can neither relish the food of home nor get a soft, comfortable bed to sleep on. So, in her survey, Piya mostly survives only through Ovaltine and protein tablets, and so – "Three years before, when working on Malampaya Sound, in the Philippines, she had been incautious in her eating and had suffered to the point where she had had to be medevacked by helicopter to Manila." (Ghosh,2004, p.101) Indeed, water is the real home of a cetologist, and

for Piya, "'home is where the Orcaella are'" (Ghosh, 2004, p.427). That is why most of the cetologists do not have any personal life. Piya is abandoned by her lover, Rath, because of her profession. She lost her mother, who died of cancer when she was twelve, and so she has no profound experience of family life, familial bonding, and familial love. As an immigrant in Seattle, she has no other relatives in America, except her parents. Her personal life is full of void and emptiness. Therefore, on one occasion, to Kanai, she expresses the pain of her life and the hardship of a cetologist –

'Kanai, tell me, do you see anything easy about what I do? Look at me: I have no home, no money and no prospects. My friends are thousands of kilometres away and I get to see them maybe once a year, if I'm lucky. And that's the least of it. On top of that is the knowledge that what I'm doing is more or less futile.' (Ghosh,2004, p.326)

Besides that, a cetologist needs intense patience, careful attention, and strong observation skills. To be a cetologist is not everyone's cup of tea, as it requires huge dedication. To define the characteristics of work, a cetologist does, Piya says Kanai –

'But that's how it is in nature you know: for a long time nothing happens, and then there's a burst of explosive activity and it's over in seconds. Very few people can adapt themselves to that kind of rhythm – one in a million, I'd say. That's why it was so amazing to come across someone like Fokir.' (Ghosh, 2004, p.289)

Thus, bringing the life of cetologists into the limelight through the character of Piya, the novel *The Hungry Tide* significantly contributes to the flourishing of the discipline of Blue Humanities.

Though Piya and Fokir are completely unknown to each other, their love for rivers and dolphins makes a heartwarming bond between them. Fokir saves Piya many times from the danger of the wilderness of the Sundarbans. As the final catastrophe, Fokir dies to save Piya

from the storm. Indeed, he is an alter ego of Piya with whom she successfully observes the Irrawaddy dolphins of the Sundarbans rivers.

A few strokes of Fokir's oars brought them to the pool and soon two dolphins approached the boat and began to circle around it. Piya recognized them as the cow-and-calf pair she had identified earlier and she was delighted to see them again. She had the impression- as she often did with Orcaella- that they had recognized her too, for they surfaced repeatedly around the boat, and on one occasion, the adult even made eye contact. (Ghosh, 2004, p.327)

Under the supervision of Fokir, Piya explores every hidden place of the rivers, which are the natural habitat of the Irrawaddy dolphins, and thus, "she was rewarded with a rare view of a young Orcaella tossing a fish into the air and catching it in its mouth." (Ghosh,2004, p.143) Fokir gives Piya the most precious gift of her life by taking her to the abode of Orcaella dolphins of the Sundarbans. Through her observation, Piya discovers that the habits of the Sundarbans Orcaella are different from the Mekong River. The Orcaella of the Mekong do seasonal migration, but in the Sundarbans, the Irrawaddy dolphins change their habitat according to ebb and tide; thus, they prefer daily migration. This unique behaviour of the Irrawaddy dolphins of the Sundarbans gives Piya new insights, new hypotheses, and new research objectives, which could take more than her lifetime to be researched. Piya's survey frames an interesting hypothesis as it assumes that by adapting to the environment and ecology of the tide country, the Irrawaddy dolphins of the Sundarbans rivers choose to change their habits. Piya's sublime love for the dolphins is magnificently revealed when she argues with Kanai on the subject of the need for wildlife conservation- "'If I thought giving up my life might make the rivers safe again for the Irrawaddy dolphin, the answer is, yes, I would.'" (Ghosh,2004, p.326)

Dolphins have strong feelings and emotions. They can easily make friends with human beings. They live a beautiful community life with a strong bond, so when the calf died in an

accident with the propeller of the launch, they did not leave the place until Piya and Fokir floated the body of the calf in water. However, this accidental death of the calf, which Piya encounters continuously during her survey, breaks Piya's heart by making her anxious about how increasing anthropogenic activities make this magical beauty of the marine ecosystem an endangered species. Piya's knowledge about dolphins is so deep and subtle that by watching dolphins' unusual behaviours, Piya makes Fokir aware of the storm. This also proves the affinity and inclination of dolphins to nature. Thus, Fokir, Piya, and the Irrawaddy dolphins become one entity. Not only are the Irrawaddy dolphins endangered, but also good and kind people like Fokir and Piya, who are sensitive to nature, are becoming the rarest species in the growing, selfish, and insensitive world. When, on one occasion, Piya tries to save the tiger from the villagers, Fokir realizes Piya is the person who can take extreme steps to save the dolphins. Hence, saving Piya at the cost of his own life, Fokir saves the dolphins. Though Fokir is dead, he is always alive in Piya through his knowledge of the rivers and the Orcaella of the Sundarbans, because though Piya loses all her collected data in the cyclone, she gets her monitor safe in her pocket, which recorded everything through GPS that Fokir showed her. In the absence of Fokir, now Piya is the protector of Fokir's widow and his son Tutul, Fokir's village, Lusibari, and the whole Sundarbans delta. Using the internet, Piya shares her story and raises money for Fokir's family. However, her success in raising funds from various conservation and environmental activist groups and gaining the sponsorship of the Badabon Trust for her full-length research on the Irrawaddy dolphins of the Sundarbans is a real tribute and hero-worship of Piya to Fokir. Piya gives her research project's name, 'Fokir', reflecting Fokir's great knowledge of the nature and environment of the Sundarbans and his selfless contribution to her survey. Thus, Piya makes Fokir immortal. Through the current of the arcane rivers and the incantation of the esoteric mangroves of the Sundarbans, *The Hungry Tide*

evokes a vigorous sense of ecocritical consciousness, SDG 14, and Blue Humanities in its readers.

Conclusion

The Irrawaddy dolphin is an evanescent beauty of marine life. The phrase 'evanescent beauty' serves a two-fold purpose with twin connotative meanings as an adjective for the Irrawaddy dolphins. The first connotation is that, surprisingly, in rivers or oceans, the Irrawaddy dolphins appear majestically with their charming beauty and stay for a few minutes, then disappear into the water with a blink of an eye. The final connotative meaning indicates a serious issue. It highlights how anthropogenic activities have become a significant threat to the existence of the Irrawaddy dolphins, leading to their classification as an endangered species. This beautiful marine mammal will soon bid farewell to the planet if we do not try to conserve them under strict protection and conservation laws. The protagonist of *The Hungry Tide* is neither Priya nor Fokir. The real protagonist is the Irrawaddy dolphins of the Sundarbans rivers. Thus, through a disanthropocentric approach, the novel attributes importance to cetaceans for an eco-friendly world. As a mouthpiece of Blue Humanities, this novel corroborates the fact that the rivers are the only source of mobility, connectedness, survival, hope, and life in the dark, deep green mangroves of the ferocious demon king Dhakkhin Rai. Concurrently, as an ideal ecocritical text, the novel explores the nuances of human-nature interdependence, human-nature affinity, and human-nature conflict, depicting the relationship between the denizens of the Sundarbans and the wilderness. Canvasing an authentic panorama of the Sundarbans delta, its unfathomable rivers, its bewildering forest, its deadly tigers, its fierce crocodiles, and the swimming of the Irrawaddy dolphins throughout the waterscapes of South and Southeast Asia, *The Hungry Tide* appears as the kaleidoscopic exhibition of Ecocriticism, SDG14, and Blue Humanities, which makes the novel one of the rarest emeralds of Green Literature.

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