

Narrativizing the Nexus Between Climate Crisis and Immigration in Amitav Ghosh's *Gun Island*: An Ecocritical Exploration

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ABSTRACT

Eco-criticism is a branch of literary scholarship that finds tangible connections between the environment and literature. The environmental problem is one of the most prominent issues of current generation. Climate crisis stands as a sole factor in the environment in view of ecological imbalance. This is an ever increasingly presence in our daily lives. prominent causes of climate change are an increase of green house gasses, deforestation to develop human settlements, excessive use of fossil fuels and so on. Decline in agricultural productivity is another impact of climate change. Thus, this is widely recognized as a contributing and exacerbating factor in immigration. The climate crisis, migration and refugees' acute situation have allegedly lost security and stability of humans and non-humans. The paper attempts to look how Amitav Ghosh has put his best endeavors to discover the inordinate use of nature by human beings. The materialistic and anthropocentric attitudes of human beings undergo extreme climate crisis and the displacement of livings. Now, the major environmental issues become the ethical concerns in the eco pages of literary writers to highlight the problems of ecosystem. The novel "Gun Island" deals with the issue of climate crisis and immigration. Planetary environmentalism identifies the planetary crisis caused by climate change. It seeks environmental justice both for humans and nonhumans across the planet. The whole planet goes beyond geographical boundary because of threatening of climate change. Ghosh in this novel wants to procure awareness among the readers regarding the impending calamities of the global environment and thus a warning to mend exploitative attitudes towards our Mother Nature.

Keywords: Climate Crisis, Environment, Deforestation, Anthropocentric attitudes, Nature, Ecosystem, Calamities

1. Introduction:

The term 'Eco-criticism' is used to discuss the big bonding between literature and the environment. The ecological concerns noticed in the environment are displayed by the eco-critical approach. The generated organic matters in the environment differ from region to region and climate to climate. Changes of climate and human interferences invite the loss of natural habitats for the plants and animals. Many species have become vulnerable or endangered in view of variations in climatic conditions. , soil

erosion, constructional activities, forest fires, tsunami and landslides are some of the man-made and natural factors which enhance the process of extinction in the environment.

William Rueckert, an American critic first used the term Ecocriticism in 1978. But after 1990, this term developed as a school of criticism in America with the foundation of an organization called the Association for the Study of Literature and Environment (ASLE) in 1992. Richard Corrigan in an article titled "Environmentalism and Ecocriticism" defines Ecocriticism in the following words:

"Ecocriticism is Literary and cultural criticism from an Environmentalist view point. Texts are evaluated in terms of their environmentally helpful or harmful effects. Ecocritics analyze the history of concepts such as 'nature' in an attempt to understand the cultural developments that have led to the present global ecological crisis." (**Waugh, 530**).

Two important texts of ecocriticism in recent times are *Ecocriticism* by **Greg Garrard** and *The Ecocriticism Reader Landmarks in Literary Ecology* edited by Cheryl Glotfelty and Harold Fromm. Ecocritics deny the binary opposition between nature and culture but seek to establish the intimate relationship between man and nature. Jonathan Bate is the finest British critic to use the term ecocriticism in *Romantic Ecology* in 1991. Bate treats ecocriticism as a theory that moves away from the Marxist and New Historicist criticism for their lack of interest in nature.

The word 'Ecology' was first used by Ernest Haeckel in 1869. He coined the term 'Ecology' from two Greek words 'Oikos' meaning house or place to live and 'Logos' meaning to study it. Literally, ecology is a study of Organisms in their homes. Climatic factor is a part of ecological study. According to Barry Commoner, Everything in the ecological laws has some cost and their payment cannot be avoided. Major man-made change in a natural system is likely to be detrimental. This genre includes science fiction and dystopian or utopian themes. It is based on how humanity responds to the impacts of climate change. Climate change shows anthropogenic climate change.

The term "Cli-fi" was coined by climate activist Dan Bloom in either in 2007 or 2008. Climate fiction appears to have begun in 2010. The authors of climate fiction of 20th century include J.G. Ballard and Octavia E. Butler while dystopian fiction from Margaret Atwood is often cited as an immediate precursor to the genre's emergence. Since 2010, prominent cli-fi authors include Kim Stanley Robinson, Richard Powers, Paolo Bacigalupi and Barbara Kingsolver. The publication of Robinson's *The Ministry for the Future* in 2020 helped cement the genre's emergence. This work generated presidential and United Nations mentions and an invitation for Robinson to meet planners at the Pentagon.

Climate change is a real and an urgent challenge for the environmentalists. It goes on affecting people directly and indirectly. Climatic changes are taking place on the Earth due to over use of resources. Natural events and human activities are the key issues for bringing climate change. The earth has been warmed remarkably over the last hundred years and particularly over the last two decades. Global warming is the acceleration of earth's average surface temperature. This results in changing climate globally.

Climate change is the long-term shift in the Earth's average temperatures and weather conditions. Over the last decade, the world was on average around 1.2C warmer than during the late 19th Century. It has now been confirmed that global warming exceeded 1.5C across the 12 month period between February 2023 and January 2024. That followed 2023 being declared the warmest year on record. The temperature increase was driven by human-caused climate change and boosted by the natural El Niño weather phenomenon. This long-term climate change has been caused by human activity, the IPCC says, mainly from the widespread use of fossil fuels - coal, oil and gas - in homes, factories and transport.

When fossil fuels burn, they release greenhouse gases - mostly carbon dioxide (CO₂). This traps extra energy in the atmosphere near the Earth's surface, causing the planet to heat up. Since the start of the Industrial Revolution - when humans started burning large amounts of fossil fuels - the amount of CO₂ in the atmosphere has risen by about 50%, external. The CO₂ released from burning fossil fuels, external has a distinctive chemical fingerprint which matches the type increasingly found in the atmosphere.

A watchdog has described a delay in the publication of the Scottish government's climate change plan as "very disappointing". Chris Stark, chief executive of the UK Climate Change Committee, said the delay was "very disappointing". The Scottish government has set a legally-binding target to cut greenhouse gas emissions to net zero by 2045, five years ahead of the date set for the UK as a whole. The last update to the climate change plan was published in December 2020. A year later, after ministers announced they aimed to reduce emissions by 75% by 2030, the UK climate change committee said the plan lacked detail. The watchdog warned last year that Scotland had lost its lead over the rest of the UK on tackling climate change.

According to Scientists, many extreme weather events are becoming more frequent and intense as a result of climate change. Globally, heavy rainfall events have become more frequent and intense over most land regions due to human activity, according to the UN's climate body, the IPCC. Scientists assess whether individual extreme weather events can be attributed to climate change by considering both natural and human causes. It was fully challenging to find out the role of climate change which is marked from intense rainfall in Dubai, the United Arab Emirates (UAE) and Oman in April 2024.

Bangladesh is struggling to cope with the effects of climate change. Large parts of the country are situated in the Ganges-Brahmaputra Delta, the world's biggest river delta. One fifth of the country could be left permanently under water as sea levels rise. On top of that, Bangladesh is already the most densely populated country in the world. The Pacific island states are particularly vulnerable to the negative consequences of climate change. Whilst they themselves contribute only marginally to global warming, their geography means that they suffer disproportionately from its negative impacts. The eastern Caribbean is repeatedly hit by disasters. That is why the German government is supporting awareness-raising campaigns, so that the local people can consciously minimize their risks.

It is likely to be the most critical and controversial report on climate change in recent years. Leading scientists are meeting in South Korea this week to see if global temperatures can be kept from rising by more than 1.5C this century. The world has already passed one degree of warming as carbon emissions have ballooned since the 1850s. A report by the Intergovernmental Panel on Climate Change (IPCC) has warned of disastrous consequences if current trends of global warming are not reversed immediately. Aayushi Awasthy from the University of East Anglia's Energy and Resources Institute explains why this has particular consequences for India and South Asia. The IPCC report has been called the most extensive warning yet on the risks of rising global temperatures.

India stands to be one of the nations most significantly affected, given its huge population and levels of inequality and poverty. Sea level rise will have a disastrous impact on the country. It has given its large coastline for the people who live close to and depend on the sea for their livelihoods. On the other hand, deadly heat waves in the year 2015 killed thousands of people in India and Pakistan. The eastern Indian city of Kolkata (Calcutta) and the southern Pakistani city of Karachi are highly affected by climatic disastrous.. The report says that it is not too late to reverse rising temperatures and minimise some of the harm. It will not be easy to do for countries in South Asia, which are largely developing economies with limited resources. In its endorsement of the latest IPCC report, India has said it will bear a disproportionate burden of climate change.

India is under pressure to mitigate climate change by controlling emission growth. But it will also need to adapt to increased water scarcity, droughts, floods, cyclones and other natural disasters.

The country has developed a fairly good disaster management system but it needs more resources to develop further. It has also set ambitious targets on renewable energy. India is currently developing a mid-century strategy for low carbon growth and the results of that study may allude to a peak year.

It has also set fairly ambitious renewable energy targets, but these come with their own set of challenges.

Writer and anthropologist, Amitav Ghosh says that "The climate crisis is a crisis of the imagination, that we are unable, at the level of literature, history and politics, to grasp the scale and violence of climate change. Yet, "climate change is outrunning us". Ghosh believes that fiction may be the best form through which we can imagine other forms of human existence. Unfortunately, stories about climate change tend to be classed as science-fiction; and "the message is essentially that writing about climate change on earth is like writing about little green men or space aliens."

Amitav Ghosh, one of the most popular novelists of the period has joined the ranks of notable novelists such as Monohar Malgonkar, Shashi Tharoor, Khushwant Singh, Salman Rushdie, Chaman Nahal, and others. In Ghosh's novels, one may detect a feeling of historical realism. Ghosh's writings are characterised by a strong desire for strong identifications and race relations.

Amitav Ghosh's writings comprise of eight major fictions and non-fictions works. The six novels of him namely *The Circle of Reason*(1986), *The Shadow Lines*(1988), *The Glass Palace*(2000), *The Hungry Tide*(2004), *Sea of Poppies*(2008), *River Smoke*(2011), *Gun Island* (2019) are noted to cover the environmental problems at wider range with respect to different global changes that took place during that period. Ghosh began working on the *Ibis* trilogy in 2004. Set in the 1830s, Its story follows the build-up of the First Opium War across China and the Indian Ocean region. The trilogy consists of *Sea of Poppies* (2008), *River of Smoke* (2011), and *Flood of Fire* (2015).

His nonfiction works include *Kinship in Relation to the Economic and Social Organization of an Egyptian Village Community* (1981), *Dancing in Cambodia*, *At Large in Burma* (1998), *Countdown* (1999), *The Imam and the Indian* (2002), *Incendiary Circumstances: A Chronicle of the Turmoil's of our Times* (2005), *The Great Derangement: Climate Change and The Unthinkable* (2016), *The Nutmeg's Curse: Parables for a Plant in Crisis* (2021), *Uncanny and Improbable Events* (2021), *The Living Mountain*(2022), *Smoke and Ashes: A Writer's Journey through Opium's Hidden Histories*(2023) . Besides these, he has published a number of short stories, essays and articles in various national and international magazines and journals. Ghosh's writings amazingly blend the real historical facts and environmental issue as its core theme. He usually interlinks human world and natural world in all his novels. He is an outstanding climate change activist.

2. Ecocritical Exploration of *Gun Island*:

Effects of climate change are directly enhancing its radius for natural environment and human societies. Changes to climate system reflect warming trend, precipitation trends and more extreme weather. The change of climate directly impacts the living planet. The alarming environmental problems for the human and non-human society have created a new platform for literature. It consequently led to the emergence of ecocriticism as a field of study. In this context, Amitav Ghosh's novel *Gun Island* is a monumental achievement as a climatic fiction. This book has accessed much familiarity in the climatic literary world. Ghosh's treatment of the climate crisis reiterates the imperative for humans to show respect for the natural world, his emphasis on the question of multispecies environmental justice

highlights the need for planetary environmentalism. This book is divided into two parts named 'The Gun Merchant' and 'Venice'. The part one focuses on Sunderbans and the second highlights on Venice and the immigrants.

The novel reflects on the scientific perspectives of the climate crisis through the character of Piya. She is a Bengali American marine biologist based in Oregon. For carrying out her research project in the Sundarbans, Piya often visits Kolkata. She often stays with Nilima in the city. Deen meets Piya at Nilima's place before his visit to the Sundarbans. Piya acts as a counterpoint to Deen's long-term friend Cinta, an Italian academic and renowned scholar of Venetian history. While Piya offers scientific interpretations of the climate crisis, Cinta presents historical and cultural analyses.

Apart from the mythical rendering of the climate crisis, the novel represents scientific interpretations of climate change to offer further insights into the notion of planetary environmentalism. Deen comes to know that all the living beings of the forest are being affected by climate change. During the visit, he knows about the impact of the Cyclone Aila, which hit the Sundarbans in 2009. He has exposed the dhaam of 'Manasa Devi'. Dinanath has witnessed the acute situation of Sunderbans and the living conditions of the inhabitants and aquatic animals as well. The unexpected change of climatic conditions has become the focal issue of this novel. Such changing scenario in Sunderbans is allegedly exposed by Amitav Ghosh. He has shown the demon of anthropocentric views. The use of freedom to torture nature for availing greediness of the human beings. The greed, Amitav Ghosh presents, would bring *pralaya*, a mark of destruction. This will kill the entire world one day. Tipu explains to Deen about extra greediness of people and its consequences.

Hey, Pope, I got news for you: greed's real, it's big. You got greed, I got greed, well all got greed.....it's not parasites we got inside of us, it's greed! If that is what a demon is, there's no way it's imaginary. Shall not! We're all demons.... That's really bad news, because according to Hindu mythology when demons take over is when the world ends.(Ghosh 113)

The materialistic attitude of the people is detected by Dinanatha when he visits to Sunderbans *dhaam* of The Gun Merchant. The effects of extra are explicitly pointed out by him. Nature has been evaded by human beings because they target to keep up prosperous life. It results that the atmospheric condition of Sunderbans is fully alarming. Nature makes Sunderbans barren. It reacts against the demon of greed. The people of Sunderbans started experiencing the cramp;

It seemed both land and water were turning against those who loved in the Sunderbans. When people tried to dig wells, an arsenic-laced brew gushed out of the soil; when they tried to shore up embankments the tides rose higher and pulled them down again. Even the fisherman could barely get by; where once their boats would come back with catch, now they counted themselves lucky if they netted a handful of fry.(54)

Moyna shares everything. She exposes her anxiety and frustration about the environment. She says about people's struggles to survive in the changing environments. Even fishermen face a lot of unexpected climatic situations while continuing their profession. They cannot go for fishing in view of frequent threatening of cyclones and floods. Moyna observes that a life in the Sundarbans has become fully hard. The boys and girls kept borrowing and stealing to pay agents to find elsewhere. Moyna has described about the uncertainty of life in the Sundarbans. The novel begins with climate migration, as well as the question of planetary environmental justice.

Moyna's son Tipu, a youth in his late teen, informs to Deen about the connections between climate change, migration, human trafficking, and the flow of refugees to the West. Deen wanted to know the

reason of migration of the people of the Sunderbans. Tipu offers, like his mother Moyna, throws a picture of the effects of climate change in Sunderbans. He says that:

Now the fish catch is down, the land's turning salty, and you can't go into the jungle without bribing the forest guards. On top of that every other year you get hit by a storm that blows everything to pieces. So what are people supposed to do? What would anyone do? If you're young you can't just sit on your butt till you starve to death. Even the animals are moving – just ask Piya. If you've got any sense you'll move and to do that you need someone who can help you find a way out.. (Ghosh, 65)

The stunning impacts of climate are extremely found reflected in Sunderbans. The facilities at Sunderbans attracted the industrialists to utilize the place to gain more profit by establishing industries over there. The water and other scopes drew their attention to carry on their business. As a result, human beings forgot their limits of exploitation of nature. Nature, as a mark of giver, turns into a destroyer. Nature shows its terrible reaction against the anthropocentric man. It has bult migration, human trafficking, poverty and displacement of human beings. The illegal activities have made man pathless and created a season of hope to despair. Now the present society is on journey of desperation in view of climate change on this earth. Displacement of human beings become an acute issue for human beings because of climate change.

Nature's reaction against the earth has cause hollowness and dejection in the mind of the human beings. Fast industrialization in Sunderbans stands as a major issue to bring displacement. Tipu puts this situation more clearly as:

... I did have a passport back then. But it expired and I haven't renewed it. Who needs to spend all that time government offices? Money you can choose whichever kind you want- Bangladeshi, Indian, Malaysian, Sri Lankan, you name it... The people moving, industry, pops, he said, grinning. It's already one of the world's biggest and still growing fast (64)

Nilima and Piya are the social activists. They managed the NGO 'Badabon Development Trust' to help the displaced. The trust tried to co-operate the people who were living below the poverty line. Some of them out of poverty engaged themselves as sex workers and victims of human trafficking. The trust, later, failed to help the rehabilitated victims. As a result, they decided to return to their old places. Nature turns to be the destroyer whereas no one can against it. So, a mass movement is required to protect Mother Earth.

Amitav Ghosh has warned to humanity to take care of nature. He tries to pass a message that It is high time to evade colonizer's attitude of dominating nature. Piya's concern for the displaced people as well as the aquatic animals shows that both humans and non-humans will suffer a lot in this eco system. Piya is disturbed when she lost contact with dolphin Rani. It is in the mind of the people that they are the sole rulers of this universe. The materialistic attitude of human beings towards nature has fully affected human's existence. In Sunderbans, the living organisms in the river like dolphins, crab and other organisms are badly stricken by climatic crisis. Migration is terrible for aquatic beings, especially dolphins like Rani and her Pod.

Amitav Ghosh has suggested that one can revive the fury of nature through the legend of 'The Gun Merchant'. In the novel, when the cyclone 'Bhola' hit Sunderbans in 1970, the particular hamlet where the *dhaam* of 'The Gun Merchant' protected the people by alarming the people. The novelist focuses on ecological crisis in Sunderbans. The west had ben affected by global warming. The attack of bark beetels in the vicinity of Oregon city, the appearance of yellow -bellied snake in the beaches of California due to

warming up of seas in the west and forest fire are all part of the crisis. This crisis is seen in the west too. Colonizer's aggression although ended geographically, but new situations have taken different forms. In the part two of the novel, 'Venice', climate changes lead to migration of the people to faraway lands. Millions of people are forced to leave their homes due to soil erosion, coastal flooding, agricultural disruption, droughts and natural disasters. The Sunderbans is facing various climatic conditions. Man made issues in the form of extra greediness, technological extension and aggressive attitude towards nature have defaced the Mother Earth. The inhabitants of Sunderbans are supposed to migrate in search of better habitat. Due to climatic disasters, people had to be displaced and gone back to their old places. The experience of Tipu and Raffi explores that migration becomes very horrifying in the forest. Their illicit movement from one place to another place in search of better habitat has brought unexpected situations. Their life gives us a picture of how climate change brings disruption in the human population. Tipu and Raffi migrated to distant lands to avail better future to build up their better living.

3. Conclusion:

Climate change and climate migration are the two important components in climate fictions. Intolerable extremes and threatening the livelihoods of millions of people are imposed by climate change on many parts of the world. Extreme events like floods, heat waves, droughts, and wild fires as well as slower-moving challenges such as rising seas and intensifying water-stress are the focal reasons that force people to leave their homes. This has been caused by ecological imbalance. Amitav Ghosh's 'Gun Island' is a climate novel which highlights migrations, myth, folktales, and the deepening crisis of climate change. The novel connects human and non-human, past and present, natural and super natural. Island projects unprecedented climatic conditions as the primary cause for these natural disasters. It becomes a clarion call for climate induced migrations as it skillfully portrays people and entire communities being uprooted from their native land and the drastic changes in the migratory patterns of different species due to changing climates and warming waters. Instead of projecting warnings of impending doom and apocalypse Gun Island focuses on giving the readers hope for a better tomorrow.

. The plot of the novel centers on a Bengali immigrant rare-books dealer from Brooklyn, Dinanath Datta. During one of his annual visits to his native Kolkata, Dinanath becomes fully involved in an old legend Gun Merchant, who was spotted in a legend involving the snake-goddess Manasa. His search to know the hidden meaning behind the Gun Merchant's legend has driven him from Kolkata to the swamp of the Sundarbans, to New York, to Los Angeles, and finally to Venice. Dinanath's mysterious journey shows the marks of cyclones and tornadoes as well as encounters with dolphins, poisonous snakes, shipworms, and venomous spiders. Ghosh's skillful use of the legend of Manasa, which acts as connective tissue in holding the different parts of Dinanath's journey together, allows him to address issues as diverse as climate change, mythology, Venetian history, and animal and human migration.

Gun Island is an intricate tale about climate change, environmental devastation, commerce, human aspirations, ambitions and desperation. Amitav Ghosh's fiction extremely interweaves current affairs with little known events of the past. This is an important novel of this current world. On a visit to his birth place, Kolkata, a Brooklyn-based dealer, the novelist finds his life becoming entangled with an ancient legend about the goddess of snakes, Manasa Devi. While visiting the vast mangrove, the Sunderbans, he has encountered snakes and witnesses the the impact of natural disaster on it. The book

shows the catastrophic processes of displacement which is unfolding across the earth, at an ever-increasing pace

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