Analysing The Unquiet Woods by Ramchandra Guha through various Ecocritical Perspectives and Linking it to the Dynamic Phenomenon of **Climate Change**

Dissertation

it orsit. Submitted to the Department of English, School of Languages, **Doon University, Dehradun**

In partial fulfillment of the **Requirements** For the award of the degree of

Bachelor of Arts (Honours) In English by

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Jepartiner

2022

Declaration

I hereby declare that the dissertation entitled "Analysing The Unquiet Woods by Ramchandra Guha through Various Ecocritical Perspectives and Linking it to the Dynamic Phenomenon of Climate Change" being submitted to the Department of English of School of Languages, Doon renter of the second se University, Dehradun for the award of Bachelors in English is an original work composed by me and in any way has not previously formed the basis for the award of any degree, diploma or

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Certificate

This is to certify that the Dissertation entitled "Analysing *The Unquiet Woods* by Ramchandra Guha through various Ecocritical Perspectives and Linking it to the Dynamic Phenomenon of Climate Change" submitted by Harshita Rawat has been done under my supervision. It is also certified that the work in this Dissertation embodies original research and hard work of the candidate. This assistance and support received during the course of investigation and all the sources of literature have been fully acknowledged.

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Acknowledgement

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A research is considered to be a blind date with knowledge and the research done on this dissertation has filled me with immense knowledge, not just theoretical but also about aspects which are often overlooked by people. This is the first research work undertaken by me in the academic field and for making this experience much easier I would like to thank our Head of the Department, Dr. Chetana Pokhriyal for providing me this opportunity to hone my knowledge about this subject. This acknowledgement would not be complete without thanking my supervisor Dr. Gazala Khan who strived hard to be bring the best out of me. A heartfelt gratitude to my guide Dr. G.S Rawat for suggesting me to work on this area and providing me resources.

A special thanks to my mentor Mr. Mehul Rawat, for being open to guide my queries and quick response.

I also owe my thanks to my parents and sister for helping me out with this dissertation.

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Abstract

The historical and political dimensions of the Chipko Movement is expounded with interpretations which makes it open to debates. Some hail it to bring an environmental revolution while others focus on the colonial forest legacies. While Ramchandra Guha traces the precolonial forest relations and the discrepancies in the metabolic relationship between the people and the forests with the advent of colonialism and industrialization, this dissertation seeks to analyse the Chipko narrative and how the author's ideas resonate with various ecocritical theories. As Climate Change has proved to be one of the major threats to the human civilization, this dissertation will also include how scientific management in the hills advocated by the West have proved to be setback for the Himalayan Ecology.

Ecocriticism is built on the symbiotic relationship between human and nature in the form of literature. Incorporating ideas from various ecocritical theories and validating them with references and facts from texts and articles, this dissertation provides an inclusive approach towards Ecocriticism as an academic field. The analysis of *The Unquiet Woods* shows a strong correlation between an author's ideology and his writings. The Marxist tilt of Ramchandra Guha clearly labels him as an Ecomarxist. Through the study of Ecofeminism the contribution of women in the movement has also be analyzed. The dissertation also provides the significance of environmental movements and their relevance for the present generation to fight the menace of rising disastrous effects of Climate Change.

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Chapter 1

Introduction

"Ecology is permanent Economy" - Sunderlal Bahuguna

The Himalayas are the Abode of gods. From this abode starts the Nanda Jat Yatra known to carry the devotion of thousands of devotees who walk barefoot for a distance of approximately 280 kilometres for three weeks. There is no unified version of each story, ritual or way of worship. For the Kumaon region it marks the birth anniversary of Nanda and Sunanda and for the Garhwal region it marks the journey of goddess Parvati back to the Kailash Mountains. Similarly there are various interpretations of the Chipko movement and with these interpretations emerge various inconsistencies. Although the various narratives arouse debates regarding their origin there is one similarity between the two events. Both acknowledge the close connectivity of the people to their environment and how both these events brought together people to show their desire to be united. The humans are in a war with the earth and this war with the earth is the only one we would lose even after we win everything else.

Many works have been written on Chipko Movement. Some hail it to bring an environmental revolution in India while some focus on the colonial forest legacies that alienated the people of their forest resources. This dissertation seeks to analyse the Chipko narrative and how the author's ideas resonate with various ecocritical aspects. An author's ideology plays an important role in the type of work he writes. The first question this dissertation seeks to answer is if Ramchandra Guha is an Ecomarxist. As the research will discuss various ecocritical theories, it will also justify why Ramchandra Guha refuses Deep Ecology in the movement. It will also answer how women in the hills are more connected to the ecology by incorporating various ideas from scholar.

Ramchandra Guha is a prominent Historian and Environmentalist. He is a Socialist thinker and his interest personally lay in politics and society. *The Unquiet Woods* was the first book authored by him in 1987. Apart from this, books like *Environmentalism, Use and Abuse of Nature, Ecology and Equity, This Fissured Land*, are some of his noteworthy works on environment and ecology. Guha calls *The Unquiet Woods* a work of 'chance and contingency' because it was during his doctoral dissertation that he accidently met professor Jayanta Bandopadhay who suggested him to work on the Chipko Movement and also in that particular year the government had introduced a draconian Forest Bill 1982 which instigated his instincts to work on the unexplored aspects of the Chipko Movement.

The significance of this work is marked by Guha's choice of place. Through this work Guha dives into the remotest areas of the country which sustain millions living in India. Hills are not just important for tourism and the people inhabiting there but also for the population in the plains which is able to thrive because it is watered by the Himalayan Rivers. The hills constitute a major chunk of the endemic species which face a threat of extinction today due to wildlife trafficking and habitat destruction which is accentuated with the high altitude dam construction and commercial logging.

The Unquiet Woods provides a close study of the historical Chipko Movement and traces it from the pre-colonial era. Peasant resistance was not new for the people in the hills specially

the Garhwal region but the Chipko Andolan brought a revolution in the environmental movement of not just India but around the world. Guha documents how forests that fulfilled the subsistence needs of the local people became the centre for the commercial demands of the British and then of the government. After India became a British colony their forest policies excluded the peasant from using the forests as a resource base, thereby denying them of the close bond they share with the forest and isolating them from the forest affairs. He highly criticizes the British when he says that the British made the forests an institutional base for commercial exploitation.

In his book, *Environmentalism: A Global History*, Guha compares the environmental movement of west with that of India. "In the west environment movement stemmed from a desire to protect endangered animal species and natural habitats. In India, however it arose out of the imperative of human survival" (7). Chipko Andolan paved the way for the second wave of environment movement in India. What was unique about this movement was that it did not emerge due to an international influence as that of Tiger conservation, rather it was authentically indigenous.

The historical and political narratives of Chipko Movement have many inconsistencies as focus has been only on certain highlighted aspects. The colonial forest policies have had a major influence on the evolution of this movement and Ramchandra Guha thoroughly explores the role forest policies had on ecological degradation, this area shows his critique towards the colonial rule specially the Capitalist method of production, accumulation and surplus. This highlights his Marxist ideas on ecology. This dissertation will also analyse Ramchandra Guha as an Ecomarxist, and discuss how Marxist ideas on environment can be a step towards changing this global narrative on Climate Change and how it can save the world from the fifth Mass Extinction. Ecomarxism, a branch of Ecocriticism will also be extensively discussed in this dissertation. Through this ecocritical analysis the dissertation will trace the colonial policies and industrialization as a driving force of ecological rift and excessive consumerism. It will discuss how nature which was the source of goods became a dumping ground for the excrements of the production process in capitalist society.

With the starting of the social movement of Deep Ecology where the shift takes place from Anthropocentrism to Biocentrism and nature has been portrayed as sacred, many researchers analyse the movement through the perspectives of deep ecology. Ramchandra Guha on the other hand is a high critique of Deep Ecology and reject the same in the Chipko

Movement also. His two main arguments against Deep Ecology are its superficiality and American orientation. The other argument being its impracticality as it accompanies grave consequences.

In her book *Staying Alive* Vandana Shiva hails the Chipko Movement as an EcoFeminist movement (64). Sunderlal Bahuguna another exponent in the movement says that the role played by women was of real leaders with the men being just the messengers. Role of women was not just limited to their hugging the trees from been cut by the loggers, they sustained the lives of the family by carrying out the forest economic activities when the males in the hills started migrating to plains in search of employment. This dissertation will analyse the role played by women in the movement and how food security is linked to women and how with the

gradual increase in climate disasters will pose the major threat to women. Ecocritical study based on gender provide us with feminist perspectives on nature and the intricate relationship shared by them as they both have been subordinated by the patriarchal society for economic benefits. By analysing the role of women in Himalayas this dissertation will further discuss the ecocritical aspects on gender in the hills.

Putting this symbiotic association of environment and literature in words is difficult and exemplary at the same time as it is built upon a moral centre which seeks to bring enlightenment to the existing generations of the interdependent relation between society and nature. Ecocriticism is built on this symbiotic association, it is a vast field that deals with the relation between nature and humans in the form of literature. It deals on how ecological and cultural aspects related to environment and human attitude towards it are presented in the literary work. It may involve fiction or non-fiction. It aims to understand how humans feel towards nature knowing that it serves almost all the needs of humans. From a utilitarian approach towards nature we are now moving towards a more environment centric idea and so the relationship is also changing. The basic tenets of Ecocriticism are the portrayal of nature and human relation with the environment, how does physical geography play a role in ecocritcal study and understanding the intricate web of relations. Ecocriticism has a diverse range of critical understanding. Earlier it had a more gender centric and region specific approach but in the age of bioweapons, artificial intelligence, and highly mechanized weapons environment has come at the centre of study. Chapter 2.1 traces the colonial forest policy and their scientific management of forests which had the sole motive of draining the forests resources for their administrative purposes. It analyses how the Himalayan ecology had been affected by these policies accelerating the damages the village population has to suffer now. It criticizes the plantation system in the seismic zone thereby damaging the soil productivity.

Chapter 2.2 addresses Ecomarxism as a branch of Ecocriticism and how Guha's work prove to be written from an Ecomarxist's perspective. Since this branch highlights Capitalism to be the root cause of ecological degradation this chapter will also discuss how Ecomarxism as a theory is relevant in today's scenario.

Chapter 2.3 goes onto describe the women in the hills and how their life is connected deeply to the forests. It will discuss Ecofeminism in the Chipko Movement and analyse how Guha perceive the role of women in the movement.

Chapter 2.4 will trace the notion of Deep Ecology and what makes it different. The chapter will analyse Deep Ecology from the author's point of view and bring out criticism of the Ecological Movement. Also why Guha does not see Deep Ecology in the Chipko Movement.

Chapter 2.5 will discuss how these historical social movements are a lesson for the young generation to take up the challenge to counter the effects of climate change. It will also discuss the significance of climate change literature and their role in making the people realize the apocalyptic event they are calling in their lives.

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Chapter 2

Climate Change and its Effect on the Himalayan Ecology

"We are the first generation to feel the effect of climate change and the last generation who can do something about it" - Barack Obama

With towering peaks and huge landscape and a stretch of 2400km in the north, the Himalayas are the symbol of our cultural rootedness as well as a shield that has protected India since ages. It is not just an Abode of gods and holy sites but provides plethora of biodiversity and natural resources which make them ecologically rich and diverse. These peaks fascinate many people around the world but not many know about the treasure it carries. The ecology in the Himalayas is driven by rain, altitude and has wide variation. The temperate forests form the foot of the Himalayas with permafrost at the top. The Khadar and Terai belt receive flooding from the perennial rivers bringing in a lot of silt making the area as the best agricultural pain. These perennial rivers and Himalayan ecosystem sustains the lives of around forty million people. Cultivable land in Uttarakhand mountains ranges between three thousand to five thousand feet above sea level. This area provides a riparian field as well as a good grazing grounds. As there is a flow of perennial rivers and streams the productivity of this land is enormous. As animal husbandry is an important activity in the Himalayas act as fodder as well as fertilizers. The fresh leaves are eaten by cattles while the dried out leaves are mixed

with grass and animal excreta to be used as manure in the fields. The manure provide all kind of nutritive value to the soil and the broad-leaf trees act as fuels. The Himalayan forest have a rich biodiversity with ten thousand species of vascular plants, thirteen thousand species of fungi and others of lichens (Singh and Hajra). The Himalayas are the result of the collision between the Indian plate and Eurasian plate, and since they are the youngest fold mountains there is a continuous movement of these plates. Situated in the IV and V seismic zone, the Himalayan ecology is not adaptive to deep construction, deforestation and highways broadening. The brunt of this eroding ecology is faced by the natives in the forms of floods, avalanches, glacial lake outburst floods and landslides. The 2013 Uttarakhand flood and the February 2021 avalanche are the incidents that highlight the intensity of destruction to the Himalayan ecology and the devastating effect of Climate Change. Ramchandra Guha in his book mentions the 1970 Alakananda flood as "the most devastating flood in living memory. Villagers who bore the brunt of the damage, were beginning to perceive the hitherto renuous links between deforestation, landslides and floods" (155). Guha hints at the idea that climate change is here and is about to get worse if the procrastination is not given a hault immediately. The increased frequency of Climate Change has crippled the poorest and the backlash is suffered most by the people living close to the ecology. Each event brings with it a crippling effect and makes them even more vulnerable and marginalized. Mira Behn's recollections of living in the Himalayas gives a realistic description of the destruction in Vandana Shiva's Staving Alive,

I became aware of the 1970's Alakananda valley flood which pour down from the Ganga catchment area. Within a year or two I witnessed a shocking flood: as the swirling water

increased, came first bushes and boughs and great logs of wood, then in the turmoil of more and more water came whole trees, cattle of all sizes from time to time, a human being clinging to the remnants of his hut. Merciless deforestation as well as the cultivation of profitable pines in the place of broad leaf trees was clearly the cause.(qtd.in Shiva, 65)

Our forests are the lungs of the earth, they hold the soil from being eroded and filters the water coming from the Himalayas. The catchment of Ganga had previously been covered with thick canopy of trees such as Banj and Kharik which has now been reduced to allow broadening of highways. Local people of the hills suggest increasing the tree cover by planting Banj as a way to reduce the effects of flood. The issue is not just about planting trees we also have to take into account to plant the right type of trees.

During the colonial period resin-tapping became a major activity to extract turpentine oil and for this the British started extensive pine plantation. By nature pine has a very less water retention capacity due to which regions with pine trees are drought prone. Pines are also highly inflammable causing extensive forest fires. Since the last decade forest fires have become a very normal routine. There were 989 forest fire incidents in the state's forest from October 2020 to April 2021, according to forest department figures. Around 1,297.43 hectares of forests got burned down ("Still Burning"). Due to this the loss is not just to the forests and people living nearby, there is also a loss to the biodiversity. J.S Rawat a well-known hydrologist has indicated that the Himalayas are moving towards the stage of desertification. If this happens the source of all water resources will itself be devoid of water. Indicators are seen in the way perennial rivers are becoming non perennial, the streams are drying up and groundwater level reducing drastically. Pine forests grown since the last three-hundred years now account for eighty percent of the forest area in Uttarakhand with most of the district having majority cover of pine trees. As per a study conducted by the Geography department of Kumaon University in Almora, the groundwater recharge rate is a meagre eight percent in pine forests on the other hand Oak forests retain nearly twenty-three percent water. A pine tree sheds many pine needles called 'Pirul' in Garhwal which is not consumed by animals and cannot even be decomposed and is used to cover the sheds of animals. A bunch of pine needles act as a plastic sheet and accelerate runoff. Pine is acting as an invasive species which can accelerate the pace of forest fires in India. The number of Oak trees to the number of pine trees need to be increased (Agarwal and Rautela)

What we are also noticing nowadays is unregulated and unsustainable tourism. Often the threshold capacity to hold people in fragile ecosystem is exceeded by a huge margin due tourist activities. Nearly 0.62 million people are reported to have visited the hills in 2016. As per reports, during the 2013 Uttarakhand flood, the pressure created by the human population present caused more devastation hence causing more loss of lives ("Sustainable Tourism" iii). The animal ecosystem is another victim of degrading ecology. Snow Leopard population in the Himalayas have been considerably decreasing due to the decrease in the permafrost area with many other species facing the threat of extinction.

The effect of hydropower project construction has been more damaging than sustainable and the mountains are the indicators for that. Avalanches and floods wash away these projects and indicate what can be the effect to the lowland areas also. "Uttarakhand is a wakeup call not just for the rulers of the state but also the planners and decision makers all over the country" (Kukreti).

Because of its extreme weather conditions and uneven topography there is a lack of knowledge about how development should be carried out. Development on a mass scale is not adaptable to the ecology as well as threaten the livelihood means of the local people. The task of managing the forests should be left to the indigenous people with regular monitoring.

Himalayas are great carbon sequesters, the estimated carbon pool in Indian Himalayas is about 5.4 billion tonnes which is equal to the annual carbon emissions from fossil fuels in Asia. Due to the increasing deforestation and forest fires this sink is also under great threat which is increasing by climate change. What are now carbon sinks will become the source of greenhouse emissions if forest fires are not haulted. The Himalayas are also a hydrological source, earlier, in higher altitudes precipitation used to be in the form of snow but since the last decades the snowline has receded to higher altitudes.

Climate change has fast induced glacial melt and put at risk many lives. This might have a negative consequence on food production and economics. Some areas might run out of water specially during dry seasons if the trend of warming and glacial melt continues. Permafrost areas will be very prone to melting due to climate change. The continuous glacial melting will lead to more avalanches like the one witnessed in February 2021 in Chamoli district.

Various forums and meetings have been organized to increase land area under forest. The Kyoto Protocol of 1997 discussed about increasing the land's carbon sinks of respective countries to reduce the effect of fossil fuels. Bonn Challenge launched by IUCN targeted to restore degraded forest area of up to 150 million hectare by 2020 and 350 million hectare by 2030. Not much is known about the present scenario and accomplishments of the government but the quest should be to the preserve the ecology to its fullest essence. The effects have just started to be felt by people in the plains in the form of heat waves, whereas the people in the hills had been facing the brunt since a long time. It's now, or never. Responsibility has to be taken by each individual to save themselves from the coming apocalyptic event.

2.1 Ramchandra Guha as an Ecomarxist

Amita Baviskar calls *The Unquiet Woods* to be written with a broadly Marxist analytical Framework. "It combines history with sociology and political science, empirical exactitudes with generalized abstraction" (Baviskar). In one of his lectures Guha says that the environment movements around the world are a result of the exploitation done due to the Industrial Revolution. He blames the capitalist mode of production and accumulation to be the ultimate cause of ecological sufferings. He gives the definition of industrial revolution as 'More people, consuming more, producing more and excreting more'. Through this definition he sarcastically points to the consumerist nature of the western society which is built on fulfilling one's luxuries at the cost of the environment.

Industrial Revolution gave the space for more expansion in terms of resources. For the British who had a powerful colonial hold, they went on to make their colonies the source and destroyed them of their own resources. On the pretext of developmentalism Industrial Revolution made a huge impact on environment and society thereby increasing the pace of environment degradation manifold. Guha's critique of Industrial Revolution, capitalist society and the government's non accommodative policies prove him to be an Ecomarxist.

The concept of Ecomarxism deals with the criticism of capitalist mode of production and accumulation and analysing its impact on the environment. In the essay "Marxism and Ecology: Common Fonts of a Great Transition" by John Bellamy Foster, he discusses how "socialist thought is re-emerging at the forefront of the movement for global ecological and social change"(3). In the last three decades theorists have been analysing if there existed any contribution of Marx in the field of environment. Many have found Marx's "Materialist Conception of History" to be the foundation for his powerful ecological critique of capitalism. According to Marx there exists an innate relationship between nature and society hence his ideas on environment deals with human development co-evolving with nature. He gave the concept of 'Labour Metabolism' which stresses on the exchange between nature and society. This relationship exists because both nature and society are dependent on each other and every human activity involves the use of natural environment. The transition from pre-modern society to modern society there was a change in how this metabolism worked.

In the pre-modern society, production was restricted to fulfill the consumption needs of the people. People themselves were responsible to compensate for what they have extracted from the nature. On the other hand, in the modern society the energy needs of the people increased and production mode shifted from labour to machine. Goods were not just restricted for consumption, they became commodities. Goods were traded with other items to generate surplus and the nature became a sink for dumping the excrements of the production process. People neglected their duties towards nature. Marx holds Industrial Revolution to be responsible for creating this metabolic rift.

Ramchandra Guha describe this metabolic rift in his book as,

The erosion of the social bonds which had regulated the customary use of the forests thus led to what can be described as an alienation of human from nature. The concept of alienation used here draws directly from the work of Marx on the alienation of the workers under conditions of industrial capitalism. I would argue that in both the instanced we are dealing with the growth of a social system (industrial capitalism/colonialism) that replaced another (craft production/subsistence agriculture)

whose social relations did not produce conditions of alienation and estrangement. (56)

By drawing a relationship between colonialism and ecological decline in *The Unquiet Woods*, Ramchandra Guha brings in Marxist idea on ecology. With the expansion of railways the British found the hills to be a fertile ground for the practice of plantation .They uprooted the Oak, Teak, Sal, and Conifer forests that have altered the Himalayan Landscape with disastrous effect on its fragile ecology. Scientific forestry was glorified for its modernism and pledge to protect the forest cover as they considered the forests in India to be unregulated by India but it was rather to serve the industrial interests of their own. The scientific management in Kumaon hills started to provide a permanent supply of fuel and timber to the administrative centres. In 1893, the British Government declared a huge land area as 'District Protected Forest' in Kumaon. What they considered "the primary importance was to assert the propriety rights of the government in these forests and lay down limits to the hitherto unregulated access of rightholders"(77). Capitalist tendencies were evident in the way the government started on an experimental basis to raise Oleoresin from Chir pine so that they could compete with the American and French varieties, even to provide a long life to Indian woods chemical treatment was given for their use in railway sleepers. Ramchandra Guha here does not present an antidevelopmental or communist picture, he rather validates what Karl Marx had said about the "Metabolic Drift" because forest goods had started to be traded for generating surplus and British did not take into account the "Law of Restitution" which is the main principle of rational agriculture (what was taken from the earth had to be returned). Ramchandra Guha describes the rules of 1894 in Kumaon as "Rules were framed for regulating the lopping of trees for fuel and fodder and claims for timber, while trade by villagers in any form was prohibited" (138).

Industrial Revolution considered the forests to be just physical realities that can be tapped by technology according to one's own monetary wishes. Guha vividly describes how with the setting up of forest industries the pace of extraction increased by constructing roads developing communication channels so that accessibility to the deep forests could be increased. For the people living in urban areas communication development provided space to seek pleasure. "Himalayas were sold like Mecca for climbers, adventurers, and tourists, deforestation and allied ecological degradation to meet their needs for firewood has proceeded apace"(Guha ,138).

Commercial demands exceeded to an extent where incentives like awarding bonus for people who exceeded their targeted yield. Liebig in his scientific work *Organic Chemistry in its Application to Agriculture and Physiology*, calls the British method of intensive agriculture

as a 'robbery system' (qtd. in Foster, 73). He describes how the British were robbing the countries and their soil of the essential nutrients. Marx carried forward the idea given by Liebig and analyzed the destructive side of modern agriculture.

Ramchandra Guha in his work *How much should a person consume?*, criticizes the western concept of environmentalism which talks about Industrial Modernization and with the growing trend in Indian consumerism he expects the Indian environmentalism will diminish soon. He had been vocal about his criticism towards the administration in mismanagement of forest and resource exploitation which poses a major threat to ecological health and oneness of the country. As the British had done and now the government, they are isolating the tribal population from the forests and depriving them of their rights. In the Pre-Industrialization period the people in the hills led a nearly utopian life, away from the political instability in the plains they were able to meet their subsistence needs. The egalitarian structure of the community made sure that those who illegally take resources from the forest will be made to pay a fine. This system helped in keeping a close check into the forests but the post- colonial world in order to catch up with the economically advanced nations did not lower their limits to judicially use the forest resources. Guha in his work *Environmentalism*, quotes Gandhi who had been one of the first environmentalists in India.

"God forbid that India should ever take to industrialization after the manner of the West. The economic imperialism of a single tiny island kingdom is keeping the world in chains. If an entire nation of three-hundred million people took to similar economic exploitation, it would strip the world bare like locusts" (7) The emphasis he here makes is on "after the manner of the west", as exploitation of resources done by them had far exceeded their limits and now is the time they are facing the brunt of climate change in the form of heat waves , heat domes, frequent cyclones etc. Paris Climate Agreement, Kyoto Protocol, Conference of parties are the result of western negotiations that still lay barren and on paper.

Guha had always been vocal about how "Economic sustainability had become a prime victim of economic liberalization" ("Environmentalism Preface II"). The promises made by head policy makers on environment sustainability with economic growth are mere utopia. What India and other developing countries are doing is just aping of the west to create demand in the society that can drive economic growth. He thinks planning should be done in realist manner through which we can satisfy our needs as well as cater to the needs of the future generation. Indian Environmentalists like Sunderlal Bahuguna and Chandi Prasad Bhatt are realists who have given a true meaning of sustainable development but it is unfortunate that in the race to compete with the west we have put our own existence at risk.

Marxist theory is necessary in understanding today's scenario of impeding climate change. His idea of the future society was that of one in cooperation with the natural resources. Undoubtedly the governments around the world have been trying to form alliances like the International Solar Alliance under the leadership of India and France to control the global temperature from exceeding beyond 1.5 degree Celsius by the end of the 21st Century and switching to renewable sources of energy but the pace at which it is working will not be able to catch up the pace of climate change. According to the 6th Assessment Report of

Intergovernmental Panel on Climate Change, "averaged over the next 20 years, global temperature is expected to reach or exceed 1.5 degree Celsius of warming"(7).

It is the industrialized nations of today that had been holding 70% of the carbon space but are not ready to take up the leadership role in controlling the global temperature. We also have liberal denialists who say that climate change does not exist. Mobiles and automobile companies are apt at tapping the interests of the people and process gadgets with latest versions to hold their interests. The high demand of these luxuries is at the cost of the nature. Mining is done at a high scale to extract the mineral resources necessary for gadgets and then these electronic waste is dumped into the nature. Marx had given a concept of sustainability where he said that nobody owes the earth we only hold it in trust for the chain of human generations. As Marx suggest, to bring communion between nature and society we have to move to an ecological revolution where the ecological proletariats, the environmentalist, will have a huge contribution. Apart from this a great transition has to be made from "consumerism, individualism and domination of nature to a new triad: quality of life, human solidarity and ecological sensibility" (Foster). A need based approach has to be followed rather than a profit based and the challenge has to be taken by the developed nations. It is right time to take the initiative to bring that ecological revolution so that we able to keep a better earth for the coming generations.

2.2 Women and Ecology in the Himalayas

"This earth is my sister; I love her daily grace, her silent daring, and how loved I am. How we admire this strength in each other, all that we have lost, all that we have suffered, all that we know: we are stunned by this beauty and I do not forget: what she is to me, what I am to her" -Susan Griffin

Ramchandra Guha describes the role of women as stewards and their position as more equal with men. Since there is no single economic activity that can sustain the houses, there are multiple economic activities including cattle rearing, cultivation, trade, agriculture that requires equal participation of men and women. It is to be noted that apart from agricultural and forest activities women were exclusively responsible for children and household chores. This was in sharp contrast to the male dominated agriculture in European nations. This disproportionate share of work can be attributed to the strong patriarchy in the hilly areas. Guha's presentation of women's role is less descriptive as much of his contribution was towards sociological and ecological aspects but he does recognise their arduous journey towards making Chipko Movement as success.

Guha has mentioned that many men from the village were themselves involved with the commercial loggers for monetary benefits but their wives still went against them and upheld their role as forest preservers. O.P Dwivedi in his work *Dharmic Ecology* says,

"Women, specifically, have seen how men tend not to mind destroying nature in order to get money. In a sense Chipko Movement is a feminist movement to protect nature from the greed of men. In the Himalayas the pivot of the family is the women. It is the women who worries most about nature and its conservation in order that its resources are available for her family's sustenance". Women and nature have an intimate relationship as both have been subordinated by the patriarchal set up of society specially in economic terms. The Ecofeminist theorists all relate to the idea that movements around climate change, women empowerment, equality of gender, environment protection are all intrinsically linked as they seek to counter the masculine domination. Women and environment since ages had to face the disproportionate share of problems, and even the repercussions of the environmental problems has to be faced by women as they constitute a major proportion of poor in the world. *Feminism and Ecology* "sees a material link between externalization and exploitation of women and externalization and exploitation is a call for destruction as all forms of suppression and subordination is not acceptable and interconnected.

Forests in India were largely a Women's domain but in the Himalayas the responsibility is multifold as after deforestation started the males of the hills had to migrate to plains in search of employment which put the responsibility of carrying on the economic activities on the women. They largely performed the role in food gathering and fodder collection so they were the main sustainers of their families while their men were away. Men in the families mostly performed the agricultural work so their relation with forests was not as deep as women had, so they felt responsible towards the forests. Forest activities performed by them gives us the idea that women had more knowledge about trees, their growth period and in what manner they need to be cut. Women in the hills cut specific branches of trees so that the branches are able to grow again easily. Trees are also classified based on their age, and only those that are old enough are allowed to be cut. Also for cutting a tree, one tree had to be planted for compensation.

Women understand the traditional knowledge of sylvicultural practice which ensures that the forest cover remain functional. This traditional knowledge has kept the left out forests in the Himalayas growing.

With the starting of commercial forestry in Himalayas the only sustenance activity of the women was gone. The traditional knowledge of forest preservation practices were replaced with scientific forestry, the local rights of the women over the forests were taken away by the reservation of forest for commercial purposes. Vandana Shiva calls it as the masculinization of forests. Women's work in the hills is largely based on forests and for them forests are directly related to food security. Even agriculture in the hills is dependent on forests that provide irrigational facilities and manure. Deforestation has wiped out the irrigational facilities affecting the food security of the people.

According to a report called "Women and Climate Change" by UNWomenWatch, "women farmers currently account for 45-80 per cent of all developing countries depending on the region"(3), and the effect of climate change will be felt most by them. Even though the Chipko Movement is called a women's movement their role has not been much recognized. Women who have contributed to the movement are not at the forfront when it comes to naming the torchbearers of the movement . Apart from Gaura Devi women like Sarala Behn , Bimala Behn, Hima Devi, Gunga Devi, Bachni Devi, Itwari Devi and many others contributed with their full might in the movement. Men involved in the movement have not been behind in praising the women for their courageous gesture in protecting the forests they feel so close towards. Sunderlal Bahuguna calls the women as real leaders of the movement. Gaura Devi took the decision of confronting with the commercial loggers along with other twenty-two women by hugging the tree. They stood out as warriors in front of the loggers by hugging the trees. Even after knowing the consequences they put their life at risk to sustain the metabolic relation with the forests. In one of his interviews Sunderlal Bahuguna said that the women were the real leaders and we were just the messengers. By taking up the challenge the women showed that women are not dependent on men and are equal partners in the struggle.

Women's leadership is crucial in maintaining the forest cover and restoring the lost tree cover. Through the use of indigenous knowledge women can counter the effect of climate change by reversing deforestation. Their role in planning policies on forest management and sustainable development should be considered as they constitute a major section of the society and more than 750 million women depend on forests for employment and household consumption (IUCN)

With the retail inflation at the highest point since years and food prices touching the sky this global phenomenon of climate change has major ramifications for food security. Traditional food sources in the hills have become unpredictable and scarce and practice of subsistence agriculture is not able to bear much produce. Irratic rainfall and floods destroy the crops. Due to landslides and road blocks during monsoon the supply of food items become difficult. This inaccessibility is particular to women whose health is at a major risk in times of food shortages. This is what the UNWOMENWATCH report "Women nature and climate change" has to say about the role of women's traditional knowledge. The symbiotic relation between women and forests have a huge potential in saving the biodiversity. In order to further preserve biodiversity and limit its degradation, indigenous women need to pay a leading role and act as stewards in global response to climate change. It is surprising that the places which earlier had abundant presence of fresh water now face water shortages due to pollution of streams and water sources, this has affected agriculture in the hills.

It is because of women's food producing capacity that determines food security. "Women also make the most significant contribution to food security by producing more than 80 per cent of the food needs" (Shiva 101). Any intervention in their capacity can decrease the food security. Shiva calls upon the 'female principle' of Prakriti in Hindu Mythology that is the driving force behind nature. Shiva's account of women's role in Chipko Movement is highly criticized for its romanticization of women's struggle. Even though she faces criticism it is not hidden that women sustains the metabolic relation between ecology and humans. Women's role is mentioned in the Matysa Puran narrated by Lord Vishnu, in this goddess Parvati nurtures the sapling of Ashoka tree. When asked why she is raising trees and not sons, Parvati replies, that by digging one well a person can live in heaven as much there is water in that well, one reservoir is equal to ten wells, ten reservoirs are equal to one son and ten sons are equal to one tree (dasa putra samo druma).

In the Himalayas during their colonial era, the rights of women with regards to forest was taken away by the British administration. They were given only a specified area to gather food and fuels. This problem was faced the most in the Kumaon Region where with frequent regulations the government took away maximum area of forest under District Forest Area and people were made to strictly follow the rules. As the forest resources curtailed women's right to carry resources they had to work more intensively in the agricultural fields. Through the use of minor forest produce the people were able to generate some income avenues but with the colonial forest policies in power the men had to migrate to other areas to find employment and the burden of keeping the family shifted more on them.

Bina Aggarwal finds three reason why Uttarakhandi "women and female children are the ones most adversely affected by environmental degradation, they had the responsibility of keeping their families, they receive inequitable access to food, and also agricultural land is inaccessible to them" (qtd.in Kedzier).

Questions whether Chipko Movement is an ecofeminist movement or not is debatable but the lesson it left for the coming generations is empowering as well as enlightening. It called out for the ethical treatment of nature and women undoubtedly by their strong showcased that they are equal partners in struggle and cannot be subordinated.

2.3 Deep Ecology and its Relevance Today

Deep ecology is a social movement started by Arne Naess a Norwegian philosopher in 1972. His conception of deep ecology hold the view that before we go onto solving or finding a solution to the deep ecological problem we have to first analyse and understand the relation between nature and society by questioning our deeds. As we start to question ourselves the depth of our questioning will uncover many unexplored aspects of nature and how intricately we are connected to the nature, because it is that connection which is keeping us alive and if incase there is a rift in that relation the consequences of that would be disastrous. It seeks to achieve a change in the orientation on how we humans define ourselves with nature.

In his essay called "Deep ecology movement", Arne Naess gives his views on the movement through an example, where he describes a family of four members with four comfortable chair where one of the person desires to have ten more chairs. One of them is told to work overtime so that they can buy ten more chairs. She is insisted to work on alternative options to the ten chair problem. At last she expresses her views saying that "if the ten chairs are not a desired end, it is pointless to discuss by which this might be achieved" (Naess 2-3). The point here he makes is on "how to stabilize and eventually decrease consumption without loss of life quality"(3). Through this he sarcastically criticizes the industrial societies who seek to increase energy production with least undesirable consequences. If the societies have a control on their luxury then there is no need to go beyond the production than we actually need so the consequences of this towards the nature and ultimately ourselves will be less. Naess makes a distinction between shallow ecology and deep ecology where shallow

environmentalism does not focus on bringing radical change in the society but focus on finding alternate solutions like the concept of sustainable development. The idea of deep ecology is to go beyond sustainable development and initiate fundamental changes in the society. It seeks to achieve a highly reductionist attitude so that we do not affect our nature. One of his important reason to distinguish shallow ecology from deep ecology was its tendency to reach back to the environment for achieving their goals. For example, Nations are taking pledges to become carbon neutral on specified years and switch to renewable sources of energy for energy consumption thereby reducing the use of coal. One way they can do this is by using electric vehicles, solar power plants and hydroelectricity but for all this to achieve the nature will have to suffer at the end as for hydroelectricity dams will have to be constructed for which deforestation will be required and for others, earth metals are required which again will require mining.

Ramchandra Guha does not support the social movement of deep ecology because of its American orientation, so his analysis of Chipko Movement was a more anthropocentric rather than bio-centric. In his essay, "Radical American Environmentalism and wilderness preservation", he analyses deep ecology from a more 'sociological and historical rather than a philosophical approach'. He makes two main arguments, first being that deep ecology is very American, compared to other radical environment movements in the world their social and political goals do not match. Second, the consequences of putting "deep ecology into practice on a worldwide basis are very grave"(1). He gives three distinct sources from which deep ecology sprang. The first is the historical source, according to this it represents knocking out 'preservationist and utilitarian dichotomy' that is disrupting the American environmentalism since 20th century. The second is the moral source which comes from the biocentric approach towards serving the nature and giving them a sacred place in nature. The third source is preserving the wilderness and biodiversity as they maintain and stabilize the ecological regime.

Deep ecologists have the belief that "they are leading edge of the environmental movement, they see themselves as the spiritual, philosophical, and political vanguard of American and world environmentalism" (Guha 2). Guha does not accept the radical ideas put forth by deep ecology. He particularly criticizes the thought that any intervention into the nature should be guided by the thought of preserving biotic integrity rather than the needs of humans. For him the concept of wilderness cannot fit the third world nations and is harmful. It is because India is a densely populated and an agrarian economy with most of the population having cordial relations with nature, it will transfer all the resources in the hands of the rich. The international projects like tiger conservation which are hailed as successful, points this idea that for the interests of the tigers the communities living near the tiger reserve had to be displaced. The international organizations like IUCN, World Wildlife Fund, are trying to sow the same seeds of radical environmentalism in India and other third world nations. Deep ecology in the guise of a radical environmental practice seeks to promote inequitable conservation practice and then put burden on the third world nations.

Guha mentions in his essay how wilderness is a 'crusade' and not a philosophical and moral agenda to get back to primitivism. It is symbolic of imperialism and dominance. Daniel Janzen in a scientific forum, says that large portion of the globe should be transferred to them as they being biologists they know how tropical landscape should be used and preserved. It is an irony how America, a superpower which dominates the global technology, industrialization and market through its high cost products is conciliating the third world to compensate for the destruction caused by them. Through Foreign Direct Investment USA is expanding its market to further boost its economy at the same time preaching their dream of primitivism. It seems to be trap by the global power to keep its domination intact by restricting the growth of the third world nations. Through multiple projects carried out by western organizations, their own records stand at a low position but any mismanagement on the part of third world nations is highly criticized.

Ramchandra Guha rejects the association of deep faith with environmentalism as he considers the root cause of environment movements, the idea of sustainability and conservation emerged as a reaction to the modern phenomenon of industrial revolution. His reaction against Deep Ecology is rooted in its American orientation towards wilderness.

Deep ecologists often associate eastern philosophies and deep ecology as converging in nature. They hold the view that Eastern philosophies epitomizes nature as essentially sacred and central to their lives, so they subordinate themselves to the service of nature.

This can be proved from the excerpt given in the text,

Through religion, folklore and tradition the village communities had drawn a protective ring around the forests. Across the region covered by this study there existed a highly sophisticated system of conservancy that took various forms. Often hilltops were dedicated to local deities and the trees around the spot regarded with great respect. In fact the planting of groves was regarded as 'a work of religious merit'.(Guha 29-30)

This gives us the idea that nature holds a sacred place in the eastern world. Guha rejects Deep Ecology in Chipko Movement because the action taken by the villagers according to the work was mostly derived from the commercial needs of the villagers to access forest resources. Even though deep ecology does not appropriately fit into the Chipko Movement it does feature in the behavior of the people living in the hilly region.

2.4 Importance of Environmental Movements and their Literature

Literature does not just reflect changing views of the natural world, it shapes them

Down to Earth

Works on climate change in the form of climate fictions is a new way to arouse environmental consciousness among the people. Through the way of wide imagination the writers provide an idea on how a future might look or be like if we do not respond to the threat of climate change. Non-fiction on historical environmental movements is another way to stimulate the same consciousness. We do have many works by prominent authors like Vandana Shiva, Jayanta Bandopadhyay, Chandi Prasad Bhatt, Ramchandra Guha that deal with various ecocritical aspects but the interest towards them is pacified by our ignorance to decipher any change.

Various environmental movements in India like Navdanya Movement, Narmada Bachao Andolan, and Bishnoi Movement are a source of inspiration for the coming generation to be apart of the movement to save the globe from a catastrophe. These historical texts trace the social, political and ecological history of the movements in order to provide a bigger picture of the causes. While we get to know about various movements we only get biased or partial information on the causes but through these texts, people will be able to form their own opinions and broaden their horizon of knowledge.

Looking at the present scenario of climate change and the global narratives of developed countries on their pledges to become carbon neutral, these texts give us inspiration to raise our voices against unjust government policies and provide a framework to start our own movements by bridging the loopholes in the earlier movements. The present generation is less attached to the green environment as they are driven by growing demands so through the understanding of the struggle taken up by people in various movements they can understand the intricate link between nature and man. Through the analogues provided in the works of that age when the movements occurred, we get to differentiate and draw contrast between the present scenario and of that age and understand our position on how much we have to work to compensate for the loss we have done.

In the schools the study on ecology is limited to just biotic and abiotic components, food webs and trophic levels but through these works we get to know about the principles of environment ethics and history of environmentalism which is important for developing our understanding on reasons for switching to environment centric views. Global climate became an object of study with the starting of carbon capitalism linking closer human and nature. Reading such texts also allows us to trace the modern developments of the natural world through the study of Ecofeminism, Ecomarxism and Deep Ecology. Each of these branches of Ecocriticism provide a new approach to study ecology and climate change. Reading these literature can help us "appreciate the natural world for its own sake". Amid the distractions and stress in modern life going back to these literary work can help us, evolve our own selves and understand the position of nature as a healer. According to researches, forests perform the task of being natural healers and reduce stress. These texts also act as a reminder of our own vulnerabilities at the same time bring a note of precaution to mend the ways we have disabled. For example, the depiction of storm in King Lear, mocking Lear's attempt: "In his little world of man to out-scorn

The two and fro conflicting wind and rain".(80)

Storms uproot anything that comes its way even the mightiest of person is not spared of the devastating effects of the storm when it is in its full form. Similar is the effect of Climate Change which will not spare any human living on this earth.

This reminds us that a storm is larger and stronger than any man, and it can uproot anything coming its way. Milton's narrative in Paradise Lost, when he says it was the fall of man which brought "pinching cold and scorching heat" to the earth reflects our present crisis (Higgins and Somerwell). These environmental texts also brings the idea that different authors have on climate change and ecological relations and how they got influenced by the movements based on nature. As environmental issues alone cannot be solved by technical solutions we need a shift of the mindset, the government policies, towards practical sustainable development and profound cultural shift. To understand the reality we require understanding of past movements and ideas that shaped the movements and for that these texts will immense source of knowledge. The Indian Movements to save the environment have been highly appreciated around the world and is the reason Chipko Movement and Narmada Bachao Andolan are one the most researched topics. Deep ecologists study Indian movements and the ecological elements in the Indian philosophy as they consider the roots of Deep Ecology to be seen in the East.

The movements started by various environmentalists have not achieved their tasks yet and that is why these texts are written so that we, the young generations can carry forward the

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Chapter 3

Conclusion

Environmentalists in India have been labelled as KGBs and CIA agents for asking tough questions on government policies. Their support for the Chipko movement was also called antidevelopmental and a local movement for the narrow demands of the people. Since the movement was multifaceted with diverse range of people and demand, it suffers criticism because of its complexity. Kathait says, "Chipko Movement was primarily economic. Environment and ecology were added to it later and Bahuguna started projecting it as a conservation campaign". The complexity of this movement can be estimated by the multiple events taking place for different goals altogether. Sometimes it was for keeping intact the smallscale industries, at another time it became an anti-liquor movement. The popularity of the movement came from its orientation as a global environmental concern. The movement ended up with a deep conservational bearing. Existing knowledge on Chipko Movement is solely based on the events that took place in the hills whereas in this dissertation the focus was on the

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author and the way his ideology shapes the text. The dissertation authenticated the role of women through statistical data and reports. Everything has been connected to the dynamic phenomenon of climate change which made the dissertation more realistic and creates awareness about the present state of situation.

In the second chapter this dissertation dealt with the Ecomarxist bearing on Ramchandra Guha while writing this work. It started with the introduction of Ecomarxism explaining the materialist concept of capitalist mode of production for surplus. Throughout the book Guha had highly criticized the colonial policies on scientific forestry and commercial logging, which is still being continued even after seventy-five years of independence and which has brought the global average temperature up by 1.2 degree Celsius approximately and as per recent IPCC sixth assessment report it may cross 1.5 degrees up by 2050. Conservation movements undoubtedly has increased the population of endangered species but the forest rights of forest dwellers have been lost, depriving some their only means of survival. This is the reason Guha is a critique of deep ecology which has been discussed in the fourth chapter. This dissertation brought in various branches of Ecocriticism to explain various ecocritical aspects. Through the third chapter on women's role in the Himalayan ecology, the dissertation travelled the arduous journey of hill folk women. People might argue the role of women as common with other Indian women but the multiplicity of tasks they perform in a rugged topography in an unpredictable weather and disasters, living without their husbands in the family with all household responsibilities they represent the image of real strugglers. Their relation with forests is also deep as they act like their brethren.

This analysis also brought down the useful aspects of Himalayan ecology and how development policies have created a rift between the metabolic relation of man and nature. The effect of colonial policies specially the plantation of pine trees for resin tapping has caused the Himalayan forests to burn due to the heat waves that are acting as agents to the forest fires. Climate change is also driving the degradation of Himalayan ecology and causing loss to the biodiversity. Through the last chapter my aim was to spread awareness on why we need to go back to historical texts like The Unquiet Woods because it is not just a source of information but a confrontation with the reality and what measures we have to adopt to take the environment movement in India forward which has diminished after the LPG reforms.

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