# ECOFEMINISM AND CLIMATE CHANGE: A COMPARATIVE STUDY BETWEEN INDIA AND CHINA

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### **Abstract**

### **Purpose**

The main purpose of this research work is to identify various responses taken by India and China regarding the concept of Ecofeminism and Climate Change.

### Methodology

A secondary data collection method with thematic data analysis has been developed based on the key aspects of research findings to make the data more concise and easier to understand.

### **Findings**

As per the results, China has generated more focus on carbon emission measures, as it has been declared as the world's top emitter of GHG. The country generates more than ½rd of the world's total annual GHG emissions, due to a 10% average economic rise per year. In India, heat waves and heavy rainfall can increase by 50%-240% due to huge GHD emissions by 2025. China and India have focused on migration strategy and transformation of the residential building from 3.5 stars to 5.56 stars for mitigating climate change issues. In India, many rural communities involve women in protecting nature as well. However, patriotism sometimes becomes the main obstacle in its way.

### Originality

All the research data has been collected from original published research articles concerning various phenomena.

**Keywords**: "Energy Consumption", "Ecofeminism", "Climate Change", Chipko Movement, "Adaptation Strategy", "Migration", "GHG emission", "Flash Flood", "Heat Waves".

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### 1. Introduction

### 1.1 Overview

Famous environmental and ethics scholar Chris Curmo has stated that the environment that society faces today is a result of 200 years of colonialism and extractive capitalism. In India, women regarding the Ecofeminism concept are considered a famous movement as a major response. The movement was called the 1973 Chipko Movement in Uttarakhand. In this movement, rural women protected their forest from the loggers, and they have done it by embarrassing trees<sup>1</sup> (India, 2020). The movement was considered an effective mission for rural women associated with nature and their pride.

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<sup>&</sup>lt;sup>1</sup> (India, 2020)



Figure 1.1: Chipko Movement in Uttarakhand, India Source: (India, 2020)

The above figure shows how women of rural areas in Uttarakhand have protested loggers and saved their trees. The Concept of Ecofeminism was introduced in China in the late 1980s. The Ecofeminism concept was a new theory within China until the 1980s and 1990s when this nation decided to respond to global phenomena. This was a major part of their effort toward modernization<sup>2</sup> (Li, 2012). Climate change is a global phenomenon that has severe local consequences. As India is a tropical developing country, it faces various challenges in fighting against climate change<sup>3</sup> (Ministry of External, 2019). China is another country, for which climate change is a major obligation within their sustainable development process<sup>4</sup> (SCIO, 2021). As a result, both top countries with the highest population have focused on developing various measures and targets to protect their nation from the climate change crisis. This research paper will study various other aspects related to these highly essential concepts of climate change and Ecofeminism in both these two countries and their responses towards it.

### 1.2 Background

Climate change is a threat to the entire humanity and various countries across the world including India and China have taken several measures to protect their nations from the effect of climate change. China has focused on building a community of harmony between humanity and nature. China has tried to bridge the relationship between humanity and nature to fight against climate change (SCIO, 2021). Moreover, India has also focused on developing a climate change policy that is the "National Action Plan on Climate Change (NAPCC)". Apart from this, it can be suggested that another aspect, which is Ecofeminism, also connects humanity with nature. It has been found that, whenever a woman has made initiatives to protest any kind of ecological destruction, they found that violence and dominant behaviour against women is the main reason behind it.

Vandana Shiva is the most visible advocate in India, who has fought for feminism and still does. According to Vandana Shiva, modern science and technology is one of the major reasons behind this violent behaviour towards women and nature; as this technology and science are considered

<sup>&</sup>lt;sup>2</sup> (Li, 2012)

<sup>&</sup>lt;sup>3</sup> (Ministry of External, 2019)

<sup>&</sup>lt;sup>4</sup> (SCIO, 2021)

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patriarchal and colonial<sup>5</sup> (Rao, 2012). According to (Li, 2012), in terms of China, it has been found that Ecofeminism can be effective in re-establishing new cultures and values across this country towards women and nature.

### 1.3 Aim

The main aim of this research article is to find out various responses that have been taken within India and China in terms of the concept of Ecofeminism and climate change.

### 1.4 Objectives

- To identify various measures taken by India and China to prevent Climate change issues.
- To understand various aspects of Ecofeminism for connecting nature and humanity
- To recommend suitable strategies that can be elective for strengthening environmental aspects and value systems both in China and India

### 1.5 Questions

- What are the measures taken by India and China to prevent Climate change issues?
- What are the various aspects of Ecofeminism, for connecting nature and humanity?
- What are the strategies that can be elective for strengthening environmental aspects and value systems in both China and India?

#### 1.5 Research Problem and Rationale

This research work will develop a thorough knowledge regarding the need for environmental responses within society to protect against climate change. This research will also move the focus of students who might pursue environmental science, toward the link between the environmental crisis and climate change. Thorough knowledge regarding climate change operations taken by India and China, being the top two democratic and larger population countries to save their nations are reviewed from the secondary data analysis method in this existing study. A wide range of literature and authentic websites are used in this study to get an overall view of this socio-economic matter.

### 2. Literature Review

### 2.1 Measure taken by Indian farmers for reducing the effect of Climate Change in India

Adaptation can be considered a major point that could be used to mitigate the issues related to climate change within a developing country like India. Migration is one of the most essential adaptation strategies that could be used to fight against migration across the world.

Conditions	Kharif season		Rabi season	
	Temperature	Precipitation	Temperature	Precipitation
Migrated total	62	60	64	67
Not migrated total	38	40	36	33
Perceive and migrated	57	52	59	58
Did not perceive but migrated	5	8	5	9
Perceive and not migrated	34	34	33	29
Did not perceive and not migrated	3	6	3	4

Figure 2.1: Effect of Socio-Economic Characteristics while Adapting Migration Theory by Farmers Source: (Jha & Gupta, 2021)

Most of the climate change, related issues, and economic uncertainties have been faced by agricultural sectors of any country due to risks related to loss of livelihood. As a result, farmers are considered the key actors in this process to accept adaptation strategies. As the basic consequences of climate change fall on farmers due to changes in harvesting land; their concept for mitigating these issues is considered the fundamental socio-economic solution. Farmers have

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<sup>&</sup>lt;sup>5</sup> (Rao, 2012)

decided to go for migration strategies in search of alternative livelihood in terms of a failure of crops or low crop yield<sup>6</sup> (Jha & Gupta, 2021). The above figure shows that Precipitation and Temperature based on cultivation season are the most essential socio-economic characteristics that are reflected in the process of migration of farmers across India. It has been found that, out of 700 responses, almost 68 percent have chosen to and 38% have not chosen to migrate in the Kharif season. On the other hand, 64% of farmers have chosen to migrate due to uncertainties within their cultivation land and 36% have not chosen to migrate. This valuation was made in terms of the sensitivity of plants or crops due to temperature changes.

However, in terms of rainfall conditions, almost 60% of farmers have chosen to migrate due to uncertainties within their cultivation land and 40% have not chosen to migrate in the Kharif season. Moreover, almost 67% of farmers have chosen to migrate due to uncertainties within their cultivation land and 33% have not chosen to migrate in the Kharif season. (Jha & Gupta, 2021). It has been found that, in both the season and in both the socio-economic characteristics, the rate of farmers who have perceived climate change as an obligation for the cultivation of their crop and chose to migrate was much higher than the rate of farmers, who perceived climate change; though, they did not choose to migrate.

### 2.2 China-aided Pathways to Reducing the Effect of Climate Change

China's building energy consumption is a major area of this country that contributes almost 30% of overall greenhouse gas emissions and climate change as well. As a result, this country has taken four main practical pathways to reduce the effect of energy consumption on residential buildings in this country.

3.5 to 5.5 stars	5.5 to 6.5 stars
Ceiling R1.0 insulation upgraded to R2.0 insulation (R means the thermal resistance of the building envelope) External Wall Brick veneer upgraded to brick veneer with R1.0 insulation	Ceiling R4.0 insulation changed into R3.5; External wall brick veneer with R2.0 insulation Upgraded to brick veneer with R3.0 insulation; Windows timber frame of single-glazing changed into aluminum frame with double-glazing

Figure 2.2: Standards that are being used to Modify Residential buildings from 3.5 to 5.5 Stars. Source: (Song & Ye, 2017)

One of the main measures is to reduce the demand for energy consumption by improving the energy efficiency factors of these buildings. Proper utilization of energy-saving alliances is another aspect of this country to reduce the effect of energy consumption on climate<sup>7</sup> (Song & Ye, 2017) The application of renewable energies has been another aspect of this country to mitigate extreme effects on climate and the overall environment. China has decided to retrofit existing residential buildings from 3.5 stars to 5.5 stars. Moreover, the new houses in Southern China have been constructed with 6.5 stars instead of the existing 5.5 stars. These modifications in residential buildings of China have been conducted to modify the above-mentioned energy star rating in Figure 3. It can be stated that the focus of China was to modify these buildings from 3.5 stars to 5.5 stars, which would have been beneficial for addressing the reduction of "GHG emissions" by almost 19.5 to 23.2 tons.

In previous times, global warming was almost 3.41 degree Celsius under 3.5 star-residential buildings. As a result, it can be stated that the main objective of reducing climate change effects with an adaptation strategy; becomes a successful one for China (Song & Ye, 2017). The results have shown that there was a possibility of an increasing rate of global warming in the 2020s, 2050s, and 2080s, by almost 0.82 degrees C, 1.91 degrees C, and 3.41 degrees C, respectively. It has been also estimated that changing residential buildings from 5.5 stars to 6.5 stars will have a larger benefit from climate change and GHG emissions (Song & Ye, 2017). As per the estimation, this would have a major asset of climate change aspects and global warming context, as a slight amount

<sup>7</sup> (Song & Ye, 2017)

<sup>&</sup>lt;sup>6</sup> (Jha & Gupta, 2021)

of global warming can be a major reason behind the larger increase in the energy consumption behaviour of buildings with low stars such as 3.5 stars.

### 2.3 Extension of Agricultural Sector and Climate Information Sources on Adaptation Strategy in India

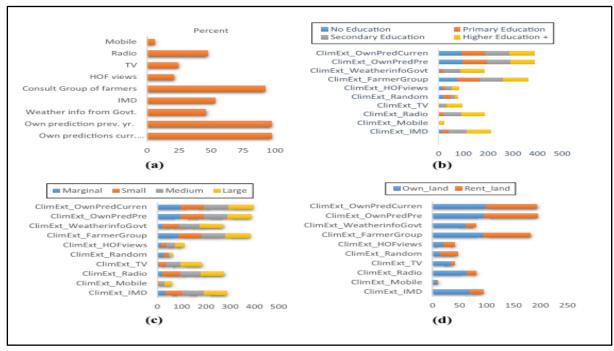


Figure 2.3: Sources used by Farmers of Bihar, India to get Information on Climate

Source: (Jha & Gupta, 2021)

As per the above figure, it can be stated that farmers from a few chosen districts of Bihar use various sources to get climate information. As per the figure, the most used sources by farmers to gather climate information are their predictions based on current and previous climate conditions. Almost 92% of farm households have agreed that they use their prediction to estimate the future Climate change situation. However, the next famous source for getting information on climate change used by 53% of farmers is local weather stations. These sources are an effective way of resolution for these farmers to protect their crops from sudden climatic disasters (Jha & Gupta, 2021). Another aspect that has been found from the study is that agricultural extension through farmer-to-farmer interaction and own predictions are effective to cope with climate change issues. In this context, it has been seen that ownership of a farmer on his land is a major criterion for their willingness to make an extension towards the agricultural field.

As a resolution, Bandura's Social Learning Theory can be an effective measure that can be considered by the agricultural officers for developing training camps for the farmers and generating selective information regarding climate change to upgrade them within any sudden change with observation, modelling, and imitating the behaviours of farmers<sup>8</sup> (Bandura & Hall, 2018). These are the aspects that need to be considered as a response to the cruel effect of climate change on agricultural land apart from any environmental strategy. Along with a sustainable environmental strategy to mitigate issues relating to climate change, which mainly imposes great effects on rural areas, expansion of agricultural land, and preparing farmers for the sudden effects of climate change. These can be essential for analyzing.

### 2.4 Overall Context of Ecofeminism and Matrilineality in North-East of India and China

The Pioneering of Ecofeminism comes from a country like India, which is known as the mother of nature. However, it has been found that, in India, the contradiction between worshiping Mother

<sup>8 (</sup>Bandura & Hall, 2018)

Nature and enforcement of technology and science has created a citation, where nature needed to pay the cost of it<sup>9</sup> (Dellios, Bhattacharyya, & M. Banjac, 2019). Feminists from various sectors of the world have argued with a certain fact that tells the actual objective of environmental movements and women's movements are simultaneously reinforcing. It has been also stated by feminists that both concerts are putting light on different phenomena than capitalism and patriotism along with the male dominating culture in society<sup>10</sup> (Bhutia & Liarakou, 2018). As per the overall theory of Ecofeminism, the actual concept is that nature is considered a central point of analysis, from which it starts with talking about nature-psyche and sexuality. Ecofeminism is a term that has been used as a sign of violence against nature and sexual as well as mental harassment of women.

The Northeast side of India has a large amount of tribal population, along with "ecocultural-linguistic heterogeneity" and "religious pluralism" (Bhutia & Liarakou, 2018). These tribes of North-east India have practiced building a harmonious relationship between nature and women. Women from these areas of India are very much active members of communities that protest environmental disruption. It has been found that, within the area, almost more than 20 women's organizations are there, that protect trees and other environmental assets from the loggers. According to (Bhutia & Liarakou, 2018) Meghalaya is one of the most popular states within North-east India that have many active women's organizations, that fight for environmental protection and conservation. The "Eastern India Women's Association" is considered the most active group in Shillong, Meghalaya for addressing the issues related to environmental health. Various theories of ecology, as well as feminism, suggest that the liberation of women is directly linked to the liberation of nature. When Ecofeminism and Daoism are joined together, it has been seen as a crucial catalyst for ecocivilization within this largest populated country.

In China, Ecofeminism was accepted as a revival of their Daoism norms. Chinese ecological civilization is mainly associated with the female voice of Daoism. Within Daoism, female principals have a major pride of place and after collaborating with nature and the environment, under which principles of Ecofeminism might have been identified (Dellios, Bhattacharyya, & M. Banjac, 2019). According to the Daoism philosophy, women played a major role to build the history of this social theory. This can relate to the evolutionary norms for the change in a social value system. Value-belief norm theory suggests that social values are mainly stable and affect human's overall attitude toward environmental systems<sup>11</sup> (Garg & Pandey, 2021). As a result, this theory might create a different scope for China, which has introduced Chinese ecofeminists to re-engaging the tradition of women in social as well as environmental aspects. According to (Dellios, Bhattacharyya, & M. Banjac, 2019) their values of culture through painting, poetry, and performance have accelerated the image of society regarding the environmental crisis, which is the main reason behind the decline in the human-nature bond.

### 2.5 Literature Limitation

The above literature has shown a thorough analysis of different aspects of climate change in China and India. However, in terms of India, only responses from rural sectors have been focused on in this literature. Any engagement of urban climate change responses is not mentioned in these studies. Moreover, any challenges related to Ecofeminism within India's urban sector are not included in this literature. As a result, further findings have been developed through various sources for identifying these missing factors.

### 3. Methodology

### 3.1 Research Philosophy

Research Paradigm can be considered an essential factor for a research article to develop in a conductive way. Research paradigm refers to a process under which the viewpoint of a researcher

<sup>&</sup>lt;sup>9</sup> (Dellios, Bhattacharyya, & M. Banjac, 2019)

<sup>10 (</sup>Bhutia & Liarakou, 2018)

<sup>11 (</sup>Garg & Pandey, 2021)

to interpret various phenomena of this world can be identified. Maintaining the privacy of respondents in primary research, the accuracy of results, making research data related to the findings accessible to all, and honouring copyrights and patents are essential<sup>12</sup> (Kiernan & Hill, 2018). Different types of research philosophy are available such as pragmatism, realism, positivism, and interpretivism.

These research philosophies can be used in research based on the nature of the research topic along with various external as well as internal phenomena It has been found that when conducting qualitative research work, interpretivism philosophy is mainly used. However, there are many alternative ways under which qualitative research study can be developed and one of them is pragmatism research study<sup>13</sup> (Goldkuhl, 2012). The main concept of pragmatism philosophy is to develop a research work based on various experiences, consequences as well as external actions<sup>14</sup> (Armat & al, 2018). On other hand, the description of realism philosophy includes a fundamental structure for research work that uses a mixed method after focusing on an ontological thesis. Positivism refers to a research philosophy that focuses on collecting quantifiable data that can be effective for developing any statistical analysis of research data. Apart from this, the interpretivism philosophy focuses on collecting data and considering in-depth analysis variables along with different contexts<sup>15</sup> (Alharahsheh & Pius, 2020). Due to this in-depth analysis concept, this research study has been conducted through interpretivism philosophy, as it helped to consider a detailed analysis of various contexts and variables related to societal consequences and reactions to climate change and Ecofeminism.

### 3.2 Research Approach and Research Design

Descriptive study design refers to a study design that is effective for a researcher to go through one or more than one variable within any research work, which does not tend to focus on any hypothesis<sup>16</sup> (Aggarwal & Ranganathan, 2019). This study design is effective for generalizing various concepts to a larger population within a research field. However, this research article has considered an exploratory study design to make an in-depth analysis regarding the research topic by identifying quality responses for Ecofeminism and climate change issues throughout the research process. Apart from that, among two major research approaches an inductive research approach and deductive research approach, inductive has been chosen for this study for the advancement of knowledge about Ecofeminism and its effect on society and to develop new theories regarding climate change<sup>17</sup> (Woiceshyn & Daellenbach, 2018). Moreover, under the deductive approach, hypotheses are made without any in-depth analysis and pre-existing theories, which are not validated in many fields of the research study; and in this research of social science as well <sup>18</sup> (Azungah, 2018)

<sup>&</sup>lt;sup>12</sup> (Kiernan & Hill, 2018)

<sup>&</sup>lt;sup>13</sup> (Goldkuhl, 2012)

<sup>&</sup>lt;sup>14</sup> (Armat & al, 2018)

<sup>&</sup>lt;sup>15</sup> (Alharahsheh & Pius, 2020)

<sup>&</sup>lt;sup>16</sup> (Aggarwal & Ranganathan, 2019)

<sup>&</sup>lt;sup>17</sup> (Woiceshyn & Daellenbach, 2018)

<sup>&</sup>lt;sup>18</sup> (Azungah, 2018)

### 3.3 Data Collection Method, Sample, and Data Analysis



Figure 3.1: Data Collection Process (Source: Developed by me)

The data collection method within a research work is highly essential for conducting the research study. Primary data collection methods and secondary data collection methods are the two data collection processes considered for any research work. First-hand data can be gathered through primary data collection processes such as interviews and surveys<sup>19</sup> (Gras, Moss, & Lumpkin, 2014). On the other hand, the secondary data collection process can excavate views of other authors and outside researchers based on Ecofeminism concepts and climate change responses within India and China both. As this research belongs to the category of social entrepreneurship study, it needs to be stated that the use of conceptual and empirical articles from secondary sources, has been a major aspect of this research study for analysing the phenomena of this study (Gras, Moss, & Lumpkin, 2014). Proper utilization of collected data from journal articles, websites, and newspaper articles can be possible in a flexible way under secondary research work<sup>20</sup> (Johnston, 2017). Moreover, this data has been converted into some essential workplace themes for better understanding<sup>21</sup> (Joffe, 2012); (Azungah, 2018). Thematic analysis is considered the experimental approach for this research, which describes the effect on one variable due to changes in one another. Thematic analysis has focused on reading the pattern of information gathered from a wide range of journals to reach the actual result. The possibility of bias effect has been less in this research work, as it has not considered any human participation while collecting data. The sample of this research has been considered as the access of articles and secondary sources from Google Scholar, government reports, and newspapers.

### 3.4 Ethical Consideration

Ethical consideration of any research work is an essential aspect of this research work and addressing only those journal articles that are published within the last 10 years is an effective part of its ethics. Moreover, all the websites used in this study are authentic and in the English language. All the data collected for this research are directly related to the research topic.

### 3.5 Limitations

The major limitation of this research methodology is that primary research work could not be developed due to lack of time. However, data from secondary resources have been used in a wide range of studies for bridging the gap of first-hand data from different perspectives with a critical tone.

<sup>&</sup>lt;sup>19</sup> (Gras, Moss, & Lumpkin, 2014)

<sup>&</sup>lt;sup>20</sup> (Johnston, 2017)

<sup>&</sup>lt;sup>21</sup> (Joffe, 2012)

### 4. Research Findings and Discussion

In this section, different themes have been developed based on the main findings excavated from the collected secondary sources. These themes analyze some additional features related to the research topic and comparison of article's findings with the existing literature review.

## Theme 1: Awareness among people in Risk and Decision Makers is effective for Action taken against Climate change in Indian Mega Cities

The study suggests that adaptation to frequent or long-term effects of climate change requires the spread of awareness among people, who are at high risk and those, who take necessary action to fight against these issues within Indian megacities. Hyderabad is the capital of one of the main states of India called Andhra Pradesh. It has been found that almost 7 million inhabitants are growing in this city due to the constant migration of people from rural to urban areas in India. As per a survey conducted by the government of India, it has been found that almost 1/3rd of the population of this city lives in absolute poverty and under an area of informal settlements <sup>22</sup> (Reußwig, Meyer-Ohlendorf, & Holt, 2012). Most of them are exposed to many serious climate change-related issues such as weather extremes, flash floods, and others. Potsdam Institute has a major contribution to the urban population of Hyderabad after looking into climate change-related issues. They have taken potential measures to develop a suitable shift in this city. It has been found from various reports that the frequency of heavy rainfall and heat waves can increase by almost 50%-240%, under a high greenhouse gas emission scenario by 2025.



Figure 4.1: Effect of Heavy Rainfall on Poor Quarter of Hyderabad City

Source: (Reußwig, Meyer-Ohlendorf, & Holt, 2012)

According to the above figure, heavy rainfall in Hyderabad city has led to a flood situation, which is not good for the poor quarters. As per many news reports, it has been found that the situation in Hyderabad due to climate change and heavy rainfall was a major area of obligation for people's daily lifestyles. The situation of flood due to heavy rail creates trouble such as high traffic jams, along with flooding of low-lined geographically disadvantaged slum areas of these cities. People from these slum areas face numerous troubles due to this flood situation in Hyderabad that has developed due to heavy rainfall, a result of climate change (Reußwig, Meyer-Ohlendorf, & Holt, 2012). Poorer sections of these cities; that live in the above-mentioned slum areas, are affected by a high margin due to these traffic jams. Apart from their economic loss, they must face various

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<sup>&</sup>lt;sup>22</sup> (Reußwig, Meyer-Ohlendorf, & Holt, 2012)

health-related issues due to these traffic jams and water logging, which cause water pollution and vector-borne diseases. Moreover, it has been also found that often occurrences of heat waves in the city due to climatic change led to higher admission to hospitals for sudden heat stroke, heat exhaustion, hyperthermia, and electrolyte imbalance, particularly in children, older people, and people with pre-existing diseases. As a result, it can be stated that the increased risk of climate change can be defined as a combined function of changed signals from climate and various sensitivity measures that are locally defined. However, this also relies on the adaptive capacity of a particular system or a place (Reußwig, Meyer-Ohlendorf, & Holt, 2012). As per this article, it has been found that the adaptive capacity of a location does play a vital role in the increasing climate change vulnerability among people. As a result, it needs to be mentioned that megacities like Hyderabad need to take necessary actions to enhance their adaptive capacity to mitigate these climate change vulnerabilities.

Theme 2: Ecofeminism a Door to Global Movements for China



Figure 4.2: Ecofeminist women working in Yunnan Province

Source: (Moioli, 2019)

Ecofeminism is a concept that combines ecological as well as various feminist movements. The concept of Ecofeminism has spread from the 70s to the 1990s in various Western countries. It has been found that this concept, which was comparatively new in China, has widened the door for this country to world literacy and this has helped the country to engage in global movements<sup>23</sup> (Moioli, 2019). After the completion of Mao's era, Deng Xiaoping took the lead in this country and did not leave any stone unturned to develop a connection of this country with a global platform with various kinds of economic as well as social reforms. However, during the era of post-reform, the concept of Ecofeminism started breeding within this country. During this period, ecofeminists in

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<sup>&</sup>lt;sup>23</sup> (Moioli, 2019)

this country created various social challenges by criticizing economic developments, which have led to environmental damage to society. Ecofeminism in China has represented a new and fresh approach to the puzzling reality that has been created by economic reform. In today's situation, the Ecofeminist of this country has taken various measures to save the environment and breathe some fresh air within this country. Ecofeminists have also started working in the Yunnan Province district for cultivation with suitable agricultural processes (Moioli, 2019). As women are the guardians of ecological knowledge, they are now in charge of the planting, weeding as well as fertilization processes in the various cities of China. As a result, it can be stated that women are now taking over the responsibility of ecology as well as their feminist rights simultaneously in China.

### Theme 3: China's Pledge to Cut GHG Emissions in Paris Agreement

China is considered the world's top emitter of GHG, and it produces more than ½ rd. of the world's total annual GHG emissions. GHG emissions have a huge contribution to the climate change issues within this world. It has been found that air pollution, water scarcity, and soil contamination have become major health and safety-related threat to the people of China. This current situation has led to an increase in the dissatisfaction level among the Chinese people, against their government. Apart from this, it can be stated that this situation in China regarding its environmental crisis is a result of the rapid growth of industrialization within this country<sup>24</sup> (CFR, 2021). This is not only an essential threat for the 1.,4 billion citizens of China, but it is also a threat to global authorities regarding the current issue of climate change faced by all the countries across the world. China has been considered the world's largest source of GHG emissions and the rate of air pollution in China has increased significantly in recent years.

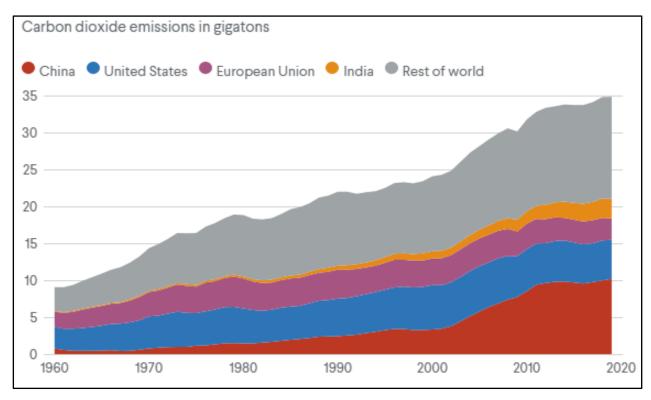


Figure 4.3: Emission of Carbon in Various Countries Compared with the Global Perspective Source: (CFR, 2021)

According to the above figure, the portion of China regarding the emission of carbon has the highest amount compared to the other countries. As per a report, the economic rise acquired by China by 10% on average per year is the main reason behind its increasing GHG emission. In previous years, it has been found that this country has emitted a larger amount of Greenhouse gasses such

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<sup>&</sup>lt;sup>24</sup> (CFR, 2021)

as carbon, methane, and nitrous oxide, than any country in the whole world. Coal, which is an essential aspect of China for generating its energy consumption, is another main reason behind its increasing GHG emission per year by a record margin (CFR, 2021). China is a country, which accounts for almost half of the required coal consumption across the world.

The country is considered the largest coal producer in the world. This production of coal has increased their GDP, though their emission rate of carbon has also increased significantly by this coal production. However, to reduce the emission of carbon by a static margin, the government of China has already banned the construction of any new coal-fired power plant in this country in 2016. However, after the ban expired, the construction of new coal-fired power plants in this country increased by a huge margin from 2018 to 2020. Due to this high environmental disruption and high rate of pollution, China had to face a huge effect of climate change like stronger storms, rise in sea levels, and heat waves across this country. As a result, it needs to be stated that, President of this country has considered climate change as a concern for his administration in recent years and made various pledges to mitigate this highly effective environmental issue. The Chinese government thought to achieve carbon neutrality by 2060. The government has also decided to use renewable energy as the 25% of their royal energy consumption by 2030 (CFR, 2021). They also have thought of boosting forest powering by almost 6 billion cubic meters by 2030. Many other pledges have also been taken forward by China to prevent this climate change issue within their country.

### Theme 4: The relationship between Women and Nature sometimes becomes a political issue in India

As mentioned earlier, the concept of Ecofeminism consists of different thoughts and one of the main areas of concern among these thoughts is, there is a direct link between donation and exploitation of nature with domination and exploitation of women in society. The intensification of both these aspects has occurred with the arrival of modernity within Indian society. It has been found from various examinations that, women are closer to nature and men are closer to culture. As a result, women could only do the representation of nature as a better version. Many governments as well as non-government measures taken by India for putting any women with a responsibility of ecological structure or environmental governance, states that women are, biologically designed and socially gendered for making a connection with nature. However, this representation of women with nature in public policies seems to be dangerous as it undermines the struggle that has been identified against this type of identification of women with nature. This concept justified the subordination of women. It has been found that an organization that is in the Nilgiris district of Tamil Nadu operates for environmental sustainability along with the inclusion of financial aspects of women, who do not get support due to the high existence of patriarchy. Moreover, it can be stated that in the Global South, this women and nature bond is considered under a political ground.

### 5. Conclusion and Recommendation

Ecofeminism believes that the degradation of the environment and domination over women both are developed due to capitalism and patriarchy. This research study has focused on various phenomena in India and China regarding the social problems that impose a connection between nature and women and revolutionary actions against it. Moreover, this research work has generated plenty of information regarding Ecofeminism in India and China along with how particular concepts are being treated in these two countries. As per the background of this study, India and China have both taken measures and developed communities to prevent climate change and violence against women and the environment. The secondary data collection method with thematic analysis is considered the existing method for this study. It has been found that Chinese Ecofeminist was responsible for re-engaging the tradition of women's power just like Daoism, in social as well as environmental aspects. In India, the contribution of women to 1973's Chipko Movement, was a major response. This movement affected various fields in India. It motivated towards this Ecofeminism concept as the Chipko movement saved their trees by only covering them.

It has been found from the literature section that the tribes of North-east India have worked hard for developing a harmonious relationship between nature and women and they are very much active in this protest environmental disruption. It has been found that, in terms of climate change, farmers have adopted the theory of migration to cope with these climate change issues. According to the literature, the farmers perceived climate change as an obligation for the cultivation of their crops and chose to migrate over anything else. However, there are some exceptions, who perceived climate change; though, they did not choose to migrate. Various theoretical measures such as Bandura's Social Learning Theory have been considered that can be used by agricultural officers for generating training to afters regarding climate change issues and the ways under which they can combat these issues. According to the literature findings, China has decided to retrofit existing residential buildings from 3.5 stars to 5.5 stars. It has been also estimated that changing

In Hyderabad, climate change has caused various environmental uncertainties such as flash floods due to heavy rainfall. All of these are the consequences of climate change. As a result, it can be concluded that taking action to make people aware of this climate change issue might help the poor section of this city to combat health diseases as well as economic problems. As per the research, China contributes almost half of the required coal consumption across the world. As a result, the level of pollution in this country is higher than in any other country. However, the Chinese government thought to achieve carbon neutrality by 2060 and many other pledges for reducing carbon emissions.

residential buildings from 3.5 to 5.5 stars or 6.5 stars will have a larger benefit from climate change and GHG emissions. Some additional information has been collected from the thematic

analysis based on the effect of climate change in urban areas and related remedies.

It can be recommended that India should also take many effective measures like China to mitigate the issue of air pollution due to coal production and GHG emission; Though, the Chinese government needs to be more focused on true policies and take necessary action to renew the policies regarding the construction of coal-fired power plant, even after the ban expired. Another recommendation that can be stated is regarding the political issues associated with women and their connection with nature. Mitigating these political issues can be more beneficial for countries like India to develop the environment and women as their pillar of social strength. It has been found that women are now taking over the responsibility of ecology as well as their feminist rights simultaneously in China.

Moreover, they need to focus on building many communities like India in both rural and urban areas, beyond any patriotism culture mentioned in the background section, women can take active participation to protect their one rights as well as protect nature. Future research work can be done with the information gathered in this study, where various names of communities, that work for women and the environment, have come forward. Further study can evaluate a detailed analysis of their contribution and boost the government to make them better scope to work for Ecofeminism in both India and China.

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