

A CRITICAL ANALYSIS ON CLIMATE CHANGE AND ENVIRONMENTAL GOVERNANCE IN INDIA

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ABSTRACT

Climate change is one of the major environmental issues in the world . Climate change is one of the environmental problems recognized from the twenty first century. In India ,impact of climate change increasing temperature, irregular rain fall, increasing extreme weather event,it affecting agriculture ,water supply ,public health and every day work.Climate change affecting the health of the animal ,bird and human also.There are mainly two types of climate change manmade and natural.Manmade occur due to human activities like industrial revolution ,human emission ,deforestation and agricultural ,natural occurs due to flood ,irregular monsoons ,droughts etc. it affecting the agriculture ,water resource ,health and economy in India .

Due to the climate change issues more debate was going on in India ,the Government also taking various steps to reduce climate change then also it was affecting the country more .The climate change affecting not only the present it is affecting the future generation also. So the government should take proper measures to reduce climate change .Because India has a large population and dependence on other ways it affects the rural and low income communities. At the same time India plays a crucial role in global climate action. Understanding climate change in India is essential to protecting the ecosystem ,supporting sustainable development and safeguarding the livelihoods of the people.

INTRODUCTION

Climate change is one of the biggest environmental challenges facing India today .It is a long term change in temperature and weather patterns. Climate change in India is not only in environmental issues but it is also socio, economic and developmental concern.Climate change affect in many way like rising global temperature ,sea level rise ,irregular weather pattern,rainfall and flood etc.These change may damage the ecosystem,reduce agriculture , human

health,and livelihoods. The Indian population highly depends on agriculture due to climate change. They are suffering risk to food security and water availability,leading to significant economic losses. Change in climate patterns can lead to crop failure,food security and economic instability . Due to climate change coastal regions are also facing the risk such as sea level rise,threatening cities and livelihoods. To reduce climate change ,India has taken several steps to protect the environment like implementation of the National Action plan on

climate change (NAPCC), To promotion of renewable energy and participation of global agreement like the Paris agreement .To reduce climate change in India requires coordinated effort among government, industries and individuals to ensure sustainable development.

ORIGIN OF CLIMATE CHANGE IN INDIA

The term climate change is derived from two Greek words "KILMA " which means "inclination" or" slop of the earth",It is about temperature, weather patterns and rainfall etc . It means the average weather condition of a place over a long time.

"CHANGE " The term change derived from the latin word "cambiare" which means "to alter" or "To make different" it menaces any shift or transformation over time. The term climate change refers to long term change in temperature ,rainfall and weather conditions mostly occur due to human activities

HISTORY IN INDIA

The history of climate change can be described in two ways: natural cause and human activities(Anthropogenic).

Ancient and Pre industrial period (Before 1800s); Indian climate change mostly affected by natural factors like

- Monsoon patterns
- volcanic eruptions
- solar variations

Colonial period(1800 -1947) ; climate change mostly affected by human activities like deforestation ,expansion of railway and agriculture etc .

post-independence industrial growth(1947-1990) ; after independent India was focused on rapid industrialization and economic development,So increased use of coal, oil,other fossil fuels and agriculture(green revolution) ,affected the environment.

modern period (1990- present); Rise of green house gas emission leads to global warming

United Nation Framework Convention on Climate Change(UNFCCC).

1992 ;Rio EARTH Summit ; declaration India ratified this.main objective is maintain green house gas.

1997 ; KYOTO PROTOCOL-India signed but did not have target as a developing country

2002 to 2007 ;GROWING RECOGNITION; India initiated National communication to UNFCCC in 2004.

2008 ; National Action Plan on climate change (SAPCCs).

2015; Paris agreement ; India submitted National determined contribution(NDCs).

OBJECTIVE

- To reduce greenhouse gas emission
- To protect sustainable development.
- To protect the forest and ecosystem.
- to strengthen the government policy

CLIMATE CHANGE IN INDIA

The Constitution, for example, makes it the State's job to protect and improve the environment and safeguard forests and wildlife (that's Article 48A). It's not just the government's job, either Article 51A(g) says every citizen should help. Even the right to life under Article 21 includes the right to a healthy environment.

CAUSES OF CLIMATE CHANGE IN INDIA

- Great change in climatic conditions that has been brought forth by large deforestation often made for large-scale agriculture or for urban development. Forests are then large sinks for carbon dioxide since they absorb carbon from the atmosphere; when forests have been denuded, atmospheric levels of CO2 increase greatly.
- Rapidly affecting industries have contributed towards emissions emanating from factories, construction, and other activities in the heavy industry

sector. Besides that, a lot of the industries are now dependent on non-renewable energy sources, which further exacerbates the problem.

- Improper waste management through the burning of biomass and waste also releases carbon dioxide and methane into the atmosphere, thus aggravating the climate.
- Urbanization further contributes to the heat-island associated whereby built-up areas are much warmer than their adjacent rural areas, increasing energy consumption in cooling and heating appliances.

ENVIRONMENTAL LAW IN INDIA

After the Bhopal Gas Tragedy shook the country in 1984, India passed the Environmental Protection Act in 1986. This law gives broad powers to the central government to regulate pollution, set environmental standards, and control hazardous substances. That's the country's go-to environmental law. It aims to keep people, animals, plants, and property safe from environmental harm and makes it possible for the government to fulfill international agreements.

The Air (Prevention and Control of Pollution) Act of 1981 targets air pollution. It created pollution control boards at both the central and state levels to prevent and control air pollution and improve air quality. The Central Pollution Control Board sets standards, advises the government, and coordinates the state boards. States check local air quality, grant permissions for industries, and enforce pollution laws.

The forests conservation Act -1980 ; It is one of the important legislation in environmental law. The main aim of the act is to protect the forest and use of the forest , to prevent deforestation and to maintain ecological balance.This act helps to control deforestation in India and ensure sustainable development.

The wildlife protection act of 1972 ; It is one the other legislation to protect the environment. The

main aim is to protect the wild animal,bird , plants and to ensure ecological and environmental security.

Water (prevention and control of pollution) act of 1974; This act consist of 8 chapter and 64 section main objective of the act is to prevent and control of water pollution , to restoring the water quality and establishment of board ,There are mainly two types board central pollution control board (CPCB) and state pollution control board (SPCB). The main aim is to control water pollution .

The national green tribunal ;(NGT)-2010; It is the quasi judicial board . Main aim to resolve environmental dispute .national green tribunal consist of minimum 10 members and not exceeding 20 members

The biological diversity act ,2002; In India biological diversity act of 2002 was established by the government with convention on biological diversity(CBD).Biological diversity act main aim is to protect the animal, plants,and microorganisms etc,and to promote sustainable development. It is a three tier institutional structure .They are national biodiversity Authority(NBD) at the central level .State biodiversity Boards(SBBs) at the state level .Biodiversity Management Committees(BMCs).

The forest (conservation)amendment act 2023 this act's main aim is to provide for the de reservation of reserved forests, use of forest land for non forest purposes.

ENVIRONMENTAL ORGANIZATION

Environmental organisations play a crucial role in protecting nature ,sustainability and addressing issues like climate change, pollution and biodiversity etc. Environmental organisations coordinate with both National and international organisations.

INTERNATIONAL ORGANIZATIONS

- United nation environmental programme 1972 (UNEP) ,To coordinate

global environmental activities and develop environmental policy.

- World Wide Fund for Nature; (WWF) It is one of the conservation organisations protecting wildlife and endangered species.
- Greenpeace ; mainly focused of climate change deforestation and oceans
- International Union for conservation of nature;(IUCN) main aim to maintain red list of endangered species
- Food and Agriculture organization ; to promote sustainable agriculture and food security.
- International panel on climate change(IPCC); It was established by United Nation it help to provide scientific reports on climate change

INDIAN ENVIRONMENTAL ORGANIZATION ;

- The Ministry of Environmental Forest and climate change (MoEFCC). It is one of the highest environmental authorities in India. It will help to establish law and policy on environmental and forest.
- Central pollution control board (CPCB); This organization helps to control air,water and noise pollution; it will work under the MoEFCC.
- National green tribunal ; It is a special court to resolve environmental disputes and provide speedy justice.
- Bombay Natural History Society (BNHS);It was also one of the environmental organisations it helped for research and wildlife conservation.
- Center for science and environment (CSE); IT will help to publish reports and policy.
- Wild life institute of India (WII); It was a research and training institution for wildlife conservation

- State pollution Control Board (SPCB) ; it will help to control state level water and air pollution mainly in industry and factories.
- The National Biodiversity Authority (NBA); It regulates biological resources and use ,it protects the traditional knowledge of the local community .
- The wildlife crime control bureau(WCCB); It helps to stop illegal wildlife trade.
- The Forest survey of India (FSI) It will help to survey the national forest ,preserve the data and provide a proper plan to how the forest is protected.
- The National Board for Wildlife (NBWL); It will advise wildlife conservation and review the development project.

PRINCIPLES OF ENVIRONMENTAL LAW IN INDIA

In india following various principles through various supreme court judgement and national green tribunal.they are

- **sustainable development ;**

Means For future generations they should not affect the present generation ,we should protect the future generation also. In the case of;

- Rural litigation and entitlement kendra v state of U.P 1985 (Doon valley case) ;supreme court held the environment and the development are not separate, both go together,development should not disturb the environment.
- The Goa foundation v Diksha holiday PVT LTD 2001 The court held The development activities and the protection of environment should go together.
- **The precautionary principle ;** It is a preventive measure ,that means prevention is better than cure.The principle 15 of Rio declaration ;order to protect the environment.
- vellore citizen welfare forum v Union of India the supreme court order to

tanaries to provide compensation to and clean the area.

- A.P. pollution control board v professor M.N Nayudu. supreme court refers to the formulation of precautionary principle.

- **The polluter pay principle** means whoever causes pollution in the environment (person, company, industry) should pay compensation and clean the environment.

- Vellore citizens welfare forum v union of india 1996 the supreme court held to tenancies to pay the compensation for their activities and clean the area,

- M.C .Mehta v Kamalnath 2002 (SPAN MOTELS A CASE); supreme court held every one has the legal duty to protect nature .

- **The public trust doctrine;** As per the doctrine states to protect and preserve the natural resources.(like air, water, forest,rivers and seashores).

- K.M.Chinnappa v Union of India 2003; in this case the court held to withdraw illegal temporary working permission To stop polluting the Bathra river during mining .To stop the company from laying down pipe lines in the forest of national park and also there was a violation of trust.

- M.I.Builders Ltd v Radhe Shyramsahu 1999 court held the public trust doctrine will be applicable and the corporation had violated the duty as

trustee. The agreement was considered as illegal and void.

GOVERNMENT MEASURE

The government took various measures to reduce environmental issues in India cooperating with law, policy and international organization such as

1)The national Action plan on climate Change 2008(NAPCC) There are mainly eight National mission

- National Solar Mission
- National mission for Enhanced energy efficiency
- National water mission
- National National Mission for Sustaining the Himalayan Ecosystem
- National Green India Mission (increases forest cover)
- National Mission on sustainable Habitat
- National Mission for sustainable agriculture
- National Mission on strategic knowledge for climate change

2) National solar Mission ; it will come under the Jawaharlal Nehru National solar mission. It will promote solar energy and the main aim is to reduce fossil fuels.

3) Paris agreement commitments ;India is a member of this agreement . The main aim is to reduce emissions of GDP and to achieve net zero emission by 2070.

4) Renewable Energy; India expansion of solar ,wind and hydropower,it was under the Ministry of New and Renewable Energy .

5) National Electric Mobility Plan ; it will help to increase electric vehicles, it will help to reduce air pollution ,fuel consumption and sound pollution etc.

6)Afforestation and forest conservation ; it is the program of green india mission , It help to

establish forest conservation act and increase the carbon sink through plantation.

7) Swachh Bharat mission ; main aim to reduce methane emission.

8) Pollution control law ; There are various law in India to reduce environmental pollution like Environmental protection act , air (prevention and control of pollution) act , Water (prevention and control of pollution) act .etc

CHALLENGES IN INDIA

India faces various environmental challenges because of rapid population growth ,industrialization ,urbanization etc. Air pollution is one of the main problems in India. Due to air pollution more people were suffering various diseases like respiratory diseases, asthma and premature death because of vehicle emission, industrial smoke ,construction dust etc.water pollution also one of the main problems in India example ; Ganga river pollution ,and Yamuna river pollution. The people affected by drinking water shortages because of industrial waste, sewage and agriculture etc .another major issue deforestation ,loss of biodiversity because of cutting trees , mining etc.

Climate change is one of the major issue it affecting agriculture Indian economy also.Industrial pollution also one of the major issue because of industrial pollution climate change, environmental pollution various disease water also affecting .

CONCLUSION

Climate change is one of the most environmental problems India is facing today. Climate change is affecting the ecosystem, human health , agriculture, and economic development because of changing weather pattern ,rising temperatures affecting the country. Environmental issues are affecting the whole world.All together should cooperate to reduce the environmental problem then only we can reduce the environmental issues and protect the future generation . Sustainable development is one of the principles to balancing environmental protection

.Sustainable development's main aim is to ensure a safe and healthy planet for future generations. Due to climate change, consequences are irreversible, affecting human beings ,plants ,animals also.India has to take proper measures ,proper implementation of law and strict punishment of violating the rules and doing illegal activities . All should cooperate together` then only we can reduce the environmental issues and protect the future generation.

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