

IMPACT OF CLIMATE CHANGE ON HUMAN BEINGS

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ABSTRACT

Among all the challenges before the human being the climate change is one of major challenge. As due to climate change not only the flora and fauna is endangered but also the existence of human being. Due to the climate change there is increase in the temperature of the earth, rise in sea level, rise in frequency of Hurricane/Cyclone, increase in displacement of people, increase in food Insecurity, which ultimately causing danger to human existence. Diseases like Lung cancer, Malaria, Dengue, skin infections, water born diseases etc. are also the results of climate change. So, from many years climate change has become the global challenge and various principles have been made in various declarations, treaties or conventions like Stockholm declaration, Montreal Protocol, Brundtland commission, Earth Summit which also includes agenda 21 and convention on climate change and biodiversity, United Nations framework on climate change in which conference of party is being held in each and every year, Paris Agreement, Agenda 2030 etc. Therefore, from above it is clear that a lot of actions to combat the climate change have been taken at the global and consequently at national level but keeping in mind the current climate emergency, now it's time to take the individual actions too, in addition to global and national actions and policies. This paper, in addition to the global action taken, suggest some individual's new and innovative ideas (on the basis of survey) to combat the climate change and its impact.

KEYWORDS:- *Sustainable Development, Intergovernmental panel on climate change (IPCC), United Nations framework Convention on climate change (UNFCCC), Cardiovascular diseases.*

INTRODUCTION

Climate is the average weather condition that present over a long period of time. From past many years, there is too much change in the climate and this change can be observed from the various factor like increasing temperature of the Earth, rise in sea level, increase in no. of diseases, rise in frequency of flood etc. which are endangering the existence of human being and diseases like Lung cancer, cardiovascular diseases, water born diseases, impairment in hearing capacities etc. Keeping in view the above impact on human being, the idea of sustainable Development was immersed. The word 'Sustainable Development' was first used in 1970s in Cocoyoc declaration. It means to bring development without compromise the ability of future generations to fulfill their needs. So, to save the environment, various treaties or conventions were made like Stockholm declaration, The Montreal Protocol (ozone treaty), Brundtland Commission, Earth Summit, Paris Agreement etc. The earth summit also includes convention on climate change and biodiversity. IPCC, UNFCC, The intergovernmental negotiating committee for framework Convention on climate change was established. The convention on climate change entered into force on 21st March, 1994. The Conference of parties to convention (COP) became convention's ultimate authority. It sets an overall framework for intergovernmental effort to tackle the challenges posted by the climate change and parties are meeting every year for that, till date. Some Sustainable Development Goals (SDG) which are adopted in above treaties or conventions are, State responsibility to protect environment, Environment as fundamental human right, Poverty elevation, Need of women Empowerment, Reducing carbon emission, Shared responsibility of all states etc.

OBJECTIVE OF PAPER

- To study impact of climate change on human body and factor responsible for climate change.

- To suggest some new and innovative step that should be taken by an individual at one's own level.
- To suggest the scope, where the help of government is required by the individual.

RESEARCH METHODOLOGY

This research is the mixture of doctrinal and non doctrinal research. The researcher have visited various website on the internet, Library and conducted survey from people.

REVIEW OF LITERATURE

As per United Nation's report 2017 on climate change impact on human health:-

Climate change is expected to exacerbate health problems that already pose a major burden to vulnerable population.

As per IPCC

Its report states that averting a climate crisis will require reinvention of global economy. By 2040, there could be food shortage inundation of coastal cities and huge refugee crises in states.

Science Organization Climate Research of America

According to it, as per current scenario of rising level of ocean, it is estimated that up to 2050 more than 30 cities of world including Mumbai, Jakarta, Bangkok, Hongkong, will submerge in ocean water and 30 crore people will be affected and would be without habitation.

IMPACT OF CLIMATE CHANGE ON HUMAN BODY

Although the climate change have the impact on each and every individual, but it effects the vulnerable people most like the people who are aged, infirm, youth, child, pregnant women etc.

There are three categories of health risk:-

- i. Direct acting effects: - These are due to heat waves, amplified air pollution, physical weather disaster.
- ii. Impact mediated via climate related change in ecosystem and relationships e.g. crop yields mosquito, ecology, marine productivity.
- iii. Indirect effects:-These are related to improvised, displacement, Resources conflict and post disaster mental health problems.

DETAILS OF RESPONSIBLE FACTOR FOR CLIMATE CHANGE AND ITS IMPACT

Rise in Temperature

Burning of fossil fuel, Vehicles, Industries, Thermal power point, large scale hearing of cattle, are emitting heat trapping green house gases like CO₂. The increase in these gases is trapping the Sun's heat and increasing the earth temperature. Europe noticed highest temperature ever in recorded history. In this July Paris recorded highest temperature of 42.6°C.

Rise in sea level

Due to global warming, glaciers are melting due to which the level of sea is rising, which is endangering the life of people living in coastal areas. According to Science Organization Climate Research of America, as per current scenario of rising level of ocean, it is estimated that up to 2050 more than 30 cities of world including Mumbai, Jakarta, Bangkok, Hongkong, will submerge in ocean water and 30 crore people will be affected and would be without habitation.

Hurricane/Cyclone

Due to the climate change the hurricane/Cyclone will become stronger and intense. For example cyclone Thane, Gardai, Ockhi and Gaju have affected the Tamilnadu, Fani in Odhisa, Vayu in Gujarat caused devastation.

Flood

Flood wreaked havoc in many countries, like in India, in Assam, Himachal Pradesh, Mumbai, Karla and Bihar recently in this year.

Food Insecurity

Due to global warming, there will be signified decline in the production of Soya, Rice, Wheat and mage.

Displacement

Due to the rise in temperature or heat waves people are displaying from heat place to cold places which results in unemployment and exploitation of natural resources.

Diseases

Tuberculosis, Hepatitis, Ebola, Respiratory problems, deafness, hearing impairment, Malaria, Dengue diarrhoea, Cholera etc. are highly sensitive to climate condition.

Heatstroke

Due to heatstroke there is a risk of cardiovascular, respiratory diseases and working conditions become unbearable.

Forest fire

As the temperature of the earth rises, it causes the danger of forest fire like recently happened in Amazon forest.

Biodiversity Loss

Due to increasing temperature of earth many of species got extinct which is danger for the balance in biodiversity. Even deforestation for human habitant is also a reason for biodiversity loss.

Population Explosion

It is one of the reason or basis of many other factors like if there is increase in population then there will be more emission of CO₂, CFC (Chlorofluoro Carban), more human waste will be generated, to fulfill the needs of increased population more industries have to established which ultimately increase pollution.

ACTION TAKEN TO COMBAT THE CHALLENGE OF CLIMATE CHANGE

To combat the impact of climate change, time to time different declaration was made, convention or treaties conferences were held and forums was established at the global level like:-

Stockholm declaration on Human Environment (1972)

In this declaration, 114 Nation participated and they agree on declaration of the principles and action plan. As per this declaration, Right to good environment is fundamental right of everyone and everyone has responsibility to protect and improve environment for present and future generations. Similarly among other principles, Safeguarding the natural resources, use of renewable resources, Safeguarding heritage of wildlife and its habitant, precautionary principles that no serious or irreversible damage to environment, Rational management of resources, Rational planning, Education in environment, Scientific research duly in context of environment problems, Recognized the need of international level of cooperation.

The Montreal Protocol (ozone treaty), 1987

It came into force on January 1, 1989 with main aim to elimination of ozone depleting substance like CFCs at an unfair rate irrespective of development stage of country. There were 48 countries who signed this pact, mostly developed countries. India and other developing countries like Malashiya and China refused to sign it because of pragmatic consideration and discrimination clause in protocol.

Brundtland Commission (1983)

It is also known as World Commission on Environment and development. It is this commission that brought the term 'Sustainable development' in common use. According to it 'Sustainable Development' is a development that meet the need of present without compromise the ability of the future generations to meet their own needs. Sustainable Development also requires that the negative impact on the quality of air, water and other natural element are minimised so as to sustain the ecosystem's overall integrity. As per commission, adequate environment for health and wellbeing are the right of all human being, it impose duty on the state for conservation and sustainable use, to set adequate environment protection standards, to make prior environment assessment of proposed activity, to cooperate in good faith with other state etc.

Earth Summit (1992)

The United Nation Conference on Environment and Development (UNCD) also known as earth summit was held in June, 1992 at Rio de Janeiro wherein more than 150 government representatives participated. It put the world on the path of sustainable development. Some of the major achievements of this summit are in the form of following documents which it produced:

- 1 **The Rio Declaration on Environment and Development:** - 27 principles were declared in this declaration. Some of main principles are :- Human being as center of sustainable development, duty is caused upon the state that not to damage the environment of other states, Sustainable development and environment protection can't be taken in isolation, eradication of poverty, cooperation among states, International transfer of scientific knowledge needed for sustainable development, participation of citizens, need of effective legislation by states, compensation to victim, precautionary principle, polluter pays principle, need of empowerment impact assessment for proposed activity, Respect for international law, cooperation among the people and state etc

- 2 **Agenda 21**

It is the overall blue-print for local, national, regional and global actions to affect the transition to sustainable development in the 21st century. This document is divided in four following sections:-

Section I**Social and Economic: Dimensions**

It includes the recommendations for internal cooperation to accelerate sustainable development; combating poverty; changing compensation pattern; protecting and promoting human health; demographic dynamics and sustainability; promoting human sustainable development; and integrated environment and development in decision making.

Section II**Conservation and Management of Resources**

This section is focused on protecting the atmosphere; integrated approach to planning and management of land resources; managing fragile ecosystem; combating deforestation; promoting sustainable agriculture and rural development; conservation of biological diversity; protection of oceans, environment and management of biotechnology; protection of quality and fresh water resources, environmentally sound management of solid waste and sewage - related matters; safe and sound management of radioactive wastes.

Section III**Strengthening the roll of major group**

To support the agenda 21 it provides for global action for women towards sustainable and equitable development; youth and children in sustainable development; recognising the roll of indigenous people and their communities; strengthen the roll of worker and trade union, business and agency, of farmers, scientific and technical community and also on strengthening the role of non government organization for sustainable development.

Section IV**Means and implementation**

It relates to financial resources and mechanisms; transfer of environmentally sound technology; science for sustainable development, cooperation and capacity building; public awareness and training; promoting education, public awareness; and training; national mechanism and international cooperation for capacity building; international legal instrument and mechanisms and information for decision making.

3 Forest principles

To support the sustainable management of forests world wide a set of non-legally binding authoritative principles was set up. There is an urgent need for consistent action for Conserving and sustaining forest resources.

4 Convention on Climate Change and Biodiversity

At Rio conference, the world community showed unanimity on two aspects; to prevent global climate change and eradication of biologically diverse species. Therefore, two legally binding conventions i.e. "Convention on climate change "and "convention on biodiversity" was signed by representative of 150 countries. The first convention required the state to take step to reduce this emission of gases believed to contribute to global warming.

5 United Nations Framework Convention on climate change:-

It is a treaty concerning environment at the international level adopted on 9 May, 1992, and enforced on 21 March, 1994. It is established with the aim of 'Stabilized green house concentration in atmosphere at a level that would stop dangerous anthropogenic interference with climate system. It sets non-binding limit on green house gas emissions for individual countries. **The convention parties to convention (COP)** became the convention's ultimate authority. The parties to convention met annually in conference of parties since 1995. Kyoto protocol was concluded which legally binding the parties to reduce greenhouse gas emission. There was an agreement to limit global warming to below 2°C in United Nation climate change conference. On 4 Dec, 2016, Paris Agreement was entered into by the different countries, governing emission reduction from 2020 on through commitment of countries in nationally determined contributions. In this agreement the target was lowers to limit up to 1.5°C.

6 Intergovernmental panel on climate change (IPCC)

It was established in 1988 by World Meteorological Organization and United Nation Environment Program and endorsed by the United Nations General Assembly. Its reports help the UNFCCC to control work. Its reports include the "scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation".

7 Agenda 2030

It is principles framed by United Nations for sustainable development, to be achieved up to 2030, popularly known as Sustainable Development Goals (SDG). 17 principles and 169 targets have been put to achieve. These principles are interconnected to combat the situation of climate change. The main SDG set up to end poverty and hunger, to achieve food security, to improve food security, to improve nutrition and permote sustainable agriculture, to ensure healthy life and well being of the people. to ensure equitable quality education and lifelong Learning opportunity to all, to achieve gender equality and empower all the women, ensure availability and sustainable management of water and sanitation for all, to ensure access to affordable and reliable sustainable and modern energy for all, to ensure full productive environment and decent work for all, reduce inequalities between different countries, to ensure sustainable consumption and production pattern, to take urgent action to combat the climate change and its impact. Consumption and sustainable use the ocean, sea's and marine resources for sustainable development, protect, restore and promote sustainable use of terrestrial use if ecosystem, provide justice for all and build effective , accountable, and sustainably manage forest, to combat desertification, and halt biodiversity loss and global partnership for sustainable development. In SDG-B:-it contains the principles to combat the climate change and its impacts. These principles includes

- Decision of the countries to make national polices, strategies and planning for climate change.
- To improve education and awareness raising
- To strengthen resilience and adaptive capacity to climate related hazard and natural disasters.
- To implement the commitment undertaken by the developed countries, parties to UNFCCC, where all decided to create a fund \$ 100 billion annually by 2020 to address the need of developing countries
- To promote proper mechanism
- In goal UNFCCC acknowledged, as primary interest and intergovernmental form for negotiate the global research.

From above it is clear that global actions are being taken to combat climate change and its impacts. Similarly, national action due to above are being taken but now there is a time to take the action at individual level too as it is not only the government duty to take action or initiatives but of the individual also. So every person must come forward to combat the crises of climate.

INDIAN POSITION

India is a developing country and also signatory of many treaties. So, the legislatures have made some Act and Provisions in its Constitution. Even Indian Judiciary have held that everyone have the fundamental right under article 21 of the constitution to live in peaceful and healthy environment and gave a lot of judgments on environment. Similarly,

Executive have made various plans to combat the crises of climate change. The details of above are as under:-

Constitutional Provisions

The Constitution of India, in its preamble, article 48A and 51A (g) contain provision regarding safeguarding and protection of environment.

Various Acts and Authorities

- The Water (prevention and Control of pollution) Act, 1974,
- The Forest (Conservation) Act, 1980.
- The Wildlife (Protection) Act, 1972.
- The Air (prevention and Control of pollution) Act,1981,
- The Environment(Protection) Act,1986,
- National Green Tribunal established under National Green Tribunal Act, 2010 etc.
- Center Pollution Control Board
- State pollution control Board

Executive actions

India have also made National Action Plan on Climate Change which includes

- National Solar Mission,
- National Mission for Enhanced Energy Efficiency,
- National mission for Sustainable Habitat,
- National Water Mission, Green India Mission,
- National Mission for Sustainable Agriculture,
- National Mission on Strategic Knowledge for Climate Change

JUDICIAL DECISIONS

Hon'ble higher judiciary gave commendable decision in various cases some of important judgments are as under:-

1. Rayland Vs Fletcher

Doctor of strict liability was propounded i.e. who for own purpose bring on his land or collect or keep any mischievous thing, he must keep it at his peril otherwise he will be liable for damage.

2. Union Carbide Corporation vs. Union of India

This case was popularly known as Bhopal gas tragedy case. The doctrine of absolute liability was propounded that if an enterprise does any hazardous activity which results in harm to anyone by reason of mishaps in operations of such dangerous and unsafe movement then such enterprises is absolutely responsible.

3. Vellore citizen's Welfare forum Vs Union of India

The Hon'ble Supreme Court held that Pollution Pays Principle is essential features of sustainable development. As per this principle polluter pays for harm and damage to natural environment.

The Hon'ble Supreme Court also held that sustainable development is a viable concept to eradicate poverty and improve the quality of human life while living with in carrying capacity of supporting ecosystem.

Despite of all action taken and judicial decisions still the pollution is at alarming stage in India and it has differently affected the life of people. For example a 28 year old girl found to have lung cancer although she or no one at her home has smoking habit but doctors found that it is only because of pollution.

4. Damodar Rao Vs S. O Muncipal Corporation Hyderabad

Held that environment pollution would be violation of fundamental rights to life and personal Liberty enshrined under article 21 of the Constitution.

5. Ratlam Municipality Council Vs Vardhichand

In this case Hon'ble Supreme Court recognised Public Interest Litigation as its constitutional obligation and held it is its duty in upholding the social justice component of rule of law by fixing liability on statutory authorities to discharge their legal obligation to the people in abating public nuisance and making environment pollution free.

6. M.C.Mehta Vs Union of India

The Hon'ble Supreme Court directed Union Government obliged to issue direction to all the state government and union territories to enforce through authorities, as a condition for license on all cinema halls, to obligatory display free of expenses, not less than 2 slide or message on environment amid such show.

Similarly the other important judgments on climate change or on environment are Ban on firecracker, ban on entry of more than 10 year old diesel engine vehicle in Delhi etc.

AIR QUALITY INDEX

The air quality index published by Centre pollution control board of India which shows quality of air on Oct 30,2019 at 4 p. m. on the bases on average of 24 hours, have categorized the impact of air pollution in following six categories:-

Good	Minimal Impact.
Satisfactory	Minor breathing discomfort to sensitive people
Moderate	Breathing discomfort to the people with lungs, asthma and heart diseases
Poor	Breathing discomfort to most people on prolonged exposure.
Very Poor	Respiratory illness on prolonged exposure.
Severe	Affects healthy people and seriously impacts those with existing disease.

In above index Baghpat, Ballabgarh, Bulandshahr, Delhi, Faridabad, Ghaziabad, Greater Noida, Hapur, Jind, Kaithal, Meerut, Noida and Panipat are found to be in severe category.

SUGGESTIONS

In addition to the proper implementation of the above measurement taken at global and national level, some suggestions are given by people in survey to combat the problem of climate crises like plantation, use of renewable energy, use of principle of reduce, reuse and recycle etc. Some other new and innovative suggestions are given by the individuals to combat the crises of climate change. These are as under:-

- An individual should have love and concern for the Mother Nature. If they have so, only than they would not pollute the nature and would take care of each and every being.
- Information Technology professional could be given work from home for 2 or 3 days in a weak as it will reduce the traffic in the roads and consequently the emission of harmful gases, which is responsible for climate change.
- Cab or pool car system could be used or it could be made mandatory for the employers to provide cab for the employees so that traffic and consequently the harmful gases emission could be stopped.

- No car should be allowed for a person riding alone within 50 km if public transport is easily available and have fast services.
- Use of plastic disposal must be stopped instead of this; washable utensils should be used like in Langar, in Gurudwara.
- Construction of building must be done as per green building concept.
- Empower your wife, daughter and daughter in law, by education because an educated woman can educate entire family as whatever learnt or made habit in childhood that remain forever. So, an educated woman can inculcate the habit of saving climate.
- Individual should take the measure for population control which is one of the basic reasons for climate change.

Suggestions given by the people where they need the help of government to combat climate crises:-

- ★ Some persons are very fond of planting but in autumn season they have no proper disposal of shedding leaves, so they have no other option except burning the dry leaves. Here the people are seeking that government should provide door to door collection of dry leaves (at least in autumn season). After collection, the government should make arrangements for decomposition of these and manure formed can be distributed among farmer for free of cost.
- ★ Some people also suggested that the government should bear the cost if any damage is caused due to falling of trees or its branches.
- ★ Government should provide time to time repair/maintenance of trees like putting in proper shape, cutting any part which is endangering to the people nearby.
- ★ Government should award the people who do best work to combat climate change.
- ★ Carbon tax should be imposed at national and global level.
- ★ There should be evaluation of implementation of government's policies and action taken by the government to combat climate crises.

CONCLUSION

Climate change has been a cause of concern from many years but now it is a time for climate emergency, so in addition to all proper implementation of the global action i.e. treaties, conventions, the individual action with firmness are needed. Towards this, whatever is done by 11 years climate activist Miss Ridhima Pandey and refusal to accept the environment award by Swedish climate activist, Ms. Greta Thunberg of U.S by saying the climate movement needed people in the power to start to “listen” to “science” not awards is really commendable. So, now everyone should come forward to combat the climate change and its impact as it is endangering, one's own life.

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DECLARATION

RESPECTED SIR/MADAM

This paper is presented by me in international seminar held at 'GITA INSTITUTE OF LAW', at Panipat on Nov 10, 2019 and selected as best presenter but not published anywhere.

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