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# THE MAIN PROTOCOL AND OTHER IDENTIFIED STRATEGIES TO ADDRESS CLIMATE CHANGE & ITS IMPACT ON HEALTH

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## ABSTRACT

*Climate change is a global crisis that has a direct impact on human health. Rising temperatures, extreme weather events, and changes in precipitation patterns are affecting the health of individuals, communities, and ecosystems worldwide. To address this challenge, a protocol and strategies have been identified that aim to mitigate the impact of climate change on health. The main protocol involves reducing greenhouse gas emissions through the adoption of cleaner and renewable energy sources, improving energy efficiency, and sustainable transport. Other strategies include enhancing public awareness, building climate-resilient communities, promoting sustainable agriculture, and improving health systems' preparedness for climate-related emergencies. Implementation of these measures can help reduce the risk of climate-related health problems such as heat stress, respiratory illnesses, and vector-borne diseases. The protocol and strategies identified provide a roadmap for governments, organizations, and individuals to take action against climate change and protect the health of the planet and its inhabitants.*

**Keywords:** *Climate Change, Global, Health, Green House Gasses*

## INTRODUCTION

Climate change is a serious risk to poverty reduction and could undo decades of development efforts. While climate change is global, its negative impacts are more severely felt by poor people and poor countries**.** Human beings stand on the sentinel of living world in environment. They shape and reshape the processes of environment in absolute accordance to technological capacity. The Environment acts as service sector supporting and nourishing the living beings in world

The complex and dynamic interaction of biotic and abiotic components serve the cause of humans as well as other living beings. The food web complex supports the feeding links and helps in preservation of whole living kingdom. Initially the tribal life was heavily dependent upon environment for its survival. Therefore the principle of "live and let live " was adopted for sustenance. This style and approach of life was termed as Deterministic approach. It holds the Nature as dictator dictating to Human beings who have no choice but to follow such dictates. Even environmentalism was supposed as main condition for sustenance of human life. Aristotle on analyzing the pattern of living held the habitability of location depends how far it stands away from equator. Hence the human beings shared a good relationship with environment.

Climate is defined to as average weather conditions for a considerable period of time usually 35 years. The parameters temperature, wind, pressure etc makeup the weather complex of atmosphere. The daily state of being in these conditions is very essential for whole living complex on planet earth. There is an inter linking pattern of living and non living components which determines the state of affairs. The natural makeup of earth gave it a sobriquet of blue planet where water and temperature balance helps in survival not so on other planets. The disturbance in actual state of affairs among any of these components sends red signal along length and breadth of whole complex. Climate change largely precepted to anthropogenic causes is on way to create tension in the normal functional aspects of planet.

Literally climate change in simple understanding deciphers to abnormal behavior of any of the parameters of weather. This erratic behavior creates tension in whole string. The description of change in normal behavior of temperature usually its rise is depicted as climate change. There are two reasons behind climate change Natural and Anthropogenic. Planet earth has witnessed intermittent periods of extreme climatic conditions. As has been proved the tropical and sub tropical latitudes of today have witnessed ice age in geological past. The recurring periods of cold and warm phases on surface of earth have occurred naturally. On the other hand solar output variations, Milankovitch cycle, volcanic dust hypothesis and continental drift have shared and are sharing the cake in climate change from natural causes. However the contemporary realization of climate change is attributed to anthropogenic causes. Climate change is attributed to rise in temperature due to abnormal human environment relation. The natural system which maintains a habitable climate especially temperature for living world is termed as green house or glass house. The atmosphere contains carbon dioxide and others which acts as blanket for trapping long wavelength terrestrial radiations. Such gases along with CO2 are called GHGs. T his effect of keeping planets temperature to habitable level is known as green house effect. Had there been no

atmosphere earth would have been a cold desert.Any rise in composition of these atmospheric gases due to human life style leads to rise in temperature of planet earth. This phenomena is termed as Climate change in simple description but the range of effects on other parameters due to such rise in is also included in the ambit of climate change. Inter-governmental panel on climate change (IPCC) established due to collaboration of UNEP (United Nations environment programme) and WMO (world meteorological organization) of experts which maintained that present nature of climate change is human induced. It further established in its assessment report that all the long lived GHGs - CO2, CH4, N2O (nitrous oxide) are emitted due to human activities.

The IPCC brings out assessment reports to gauge the level of rise in temperature and other related parameters of climate change. According to 4th assessment report (2007) it held that 11/12 years in between 1995 to 2006 have been records of top warmest years. In addition most applied parameter called Climate Sensitivity demarcated in 3rd assessment report projected that by 2100 surface temperature of earth will register increase up-to 5.8 degree Celsius adding to present average of 15.2 (WMO).

Now when the rise in temperature is due to human activity is clear the necessary modification in human lifestyle is emerging need of hour. Climate change has various outlined repercussions for humanity. The 1$^{st}$ and foremost impact of rise in mean sea level due to thermal expansion and melting of glaciers. The projected rise of .9 m as per IPCC by 2100 due to climate change is supposed to be cause of submergence of numerous islands and coastal areas. As per national reports of Maldives and Mauritius the island nations are facing an acute crisis of submergence due to rising sea level. In backyard A and N islands are also on the danger mark. Erratic and abnormal behavior of weather parameters. Intense flooding at one place while as severe draught at others. The precipitation pattern over whole globe may deviate from rule. The ecological concerns would rise due to destruction of numerous habitats. If the continental glaciers melt at alarming rate the snow leopards and bears of such habitat may face extinction.

Change in agricultural patterns due to severe floods and erratic behavior of climate thus directly impacting feeding link of human beings.

The habitable patterns of whole living system would change. Temperate climate adopted living beings may face threat in case of rising temperatures and so so on. These are but some broad impacts of climate change. All in one is to sum up the impacts "Habitability of earth will face crisis in coming future".

When the climate and its impacts uncovered their ugly head mankind started to take pains. The classical approach of awareness after Sierra Club and Club of Rome cautioned about irrational exploitation of environment and questioned mad race for development. They held that "there's no blind opposition to development but opposition to blind development". After this UNCED also known as Stockholm conference was held for international collaboration to preserve the environment as a heritage of mankind . Thereafter Earth summit changed whole narrative from theoretics to action oriented strategy to curb rise in temperature up-to possible minimum level. It also tried to correct the anomalies through Polluters pays principle and kept the developing and underdeveloped outside the commitment bracket. Historical role of pollution in case of western developed countries was presumed to be cause of contemporary climate change impacts. It evolved certain measures to keep global rise comparable to pre industrial levels because the initiation of industrial revolution has raised GHGs composition in atmosphere. Agenda 21 and COP were started to keep the agreement live in letter and spirit. The recent COP 15 held in Paris France outlined less than 2 degree Celsius above pre industrial level through binding emission reduction targets for participating countries. The agreement has come into operations. India has committed 33% reduction up-to 2050 in emissions to participate in global efforts. Clean development mechanism, emission trading etc are, but numerous instruments to decrease the level of carbon dioxide in atmosphere. Apart from this countries have took domestic steps to combat climate change. Here in india NAPCC (National Action Plan on Climate) is in process including nine ancillary missions to abide by emission cut target.

Afforestation, use of non conventional sources of energy, replacement of carbon dioxide emitted fuel in transport and industries through cleaner fuels can be delineated as areas of focus. For this to happen intra as well as international collaboration is must. Transfer of technology is oft repeated adage but in reality that hardly ever happens

The developing world is constrained of such technological solutions to switch over to renewable energy sources. And the inserious attitude of developed world is no more hidden. Before couple of years Donald Trump signed exit from Paris Agreement by calling climate change hoax. Although international efforts have evolved a wide array of dimensions for combatness of climate change but the implementation stage is facing acute crisis. As far as awareness level is concerned the propounders are themselves doubting the global issue. Climate change is a reality whose repercussions are already visible through receding of glaciers. The sloganeering phase is over. There's a need for sustained implementation of outlined strategy to combat climate change like Kyoto Protocol. The solution lies in sustainable development in light of limit to growth principle "Earth is like a spaceship with no outer source of supply". To call climate change a hoax is illusion of humanity in 21st century . It's only the judicious utilization of environment and its resources in spirit of sustainability that will ensure survival of human population else , humans will encounter disastrous end.The Latest IPCC report reiterated its stand for Climate change and correlation of Global Greenhouse Gas Emissions. It puts the three countries of south Asia vis India , China and Pakistan on red signal. The report quotes the recent storms along length and breadth of planet and presumes their intensity in years to come. The Son's hindsight is father's far-sight. The humanity needs to awake and take serious efforts for combat of climate change.

## IMPACT OF CLIMATE CHANGE ON HEALTH

Global climate change would affect human health via pathways of varying complexity, scale and directness and with different timing. Similarly, impacts would vary geographically as a function both of environment and topography and of the vulnerability of the local population. Impacts would be both positive and negative (although expert scientific reviews anticipate predominantly negative). This is no surprise since climatic change would disrupt or otherwise alter a large range of natural ecological and physical systems that are an integral part of Earth’s life support system.

Via climate change humans are contributing to a change in the conditions of life on Earth. The more direct impacts on health include those due to changes in exposure to weather extremes (heatwaves, winter cold); increases in other extreme weather events (floods, cyclones, storm-surges, droughts); and increased production of certain air pollutants and aeroallergens (spores and moulds). Decreases in winter mortality due to milder winters may compensate for increases in summer mortality due to the increased frequency of heatwaves. In countries with a high level of excess winter mortality, such as the United Kingdom, the beneficial impact may outweigh the detrimental (Langford & Bentham, 1995; Rooney et al. 1998). The extent of change in the frequency, intensity and location of extreme weather events due to climate change remains uncertain. Climate change, acting via less direct mechanisms, would affect the transmission of many infectious diseases especially water, food and vector-borne diseases and regional food productivity (especially cereal grains). In the longer term and with considerable variation between populations as a function of geography and vulnerability, these indirect impacts are likely to have greater magnitude than the more direct (McMichael & Githeko, 2001; Epstein, 1999). For vector-borne infections, the distribution and abundance of vector organisms and intermediate hosts are affected by various physical (temperature, precipitation, humidity, surface water and wind) and biotic factors (vegetation, host species, predators, competitors, parasites and human interventions). By reflecting the increased retention of heat energy in the lower atmosphere, global warming also affects the atmospheric heat budget so as to increase the cooling of the stratosphere (Shindell et al., 1998) Should this cooling persist, the process of ozone depletion could continue even after chlorine and bromine loading (by human emission of ozone-destroying gases) starts to decline. If so, the potential health consequences of stratospheric ozone depletion (increase in incidence of skin cancer in fair-skinned populations; eye lesions such as cataracts; and, perhaps, suppression of immune activity) would become an issue for climate change.

## CONCLUSION

Climate change is happening and it is caused largely by human activity. Its impacts are beginning to be felt and will be worsen in the decades ahead unless we take action. The increasing rate of global warming consideration of carbon dioxide and other green house gas emissions from human activities have led to climatic changes and environmental degradation, which in turn have resulted to great challenges in relation to diseases and human health. Many diseases which were previously unknown in certain climatic zones are now finding their way to such areas, due to changes in the weather conditions. Further, many diseases that had been thought extinct are reemerging in areas with altered climatic conditions that favor their comeback. It is therefore important that stakeholders and decision makers at industrial, government and international policy levels come up with stringent and workable means of cutting down on green house gases emission to combat the spread of global warming effects, and the resultant climate change, which has produced devastating impacts especially among poorer nations. Further, there should be increased funding of adaptation and coping programs and projects in affected areas to minimize the impacts on human health and curtail the spread of diseases.

## References


- Githeko, Andrew K., and Alistair Woodward. "International consensus on the science of climate and health: the IPCC Third Assessment Report." *Climate change and human health: risks and responses*, 2003.
- McMichael, An. *Climate change* thony J., et al *and human health: risks and responses*. World Health Organization, 2003.
- Ramachandran, S., et al. "Radiative impact of the Mount Pinatubo volcanic eruption: Lower stratospheric response." *Journal of Geophysical Research: Atmospheres* 105.D19, 2004
- Change, Climate. "Intergovernmental panel on climate change." *World Meteorological Organization*, 2007

- Mann, Michael E., Raymond S. Bradley, and Malcolm K. Hughes. "Global-scale temperature patterns and climate forcing over the past six centuries." *Nature*, 1998.
- Mishra, Mukesh Kumar, Nilay Khare, and Alka Bani Agrawal. "Scenario analysis of the CO2 emissions reduction potential through clean coal technology in India's power sector: 2014–2050." *Energy Strategy Reviews*, 2015.
- Reshi, I. A. (2023). COVID-19 Pandemic and Teaching and Learning: A Literature Review. *MORFAI JOURNAL*, *2*(4), 820-826.
- Reshi, I. A., & Sudha, T. (2021). Self-Help Group movement has made great strides in the fields of women empowerment. *Turkish Online Journal of Qualitative Inquiry*, *12*(7).
- World Health Organization.World Health Report. *Reducing Risks, Promoting Healthy Life* . Geneva, Switzerland: World Health Organization; 2002.
- Reshi, I. A., & Sudha, T. (2023). Women's Economic Involvement and Self-Help Groups in the Pulwama District of Jammu and Kashmir. *MORFAI JOURNAL*, *2*(4), 872-882.
- Department Environment Conservation.Air Pollution Economics. *Health Costs of Air Pollution in the Greater Sydney Metropolitan Region*. Sydney, New South Wales: Department of Environment Conservation ; 2006.
- Dar, S. A., Muthukumar, J., & Reshi, I. A. (2023). KASHMIRI WOMEN AS THE AGENT OF CLIMAT CHANGE. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, *3*(1), 213-216.