Preface

The different dimensions of industrialization and development cannot be measured by a single yardstick but the harmful effects of industrialization and development are equally felt by the inhabitants of all ecosystems throughout the globe. One of the prominent instances by which such connection can be easily established is through the environmental problem of global warming. Global warming refers to the presence of greenhouse gases in the atmosphere in concentrations that are harmful for organisms inhabiting the different ecosystems existent in the planet. The impacts of global warming are observable in the natural environment through the melting of glaciers, changes in temperatures, disruptions in weather events, changes in precipitation levels, rise in sea-levels, etc. The various life forms inhabiting the earth are equally affected as a result of global warming with changes occurring in flowering seasons of plants, changes in the breeding seasons of animals, increase in the numbers of pathogens, etc. The same picture gets repeated also in the human environment with violations of human rights happening rampantly as a consequence of global warming.

Such harmful consequences of global warming inherently raises the question as regards who should be held accountable for such increase in the concentration of greenhouse gases in the atmosphere. Tracing the answer to such question the obvious answer that evolves is that it is human induced global warming that stands responsible for the current and future impacts to be observed by the world. The developed countries of the world hold the primary responsibility in this case as under the garb of development, such countries have indiscriminately exploited the environment and resulted in the increase in the concentration of greenhouse gases. The developing countries have also contributed their share to such increase but on comparison between their contribution to the menace and their share of the sufferings, their contribution appears miniscule. It would however be pertinent to mention herein that certain emerging economies like China and India have increased their contribution of greenhouse gases in the atmosphere as the international legal framework in existence to tackle climate change does not lay down any quantifiable binding obligations on the developing countries to reduce such emissions unlike that imposed upon the developed economies of the world.
The international legal framework to tackle global warming in existence does not impose any binding commitment on any country irrespective of its economic or social condition to reduce greenhouse gas emissions beyond 2012. In its place, each State shall undertake voluntary commitments of action based on their respective capabilities and developmental needs. This creates a void in the system of governance and allows countries to decide on their voluntary course of action without being subject to any restrictions or accountability mechanism. As a result of such features in the existing legal framework on climate change, the least developed economies of the world are forced to face the brunt of global warming although they contribute minuscule to the increase in the concentration of the greenhouse gases.

In the light of the abovementioned scenario, the present study has been undertaken to understand the emerging legal regime in global warming and suggest suitable measures for a sustainable future.
Acknowledgement

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Date: __________________________________________

Debashree Mukherjee (Bhattacharjee)


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# List of Abbreviations

1. AOSIS - Association of Small Island States  
2. ASEAN - Association of South-East Asian Nations  
3. BASIC - Brazil, South Africa, India and China  
4. BEE - Bureau of Energy Efficiency  
5. CAEP - Committee on Aviation Environmental Protection  
6. CDM - Clean Development Mechanism  
7. CER - Certified Emission Reduction  
8. CERU - Certified Emission Reduction Units  
9. CH₄ - Methane  
10. CO₂ - Carbon dioxide  
11. COP - Conference of Parties  
12. EEDI - Energy Efficiency Design Index  
13. EEOI - Energy Efficiency Operational Indicator  
14. GDP - Gross Domestic Product  
15. GHG - Greenhouse Gas Emissions  
16. GIACC - Group on International Aviation and Climate Change  
17. Gt - Giga tonnes  
18. GT - Gross Tonnage  
19. Gtc - Giga Tonnes of Carbon  
20. ICAO - International Civil Aviation Organization  
21. ICIMOD - International Centre for Integrated Mountain Development  
22. IMO - International Maritime Organization  
23. IPCC - Intergovernmental Panel on Climate Change  
24. IUCN - International Union for Conservation of Nature  
25. JNNU - Jawaharlal Nehru National Urban Renewal Mission  
26. LDC - Least Developed Countries  
27. LEED - Leadership in Energy and Environmental Design  
28. MARPOL - The International Convention for the Prevention of Pollution from Ships  
29. MOP - Meeting of Parties  
30. NATCOM - National Communication  
31. NCEP - National Committee on Environmental Planning  
32. NCEPC - National Committee on Environmental Planning and Coordination  
33. NEERI - National Environmental Engineering Research Institute  
34. NGO - Non-Governmental Organizations
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<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<td>PAT</td>
<td>Perform, Achieve &amp; Trade scheme</td>
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<td>37.</td>
<td>ppb</td>
<td>Parts per billion</td>
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<td>ppm</td>
<td>Parts per million</td>
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<td>39.</td>
<td>REDD</td>
<td>Reducing Emissions from Deforestation and Forest Degradation</td>
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<td>SEEMP</td>
<td>Ship Energy Efficiency Management Plan</td>
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<td>SIDS</td>
<td>Small Development Island States</td>
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<td>U.S.A.</td>
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<td>UNEP</td>
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