

Climate Change and Legal Order (Elective)

I: Global Climate

1. Introduction to Climate
2. Elements of Climate (Wind, temp. humidity, Precipitation, pressure)
3. Different Climate Zones
4. Micro Macro Climate effects

II: Global Warming

1. Energy Issues and Climate Change – alternate Energy Sources
2. Green – House Effect as a natural Phenomenon, Green House Gases GHGs) and their Emission Sources

III: Climate Change and Impact

1. Modeling climate change, Ozone layer depletion and its control
2. Impacts of climate change-Global and India, Temperature Rise Sea level rise, Coastal erosion and landslides, Coastal flooding, wetlands and Estuaries loss
3. Carbon Trading – Mechanisms various Models (European, Indian) Global and Indian Scenario
4. Cleaner Development Mechanisms – Various projects related to CO2 Emission Reduction

IV: Climate Change and Legal Order

1. Frame work convention and climate change 1992
2. Kyoto Protocol 1997: Significance and Role in climate change
3. Establishment of IPCC and its reports
4. Vienna Convention 1985

V: Indian Climatology

1. Different seasons – Distribution of means Sea level pressure/ temperature in different seasons
2. Wind circulation and temperature distribution over India in lower, middle and upper troposphere in different seasons. In rainfall in different seasons
3. Indian summer monsoon, onset, withdrawal, rainfall distribution, inter annual variability of monsoon
4. Main synoptic pressure systems causing weather over India in different seasons

Reference

1. Barry R.G. and Chorley R.L. (1992), "Atmosphere, weather and climate" 4th edition Publication
2. Bolin B., (Ed) (1981), "Carbon Cycle Modeling", John Wiley and Sons Publications.
3. Corell R.W., and Anderson P.A., (Eds.) (1991) "Global Environmental Change" Springer-Verlag Publishers.
4. Francis D., (2000), "Global Warming: The Science and Climate Change" Oxford University Press
5. Frame B. Medury Y., and Joshi Y., (Eds.) (1992), "Global Climate Change: Science, Impact responses"
6. Linden E., (2006). "The winds of change: climate, weather and the destruction of civilization", Simon and Schuster Publications.
7. Mintzer I.M., (Ed), (1982), "Confronting Climate change, risks, Implications and Responses" Cambridge University Press
8. Srivatsava A.K., (2007), "Global Warming", APH Publications.
9. Wyman R.L., (Ed.) (1991), "Global Climate Change and Life on Earth", Chapman and Hall Publication.
10. Yadav, Chander and Bhan, (2005), "Global Warming": India's Response and Strategy", RPH Publications.
11. Phillippe Sands: Principles of International Environmental law- Cambridge Second Edition.
12. Syamdivan and Rosencranz – Environmental Law and Policy in India