

Global Climate Change and Disasters by Prof. V. Jayarama Reddy and Dr. Shivanna, S. Publisher: Kaustubha Publications, ISRO Layout, Vittal Nagar, Bangalore - 560 078, 2024, Total Pages: 169, Price: Rs. 350, ISBN: 978-81-975605-9-0

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The book contains the latest information about the disasters observed due to global climatic changes which are caused by natural events but mainly because of man interaction with the environment. The authors have discussed under different heads the changes and disasters with examples of events worldwide, its impact on environment and human population. The topics have been discussed with diagrams, tables and photos, which are very informative. The book is an eye opener for all concerned with global environment protection and sustainability. The authors have given a brief insight to the earlier climatic conditions and its changes over time. They have emphasized how nature has been altered due to the result of population explosion and the related activities. Thus, the impact on mother earth and its realms, remedial measure being taken to mitigate the same. Also lack of political will to implement various environment related laws has compounded to further deterioration of environment has been highlighted. There are five chapters and each having an introductory information, present scenario, and future course of action needed for protecting global environment for sustainability.

The first chapter gives an account of **Global Climate Change** as result of burning of fossil fuels such as coal, oil and natural gas, and its impact on the environment due to enormous emission of carbon and other green house gases. It also contains the information on the deforestation, urbanization, increased agricultural activities and its impact on global temperature. Even urbanization is a major contributor for rise in temperature due to various infrastructures coming up. Also, this chapter covers air pollution, plastic menace, and problem of solid waste disposal, which are related to various human activities. The low mortality rate with the advancement in medical science has compounded for the population boom, resulting in shortage of food, leading to green revolution has also contributed for environmental degradation as a result of reckless use of agro inputs. They have also highlighted the recent implications arising from increased animal husbandry and the emission from animals particularly methane, also has an impact on global temperature rise of late.

The second chapter provides insight of **Conflicts** between the neighboring countries involving the use of dangerous explosives, sophisticated weapons, mobilizing the men and machinery has caused damage and destruction of environment including loss of human population. It also covers volcanic eruptions, its emission and impact on environment. Even this has contributed for rise in global temperature due to various gases released to the atmosphere causing enormous impact on the air quality and health hazards.

The third Chapter gives an account on **Global Warming** and its impact. The main reason being increased fossil fuel burning,

deforestation, industrialization and urbanization, all these activities have increased the temperature world over. This chapter highlights the increased global warming, its impact on water resources, resulting in damage of coral reef and other aquatic life. It also contains information related to environmental warming, melting of ice caps, glaciers and changes in rainfall pattern. Continuous melting of glaciers / ice caps world over, thus resulting in change in sea levels leading to submergence of mangroves, terrestrial land, loss of coastal infrastructure and erosion are highlighted. Even the fragile aquatic life is destroyed, with extinction of several species. Cyclone and thunder storms are most destructive and disastrous calamity, related to global warming and deforestation, leading to flash floods and landslides causing damage to the life and property has been discussed with examples. Lightening is another natural calamity causing death to human beings, animals and damaging infrastructure. It also dealt with the reasons for acid rain, its impact on the environment and health hazards briefly.

The fourth chapter is on **Droughts**, discusses the various reasons for drought condition. In recent times this natural calamity has been a regular event in many parts of the world. Its impact on environment, food production, crop loss, migration of people in search of food and job has been dealt in detail. Worldwide efforts in harnessing of green energy like solar, wind, hydel, biomass and geothermal to reduce the carbon and other toxic gas emissions contributing for global warming as a mitigative measure are highlighted.

The fifth chapter is about the **Financial Implications**, that arises as a result of damages caused by global climatic changes and the disasters associated with it. This chapter also contains information on various international and local governmental agencies/organization which extend support due to natural or manmade disaster occurring on humanitarian grounds anywhere in the world. These agencies provide financial, technical and other expertise when disasters occur in a region or a country, so that they come out of the disaster event at the earliest and the protocol to be followed to access the same have been explained.

The book is a lead for those who are interested in knowing more about the Global Climate Change and Disasters. It will serve as reference book for students and academicians. Prof. Jayaram Reddy and Dr. Shivanna have done commendable job and deserve all credits for their efforts in pooling both international and local events in real time to highlight adverse impact in a very lucid way for the readers on the global climatic changes and its impact on human population. The figures/photos given in the book are black and white, it would have been better if printed in colour.