

Preface

This brief introduction describes the organization and contents of our book. This volume is an effort to present, in one readable collection, the diversity of environmental issues. Researchers from different fields of subject like Political Science, Environmental Science, Economics, Geography, Pollination Biology, History, English, Earth Sciences and Zoology are addressing these environmental issues through their findings independently. Diverse approaches toward the environmental concerns can open great array of opportunity for possible solutions to the real time environmental problems. The publication committee of Syamaprasad College so decided to put together a selection of papers from various subjects, concentrating on environment that will inform, stimulate and provoke thoughts of the environmental concerns among their students as well as the readers worldwide with their first publication of an e-book entitled “Environmental Issues: Approaches and Practices”.

The book is being made available at the Syamaprasad College website. Open access to the e-book and the published articles will certainly attract global audience with the prevalent response. This book will incite, instruct, inspire and inform both the lay readers and specialists. Students will surely enjoy the well-expressed articles from diverse fields of study published in this knowledge based volume as there are invited research papers from well-known national and international research labs. Anyone keen to know more about the ‘What’, ‘How’ and ‘Why’ from different viewpoints toward environmental issues will find this e-book, a precious knowledge resource.

The book consists of nine chapters discussing the theoretical background of several environmental intimidations, from basic to the applied methods and real-time practices in addressing those concerns and also considering our great resource of age-old anthropogenic knowledge which edify the approaches of ecosystem preservation and protection. Climate change is an important concern in current time. Many of the chapters in this book have discussed different aspects of this environmental perturbation.

In order to reduce the effects of climate change, the relationship between renewable energy consumption, economic growth and its impact on total carbon dioxide emissions need to be analyzed. Chapter 1 gives an understanding of the drivers of CO₂ production in India and role of country’s emission reduction efforts.

Chapter 2 unfolds the way to reduce the water pollution from domestic sewage while boosting local economy by wastewater reuse. Here the author has discussed the sewage management procedure in the fisheries of East Kolkata Wetlands, the largest wastewater-fed aquaculture system in the world.

Global food crops which comprise a large fraction of global food demand, partially depend on pollination by insects. Prevalent deteriorations in pollinator diversity have led to worry about a

global “pollination crisis” not only to sustain food security but preserve biodiversity of plant population too. In chapter 3, the author has discussed numerous concerns which act synergistically to affect honey bee populations worldwide to help alleviating the effects of those environmental stresses successfully.

Latest developments in atmospheric science have revealed that due to human activity the chemical composition consisting of the climate forcing agents of the whole atmosphere of the planet has been changed. The heat balance of the planet which are driven by local discrepancies in energy equilibrium, had changed subsequently. To understand this multifaceted subject systematically, the authors have measured climate forcing agents and analyzed their effect in a rural location in West Bengal in chapter 4.

Chapter 5 accentuate the highest emphasis on current international political arguments on climate change and how India has developed its foreign policy over time to meet the present challenges.

Environmental destruction has put our planet in severe danger. To sustain life on earth we need to preserve what we have in hand and escalate these acts as wisdom into our children. Chapter 6 emphasizes on the depiction of the environment in the fable of the Pañcatantra and what children can acquire from them.

To conserve the nature and natural resources many environmental movements took place in India which inspire environmentalists worldwide even today. In chapter 7, the author has given a historical account of the famous Chipko movement - a Gandhian practice of nonviolent protests on the human rights to protect and utilize the forests.

Air pollution in India is a serious issue. Respiratory and cardiovascular diseases induced by air pollution globally account for approximately 45% of deaths in the advanced countries. Chapter 8 addresses a vast evaluation on the role of air pollution in the growth of respiratory diseases like pulmonary fibrosis. This chapter interprets the future perceptions in pulmonary fibrosis research and remark on the monitoring approaches to regulate air pollution.

The book ends with Chapter 9 which shows the potentials of the folkloric beliefs practices to preserve nature, established on the close proximity amidst environment and human existences.

I hope the interdisciplinary approach of this book will help to widen awareness of the reader about the environmental perspectives.

Sarmistha Saha
Subject Editor