



Book Review **Fundamentals of Environmental Studies***

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Man owes all his achievements to the congenial environment he had on this Earth. With his superior intellect, by virtue of his brain capacity, he has utilized the resources available in nature for his needs. Though the resources were bountiful, we have now reached a state where one finds scarcity of natural resources due to overexploitation. It is high time that we start thinking about sustainability. In this context, the authors of this book have done an excellent job of depicting the current environmental issues in a systematic manner in ten well-written chapters. The first feeling one gets after reading this book is that the authors are truly passionate about the content of the book. As they have rightly mentioned in the preface, the main objective of this book seems to be to enlighten and enthuse the young readers to strive for a better environment.

The introductory chapter gives a bird's eye view of the current environmental situation with a particular reference to the Indian scenario. A lot of textbooks have been published on Environmental Studies, and few of them have succeeded in arousing the interest of the readers. But most of them leave the readers in a dilemma as to how to proceed further if they want to delve deeper into the subject. As an exception, this book has given concrete information

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on how to proceed further for those who get enthusiastic on the topic and would like to research more on it.

Natural resources are getting scarcer day by day. Developed countries have already begun initiatives on a large scale to find alternative methods. The second and third chapters provide insights on various natural resources and their current fate. Though we see such chapters in most Environmental Sciences textbooks, the way the authors have detailed them in this book is indeed commendable. Chapters 4 and 5 deal with Ecosystems and Biodiversity by depicting a number of case studies which are sure to take the reader to better heights of understanding the gravity of the problem. Ecosystems have been developed in nature by millions of years of trial and error. Man has been tampering with it for his benefit without a thought on the sustainability angle. This has led to imbalances in the food chain and thereby serious consequences. Forests, which are centres of maximum biodiversity are reducing in area. This has affected forest dwelling plants and animals at first but slowly has started affecting human lives also in an indirect manner. The havoc caused by such indiscriminate actions of man are well depicted.

Pollution is a real and imminent threat. Countries like China and India which top in the population figure charts face the brunt of this serious menace. The atmosphere, lithosphere, and the hydrosphere have already been polluted to the core. The causes of environmental pollution and the possible remedial measures are described in chapter 6. The impact of climatic changes which affects life on Earth (e.g., El Nino and its indirect after effects) and the health hazards of pollution (e.g., Arsenic poisoning of groundwater in West Bengal) are beautifully depicted. Substantial details on thermal, marine and radioactive pollution are provided.

Waste management is indeed the need of the hour worldwide. As population grows exponentially, it has turned into a chief problem that all countries have to deal with in the coming years. Ways of effectively dealing with different kinds of wastes are explained in chapter 7. In addition to the routine descriptions of the primary, secondary and tertiary treatments of wastewater and solid waste, the authors have detailed the management and recycling of paper, glass, plastic, and e-waste.

An indirect outcome of the increased pollution levels are the natural and manmade disasters. These are happening world over at an increased rate. How to tactically and efficiently deal with such disasters is the topic of the eighth chapter. India with its lengthy coastline, a multitude of rivers and a predominantly agrarian economy is an easy victim of such calamities. Flood, drought, cyclone and landslides are a few of such disasters our country has to deal with quite often. As one proceeds through this chapter, a fair knowledge of the management of such disasters is obtained. Case studies on the Gujarat earthquake of 2001, Tsunami of 2004, Cyclone Phailin of 2013, etc. are worth reading in this context.

Natural disasters and large-scale pollution is directly reflected on the society too. Natural disasters like the cyclones, earthquakes, flashfloods, landslides, etc. and anthropogenic activities like mining, dam building, etc. displace people and have a huge effect on their lives. Though the governments try to compensate for their land and livelihood, those efforts seldom bring back normalcy in the affected peoples' lives. India has seen numerous such cases. Chapter 9 deals with such effects on the society. The list of the types of projects (which could affect the environment) requiring government sanctions is informative.

The last chapter is a very significant one which depicts the relation between population and the environment. We know that population and environmental problems are directly proportional in most of the countries. It is almost an inevitable phenomenon. The trends of population growth in different countries and their possible adverse effects are beautifully depicted in the concluding chapter.

The best aspect about this book is the relevance given to case studies which are well placed and grab the interest of the readers. The multiple choice questions and the short and long answer questions provided at the end of each chapter are sure to benefit the students from an academic point of view. The bibliography which also includes the websites of online resources are sure to benefit the readers who are enthusiastic in gaining further knowledge on the subject. The gravity of the various environmental problems in the current situation is presented in an appropriate manner. This book will equally benefit the students at the

undergraduate and postgraduate levels and also people who are interested to know more about the current environmental scenario. One may hope that the younger generation takes these issues seriously and work their way to sustain life on this beautiful planet.