



Environment & Ecology

Biodiversity, Climate Change and Disaster Management



for Civil Services Examination

MAJID HUSAIN

The constructive criticism of the book by the learned scholars and students along with the increasing demand for the book from across the country gave the impetus to the author to revise the book. I thank each one of them for their confidence in my ability as an author to simplify the difficult concepts of Geography and Ecology in a cogent manner.

I express my deep sense of gratitude to Access Publishing India, especially Mr. V. Biju Kumar and Mr. Abhishek Sharma who published the revised edition meticulously in a record time. My sincere thanks are to my sisters late U. Salma and S. Bano who tirelessly helped me in the building of my career and life. Thanks are also due to all my family members and friends, who directly or indirectly provided me the logistics and moral support in the revision of the book.

It is hoped that the new edition would prove useful to the students, teachers and to all those who are interested in the discipline of Geography and Ecology. The author would be appreciative of positive criticism for improvement of the subsequent edition of the book.

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Environment and Ecology: Basic Concepts

Environment: Definition and Types

Environment stands for surroundings. Environment has been defined 'the sum total of all conditions and influences that affect the development of organisms'. This definition stresses on the totality of environment, implying that every organism including human beings has its own environment. A number of terms have often been used as synonyms of geographical environment. These synonyms include habitat, ecology, population-ecology, ecosystem, nutrient cycle, biodiversity, geosphere (zone of life) and ecosphere. In other words, environment is an inseparable whole, consisting of mutually interacting systems of physical and biological elements. The physical elements include space, landforms, water-bodies, climate, drainage, rocks, soils, mineral wealth, etc. while the biological elements include man, fauna and flora including microorganisms. Some of the experts recognise the following categories of environment:

- 1. Physical Environment: The non-living components of environment include landforms, climate, water-bodies, temperature, humidity, air, etc.
- 2. Cultural Environment: The creations of man on the earth surface are known as cultural environment or man-made environment.
- 3. Biological Environment: The biological environment consists of human beings, fauna, flora and micro-organisms.
- 4. Cognitive Environment or Subjective Environment (Mental Map): The perceived environment is known as cognitive or subjective environment. It differs from person to person. For example, a field has different meanings for a sheepkeeper, vegetable grower, grain farmer, rubber planter, industrialist, and builder of colonies.

Environment & Ecology



Biodiversity, Climate Change and Disaster Management

This new edition has been thoroughly updated and enlarged by utilizing the latest data and information from the various government and non-government publications. The book covers almost all the topics of Ecology, Environment, Climate Change and Disaster Management for the General Studies papers of the civil services CSAT and Main examinations.



New topics in the revised edition:

- Distribution of natural resources of the world and India
- ✓ Locational factors of primary and secondary activities of the world and India
- Social and Agro-forestry
- ☑ Important geophysical phenomena including ice-caps and their impact on fauna and flora
- ✓ Issues relating to poverty and hunger in the world and India
- Agricultural typology, major crops and cropping patterns in India
- Irrigation systems in India
- ☑ Liberalization and globalization and their impact on Indian economy and society





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