

# Environmental Studies

Dr. Samu Mahali



**Jayanti Prakashan**

Belda, Paschim Medinipur, 721424, WB

**Book Title:** Environmental studies  
**By** Dr. Samu Mahali

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**Jayanti Prakashan**  
Vill: Gangajamuna, PO: Phandar,  
PS: Belda, Dist.: Paschim Medinipur, 721424, WB, India  
E-mail ID: prakashanjayanti@gmail.com  
Contact: 9836413580/8016828750

- Chapter-6: Environmental Policies & Practices**
- Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.
  - Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Wildlife Protection Act; Water (Prevention and Control of Pollution) Act; Montreal and Kyoto protocols.
  - Forest Conservation Act; International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).
  - Nature reserves, tribal populations and rights, and human wildlife conflicts in India.
  - an context.
  - Environmental policy and gender issues.

**Chapter-7: Human Communities and the Environment**

- Human population growth: Impacts on environment, human health and welfare.
- Resettlement and rehabilitation of project affected persons; case studies.
- Disaster management: floods, earthquake, cyclones and landslides.
- Environmental movements: Chipko, Silent valley, Bishnoi of Rajasthan.
- Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.
- Environmental communication and public awareness, case studies (e.g. CNG vehicles in Delhi).

**Chapter-8: Field work**

- Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.
- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural.
- Study of common plants, insects, birds and basic principles of identification.
- Study of simple ecosystems--pond, river, Delhi Ridge, etc.
- Disaster management.
- Coastal ecosystem.



## Content

### Chapter-1: Introduction to environmental studies

- Multidisciplinary nature of environmental studies.
- Scope and importance; Concept of sustainability and sustainable development.

### Chapter-2: Ecosystems

- What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem; food chains, food webs and ecological succession. Case studies of the following ecosystems—
  - a) Forest ecosystem
  - b) Grassland ecosystem
  - c) Desert ecosystem
  - d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

### Chapter-3: Natural Resources: Renewable and Non-renewable Resources

- Land resources and land use change; Land degradation, soil erosion and desertification.
- Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations, Joint forest management.
- Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & interstate).
- Energy resources: Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

### Chapter-4: Biodiversity and Conservation

- Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots.
- India as a mega-biodiversity nation; Endangered and endemic species of India.
- Threats to biodiversity: Habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.
- Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value.

### Chapter-5: Environmental Pollution

- Environmental pollution: Types, causes, effects and controls: Air, water, soil and noise pollution
- Nuclear hazards and human health risks
- Solid waste management: Control measures of urban and industrial waste.
- Pollution case studies.
- Noise pollution.



### About the Author

Dr. Sanu Mahant (Principal & Professor) has duly completed his Ph.D. Works on Tribal and Urban Geography under Ranchi University, Ranchi and Tribal Research Institute, Ranchi and in collaboration with the Rural Development of I.T., Kharagpur. Dr. Mahant has over ten years of Research experience in the area of Tribal and Urban Geography in Jharkhand, Odisha and also in the state of West Bengal. His contribution in Environmental studies, Tribal Geography & Urban Geography is highly appreciated in National and International sphere. His eminent publication on Population Geography and Cultural Geography are also more useful & applicable for students, scholars & teachers. He has been awarded as the best young teacher in the year 2009 on the occasion of Silver Jubilee Celebration of Tribes in Jamshedpur organised by AIMA. Over 25 (twenty five) research papers and more than 15 (fifteen) popular articles on various aspects like Environment, Urban Studies & Tribal Development areas was published in national and international journals. Presently, Dr. Mahant has been serving as the Principal of Stananda College, Nandigram affiliated to Vidyasagar University, Midnapore since 29<sup>th</sup> august, 2018.

Price: 300.00



डुमरी माहली

(कुम्भीरमुद्रापंचायत)  
P.S.S



D. Mahadev  
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Potarin Mahal

द्वितीय पक्ष (भद्रकृष्ण)  
सुमन माहली

निर्णय हुआ है कि कवित्री ने शंभुक का बंधन कर  
पति-पत्नी के कलह को समाप्त करने  
का प्रयास किया किंतु पति ने साफ  
उत्कार किया कि मैं नहीं रखूंगा।  
कारण मैं ऐसा नहीं हूँ।  
पत्नी ने कहा कि मैं इसके साथ परिवार  
बसाने लगे हूँ।