



SAHYADRI
COLLEGE OF ENGINEERING & MANAGEMENT
An Autonomous Institution
MANGALURU

COURSE: ENERGY AND ENVIRONMENT

COURSE CODE: ME72224MA

Academic year: 2025-26

(Seventh Semester)

ASSIGNMENT

Section: 7B

Name	USN	Assignment Score (Out of 20)
MOHAMMAD MUZAMMIL	<u>4SF22IS051</u>	
RAZEEN AHAMED	<u>4SF22IS082</u>	
SUHAS SUDEEP	<u>4SF22IS112</u>	

Date of Submission:

Faculty: Ms. Ramya K

ASSIGNMENT DESCRIPTION

Sl No	Assignment Description	Assignment Type	Assignment Evaluation
01	“Environment Protection Act”	Seminar	20 Marks

CHAPTER 1

INTRODUCTION

The presentation titled “Environmental Protection Act and Wildlife Protection Act” provides a comprehensive understanding of how these two major legislations play a crucial role in safeguarding India’s environment and biodiversity. It begins by explaining that both Acts were introduced to regulate human activities that threaten ecological balance, increase pollution, and endanger wildlife species. The Environmental Protection Act (EPA), 1986 serves as an umbrella law aimed at controlling pollution, protecting natural resources, and ensuring sustainable development. The Wildlife Protection Act (WPA), 1972 focuses specifically on conserving wildlife, protecting habitats, and preventing illegal hunting or trade of animals and plants.

Since environmental issues are multidimensional, the Acts integrate concepts from ecology, law, policy-making, chemistry, biology, and environmental engineering to create strong frameworks for environmental governance. These laws recognize that protecting the environment requires

coordination among scientific institutions, government bodies, local communities, and industries.

The presentation highlights the scientific and legal foundations Under the Environmental Protection Act, scientific principles from chemistry and ecology help identify pollutants, study their impacts, and establish standards for air, water, and soil quality. This ensures that industries control emissions, treat waste, and avoid harmful chemicals that degrade ecosystems. Similarly, the Wildlife Protection Act relies heavily on biological studies such as species behavior, population dynamics, habitat requirements, and threats to biodiversity. These insights help classify species into schedules, declare protected areas, and implement recovery programs for endangered wildlife.

A major theme throughout the presentation is the need for interdisciplinary collaboration. Effective enforcement of EPA and WPA cannot depend on a single field alone. Scientists, legal experts, forest officers, environmental engineers, and community members must work together. Public participation

is vital—citizens play a role in reporting violations, promoting conservation practices, and participating in awareness programs. When local communities, government agencies, and scientists share knowledge, the enforcement of environmental laws becomes more efficient and socially acceptable.

The presentation then explores major environmental concerns that the Acts address, beginning with air, water, and soil pollution, controlled under the Environmental Protection Act.

- Air pollution from vehicles, industries, and burning of fossil fuels is regulated through emission standards and air quality monitoring systems. This helps reduce respiratory illnesses, smog, and acid rain.
- Water pollution caused by industrial discharge, sewage, and agricultural runoff is monitored through strict guidelines for water treatment, effluent disposal, and protection of rivers and lakes.
- Soil pollution from pesticides, heavy metals, and waste dumping is controlled through rules that regulate hazardous waste handling and promote techniques such as bioremediation and safe disposal practices.

By combining scientific monitoring with legal enforcement, the Act ensures cleaner resources and healthier ecosystems.

Next, the presentation explains how the Wildlife Protection Act combats threats to biodiversity. Wildlife faces dangers such as poaching, illegal trade, habitat loss, and human–animal conflict.

The Act provides:

- Legal protection to species by listing them in Schedules, with the highest protection for endangered animals.
- Creation of Protected Areas such as national parks, wildlife sanctuaries, biosphere reserves, and conservation reserves.
- Strict penalties for hunting, capturing, or trading protected species.
- Conservation programs supported by scientific research and community participation to safeguard threatened species and restore degraded habitats.

Through these measures, the WPA strengthens India's commitment to preserving its rich biodiversity

CONCLUSION

In conclusion, the presentation emphasizes that the Environmental Protection Act and the Wildlife Protection Act together create a powerful legal framework for protecting India's environment and wildlife. Addressing pollution, conserving species, and restoring ecological balance requires a combination of science, technology, strong policies, and active community involvement. These Acts reflect the interconnected nature of environmental challenges and highlight the need for continuous collaboration across disciplines. By enforcing these laws effectively, society can move toward sustainable development and ensure a healthier planet for future generations.

**SEMINAR
PRESENTATION**

ON

**“Environment Protection
Act”**

CHAPTER 6




Wildlife Protection Act, 1972

Legislative Objectives	Conservation Framework
<p>Comprehensive legislation aimed at protecting wild animals, birds, and plants through systematic conservation measures.</p> <ul style="list-style-type: none">• Protection of endangered species and their habitats• Establishment of Wildlife Sanctuaries & National Parks• Classification system through Schedules I-VI• Regulation of hunting and wildlife trade• Creation of Wildlife Crime Control	<p>Provides legal structure for wildlife conservation through protected areas and species-specific protections.</p> <ul style="list-style-type: none">• Habitat preservation through sanctuary designation• Species protection through hunting restrictions• Trade regulation for wildlife products• Enforcement through specialized agencies

Key Provisions of Wildlife Protection Act

Hunting Restrictions	Legal Framework
<p>Comprehensive ban on hunting endangered species with strict enforcement mechanisms.</p> <ul style="list-style-type: none">• Complete prohibition on hunting Schedule I species• Regulated hunting permits for specific cases• Licensing requirements for zoos & captive breeding• IPC-linked penalties for violations	<p>Strengthened through successive amendments to address emerging conservation challenges.</p> <ul style="list-style-type: none">• 2002 Amendment: Enhanced protection measures• 2006 Amendment: Strengthened enforcement• 2022 Amendment: Updated species lists• Stringent penalties under IPC provisions



Water (Prevention and Control of Pollution) Act, 1974

Legislative Purpose	Regulatory Framework
<p>Comprehensive legislation to control and prevent water pollution across India's water bodies.</p> <ul style="list-style-type: none">• Control and prevention of water pollution• Establishment of CPCB and SPCBs• Consent to Establish/Operate requirements	<p>Creates institutional structure for water pollution control through specialized boards and enforcement mechanisms.</p> <ul style="list-style-type: none">• Central Pollution Control Board oversight• State-level implementation through SPCBs• Industrial compliance monitoring

Key Provisions of Water Act

Pollution Control

Strict prohibition on discharge of pollutants into water bodies with comprehensive enforcement.

- Prohibits discharge of pollutants into water bodies
- Establishes water quality standards
- Section 41-45: Penalties and offences
- Regular monitoring and compliance checks

Economic Measures

Former Water Cess Act provisions for pollution control funding and economic disincentives.

- Water Cess for pollution control funding
- Economic disincentives for polluters
- Revenue generation for monitoring
- Now integrated with broader environmental laws

6

Forest Conservation Act, 1980

Conservation Objectives

Legislation focused on forest conservation and restriction on dereservation of forest lands.

- Conservation of forests and forest ecosystems
- Restriction on dereservation of forest lands
- Central Government approval requirements
- Advisory Committee for monitoring
- Minimizing deforestation activities

Land Use Restrictions

Comprehensive approval process for any diversion of forest land for non-forest purposes.

- Prior approval for forest land diversion
- Restrictions on leasing to private agencies
- Compensatory afforestation requirements
- Forest land use monitoring system



7



10

Case Studies & Examples

Mining Violations

Illegal mining operations causing severe damage to forest ecosystems and biodiversity.

- Unregulated mining in forest areas
- Ecosystem destruction and habitat loss
- Violation of Forest Conservation Act
- Enforcement challenges in remote areas

Water Pollution Incidents

Major rivers facing severe pollution from industrial discharge and urban waste.

- Ganga river pollution from industrial waste
- Yamuna contamination from urban discharge
- Damodar river industrial pollution
- Poaching networks and trafficking

Recommendations for Better Enforcement

Institutional Strengthening

Enhancing capacity and coordination among environmental enforcement agencies.

- Strengthening CPCB, SPCBs, Forest Departments
- Use of GIS, drones, and AI for monitoring
- Fast-track green courts (NGT)
- Stronger penalties and IPC-linked enforcement

Community Engagement

Promoting public participation and community-based conservation initiatives.

- Public participation in monitoring
- Community watchgroups formation
- Awareness campaigns and education
- Stakeholder collaboration platforms

Conclusion

Legislative Summary

India has established comprehensive environmental legislation through Wildlife Protection Act, Water Act, and Forest Conservation Act providing robust legal framework.

Enforcement Imperative

Strict enforcement of environmental laws is crucial for achieving sustainable development goals and protecting natural resources for future generations.

Sustainable Future

Balancing economic development with environmental protection through effective implementation of existing legislation and continuous improvement.

References

Comprehensive list of primary sources and legal frameworks referenced in this presentation.

Legislation/Document	Year	Key Focus
Wildlife Protection Act	1972	Wildlife conservation and protection
Water (Prevention and Control of Pollution) Act	1974	Water pollution control and prevention
Forest Conservation Act	1980	Forest conservation and land use regulation
Indian Penal Code	1860	Environmental offences and penalties
Ministry of Environment, Forest & Climate Change	Ongoing	Policy implementation and regulation

References

Comprehensive list of primary sources and legal frameworks referenced in this presentation.

Legislation/Document	Year	Key Focus
Wildlife Protection Act	1972	Wildlife conservation and protection
Water (Prevention and Control of Pollution) Act	1974	Water pollution control and prevention
Forest Conservation Act	1980	Forest conservation and land use regulation
Indian Penal Code	1860	Environmental offences and penalties
Ministry of Environment, Forest & Climate Change	Ongoing	Policy implementation and regulation

13

Introduction to Environmental Protection in India

Constitutional Foundation

Environmental protection in India is constitutionally mandated through Articles 48A and 51A(g), establishing the foundation for comprehensive environmental legislation.



Legal Framework

Comprehensive environmental laws addressing wildlife, water, and forest conservation form the



Protection Priority

India recognizes environmental protection as crucial for sustainable development and



National Commitment

Strong constitutional and legislative framework demonstrates India's commitment to

2



Environmental Legislation in India

Wildlife Protection Act, 1972 | Water (Prevention and Control of Pollution) Act, 1974 | Forest Conservation Act, 1980 | Issues in Enforcement of Environmental Laws

Presented by: [Your Name]

1

Student Name with USN	Report		Seminar		Total (20)
	Content (05)	Organization of Report (05)	Presentation skills (05)	PPT (05)	
1. Mohammad Muzammil-4SF22IS051					
2. Razeen Ahamed-4SF22IS082					
3. Suhas Sudeep-4SF22IS112					
4.					



SAHYADRI
COLLEGE OF ENGINEERING & MANAGEMENT
An Autonomous Institution
MANGALURU