BHARATHIDASAN UNIVERSITY

Tiruchirappalli-620024

Tamil Nadu, India

Programme: M.A.,HUMAN RESOURCE MANAGEMENT

Course Title : Natural Resource Management
Course Code : 22HRM4EC8

Unit-VI

Sustainable NRM and Management of CIR

Dr. T. KUMUTHAVALLI
Associate Professor
Department of Lifelong Learning

Sustainable NRM and Management of CIR

Agenda

- Sustainable Agriculture
- Water Management
- Sustainable Energy
- Sustainable Livelihood
- Organic Farming
- Awareness Programmes
- Management of Common International Resources

Sustainable Agriculture

- Definition:
- Farming that preserves environmental quality
- Practices:
- Crop rotation, reduced chemical use
- Benefits:
- Long-term soil health, biodiversity

Water Management

- Approaches:
- Efficient irrigation, rainwater harvesting
- Goals:
- Prevent water wastage, ensure equitable access
- Challenges:
- Climate variability, over-extraction

Sustainable Energy

- Sources:
- Solar, wind, hydropower
- Benefits:
- Reduces carbon footprint, renewable supply
- Global Trends:
- Increasing investment in renewables

Sustainable Livelihood

- Definition:
- Activities that support long-term economic and environmental stability
- Examples:
- Eco-tourism, community forestry

Organic Farming

- Principles:
- Avoid synthetic inputs, promote biodiversity
- Benefits:
- Healthier food, soil fertility
- Challenges:
- Pest control, higher costs

Awareness Programmes on NRM

- Goals:
- Educate communities on sustainable practices
- Methods:
- Workshops, campaigns, school curriculums
- Examples:
- World Environment Day, local conservation projects

Management of Common International Resources

- Definition:
- Shared resources beyond national jurisdictions
- Examples:
- Oceans, atmosphere, fisheries

Ocean Resource Management

- Importance:
- Source of food, energy, biodiversity
- Challenges:
- Overfishing, pollution, climate change
- Solutions:
- Marine protected areas, international agreements

Climate Management

- Global Concerns:
- Rising temperatures, extreme weather events
- International Efforts:
- Paris Agreement, IPCC
- Local Actions:
- Afforestation, emission reduction

International Fisheries

- Current Issues:
- Unsustainable harvesting, illegal fishing
- Regulations:
- Exclusive Economic Zones (EEZs), fishing quotas

Fisheries Management Commissions

- Examples:
- International Whaling Commission (IWC)
- Goals:
- Protect marine species, ensure sustainable harvests

Antarctica Management

- Unique Status:
- Protected under the Antarctic Treaty System
- Resources:
- Scientific research, limited fishing
- Challenges:
- Melting ice, geopolitical interests

Sustainable Development Goals (SDGs)

- Relevant Goals:
- Clean Water (Goal 6), Affordable Energy (Goal 7), Climate Action (Goal 13)
- Global Collaboration is Key

Community Involvement

- Why it Matters:
- Local support ensures project success
- Methods:
- Public meetings, participatory planning

Role of Technology

- Applications:
- GIS mapping, remote sensing, AI for resource management
- Impact:
- Improved monitoring and decision-making

Challenges in CIR Management

- Key Issues:
- Conflicting national interests, enforcement difficulties
- Possible Solutions:
- Stronger treaties, international cooperation

Case Studies

- Case Study 1:
- Coral reef restoration in Australia
- Case Study 2:
- Sustainable fishing practices in Norway

Conclusion

- Summary:
- Sustainability is vital for future generations
- Call to Action:
- Participate in conservation efforts, support policies