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Indira Gandhi National Open University
School of Interdisciplinary and
Trans-disciplinary Studies

MEV-003 Environmental Law and Management



**ENVIRONMENTAL ACTS LAWS
AND POLICIES**

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COURSE INTRODUCTION

Strengthening the capabilities of human resource capabilities to address various upcoming challenges of environment and development is a critical emergency for countries. An integral component of such capacity building is the application of environmental facts, laws and policies are the instruments in numerous agreements which are incorporated in this course. The course comprises of 4 blocks.

Block 1 deal with environmental acts, laws and policies that consist of four units. Environmental Law is an effective means for translating environmental policies that incorporate global, regional and national priorities, concerns and practices and their action. This block comprises 4 units. **Unit 1** deals with International Environmental Policies, Agreements and Treaties. This unit comprehends the need for international Environment law. It elaborated the implications of Stockholm Conference, Rio Conference and Johannesburg Treaty. **Unit 2** deals with National Environmental Legislation and Programmes-I. This first part dealt with various National Environmental Legislations by giving examples of Water Act 1974, the Air Act 1981, the Environmental Act 1986 and the Environmental Impact Assessment notification 2006. **Unit 3** deals with 2nd part of National Environmental Legislation and Programmes. Indian Constitution is the first constitution in the world that contains specific provisions for the protection and the improvement of the environment. This unit made emphasis on constitutional provisions related to environment by explaining fundamental duties, fundamental rights and Directive Principles of State, various laws related to noise pollution and penalty, by explaining the regulations with regard to hazardous waste and disposal guidelines and concluded by discussing various case laws related to environmental protection. **Unit 4** of this block deals with part three of National Environmental Legislation and Programme. In this unit we explained general principles of food safety and constitutional provision, explained about the standards and the mechanism for the enforcement of those standards. It also discussed about various laws related to food industry, industrial policies and issues, regulations with regard to insecticide and pesticide Act, laws related to food safety and adulteration and concluded by highlighting various legislations, preventions and controlling acts.

Block 2 deals with Awareness, Responsibility and Compliance. Due to increased environmental regulations and costs of non-compliance over the past few decades corporate expenditure in the area of environment, increased substantially. As a result of the large amount of capital expenditures required for environmental compliance and the potential for substantial fines for non-compliance, environmental concerns have become a key factor in global competitiveness. This block consists of 4 units. **Unit 1** deals with social and civil society Movements in India. This unit given a brief historical narrative of the normal factors for the emergence of social and civil movements for conservation of natural environment. It also highlighted about environmental activities in contemporary India. **Unit 2** deals with environmental ethics. This unit provides you an overview of principles of environmental ethics. The enough justification has been given to safe environment as a human right and the importance of indigenous knowledge in conserving nature. **Unit 3** explains you about Bio safety. In this Unit you will be learning about types and elements of containment, various bio safeties. In

this unit you will be learning about types and elements of containment, various bio safety levels of 1-4 and biological safety cabinets. This unit also introduces you to Genetically Modified Organism (GMO) and Living Modified Organism (LMO). **Unit 4** is Corporate Sector and Environment. It is interesting to discuss the role of business in Environmental Protection by established link between business and environmental concerns. It explained about novel concept of green business, green consumerism. It also introduced the environmental dimension of corporate social responsibility.

Block 3 deals with Environmental Management Techniques. This block comprises four units. **Unit 1** deals with Introduction to Environmental Management (EM). Environmental Management has been properly defined and scope has been well established. The EM involves the management of both biotic and abiotic components of the environment. Goal and need for EM has been discussed at length. Environmental Management Principles in decision making elaborated precisely. The unit concluded by discussing various methods to protect the global commons, ozone layer, Montreal Protocol and various Treaties regarding climate change concern. **Unit 2** talks about Environmental Auditing. You will enjoy by learning the concept and purpose of environmental audit, how to formulate the audit protocol and its benefits. **Unit 3** explained about Management of Air and Water, their treatment technologies. This unit highlighted the facts about Air Quality Index and its need by providing suitable examples and criteria & standards. Categories of control methods of air pollutants have explained under different sources. It also explained about Water Quality and Management, Standards of Water in respect to public health and concluded by explaining detection and control of microorganism in environmental fresh water and drinking water. **Unit 4** deals with treatment of solid waste, that discussed about vermicomposting, composting and anaerobic digestion are suitable processes for the management of biodegradable solid wastes. In anaerobic digestion, biogas is produced when microbes (mainly bacteria) ferment or breakdown biological or organic material in the absence of oxygen. Hazardous waste can be treated by physical, chemical, biological and thermal methods. The chemical, thermal and biological treatment methods outlined above change the molecular form of the waste material. Physical treatment, on the other hand, concentrates, solidifies, or reduces the volume of the waste. Normally wastes are subjected to a combination of these methods for effective and safe disposal. It also explained about the classification of biomedical wastes according to color code and type of treatment and disposal needed for particular wastes. For the treatment of e-wastes, three levels treatment is used based on material flow. Finally, this unit is concluded by highlighting about land filling and incineration methods that are suitable disposal options for e-waste.

Block 4 deals with Environmental Standards. Environmental Standards are legal and administrative regulations regarding treatment, techniques and maintenance of the environment that are set by the Government which oversees specific areas. Environmental Standards help to make goals of environmental protection into quantified and enforceable laws by considering scientific community opinion. This block comprises 4 units. **Unit 1** describes environmental design, which is a process that concentrates on creating structurally sound buildings for commercial and domestic purposes which acts as functional and environmentally responsible. This unit explains the basic principles and benefits of environmental design,

discussed objectives and potential of environmental design. It highlighted the concept of green building, green infrastructure and green landscaping. **Unit 2** deals with Environmental Management system (EMS) in which it explains the core elements of EMS/ EMS Assessment and also benefits and limitations of EMS. This unit highlighted various national and international standards and specified USEPA, 2017. **Unit 3** deals with EMS standards ISO 14000. ISO comprising 160 national standard bodies is coordinated by Central Secretariat situated in Geneva, Switzerland. This unit explained about ISO, ISO 14000, and Plan-Do-Check-Act cycle. It highlighted Integrated Management System. The emphasis is made on OHSAS18001: comparison to ISO14001 and ISO9001. The unit concluded with Integrated Management System approaches to reduce the risk regarding quality, environment, health and safety issues. **Unit 4** deals with Environmental Labeling. This unit explained you about the concept of eco-labeling and its objectives where environmental protection, inventing and promoting environmental friendly technologies and sensitizing the consumers about environmental related issues. This unit brings you to the new concepts of eco-labeling, its origin, classification and guiding principles which are prescribed by ISO. It concluded by explaining about eco-mark, its criteria and mechanism of the scheme.



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BLOCK 1 INTRODUCTION

Block-1 deals with Environmental Acts, Laws and Policies. Environmental Law which is also known as environmental and natural resources law, which describes the network of treaties, statutes, regulations, common and customary laws addressing the effects of human activity on the natural environment. This block comprises four units.

Unit 1 deals with International Environmental Policies, Agreements and Treaties. This unit comprehends the need for International Environmental Law; make you to understand the implications of Stockholm Conference, Rio Conference and Johannesburg Treaty. It highlighted the Stockholm Conference 26 principles, includes fundamental right to freedom, international equity, maintenance, restoration and improvement of renewable resources. Agenda 21 also comprehended as a part of Rio declaration. The unit concluded by explaining some important international environmental law agreement like CITES, Cartagena Protocol on bios safety, Montreal Protocol and Rotterdam Convention.

Unit 2 deals with National Environmental Legislation and Programmes- I. Having a common goal of regulating the interaction between man and the natural world to reduce threats to the environment and improve public health. This unit brings you various nation environmental legislations like The Water (prevention & control of pollution) Act 1974, The Air (Prevention & control of Pollution) Act 1987, and The Environmental (Protection) Act 1986. This unit informed you about various National Programmes like National Wetland Conservation Programme, National Tobacco Control Programme, National Tobacco Control Programme, National Iodine deficiency Disorder Control Programme.

Unit 3 addresses Constitutional Provisions related to environment, explained about fundamental duties, rights and Directive Principles of State under the title National Environmental Legislation and Programmes Part II. It highlighted the Factories Act 1948 in which health hazards, permissible limits of exposure to toxic substances and noticeable diseases under Third Schedule of the Factories Act. The unit concluded by explaining giving brief out look of hazardous municipal solid waste, biomedical waste and recycled plastics manufacture and usage rules 1999, and the overview of Legal Framework on Environment.

Unit 4 deals with National Environmental Legislation and Programmes III. This unit stated the general principles of food safety and constitutional provisions under the Essential Commodity Act, 1955. This Act tries to promote energy efficiency in the commercial sector to reduce the pressure on already existing for resources, to the benefits the environment. Section B of this Act explained with powers to control production, supply and distribution. The emphasis is also made on fertilizer control order 1985, Insecticides Act, 1968. An introductory approach has been given on plant and animal quarantine order to make you to understand the regulatory facts on importing various plants and animals. You will be happy to learning about prevention of Food Adulteration Act 1954 and Food Safety and Standard Act, 2006. This Act is to regulate and monitor the manufacturing, import, processing, distribution and sale of food to ensure safety of food.

UNIT 1 INTERNATIONAL ENVIRONMENTAL POLICIES, AGREEMENTS AND TREATIES

Structure

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- 1.6 Let Us Sum Up
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- 1.8 References and Suggested Further Readings
- 1.9 Answers to Check Your Progress

1.0 INTRODUCTION

Global environmental issues are examined under the subject of International Environmental law. Debates over environmental issues are based on the principles of international law, numerous international agreements and declarations. International Environmental law is not a separate branch of law but a part of the International law which governs relations between states. Environmental international law has evolved from a number of sources. The most important source is the customary international law. Customary international laws are the norms followed by most countries as a matter of custom. They are responsible for the common thread that binds all countries. Other sources of the international law include general principles of law

recognized by civilized nations. International law is also evolved from subsidiary sources such as decisions of courts and tribunals and writing of jurists.

Numerous legally binding international agreements cover a wide range of environmental issues. They cover different aspects like: terrestrial, marine, atmosphere to biodiversity protection. Most of the International environmental agreements are generally multilateral. Protocols are subsidiary agreements that are based on the primary treaty. Protocols are available in various subsets of international law. These find practical applicabilities in the issues relating to environment. They enable the incorporation of recent scientific advances. Kyoto Protocol is one of the most popular protocols in international environmental law. United Nations Framework Convention on Climate Change follows the Kyoto protocol.

Some important conferences like the United Nations Conference on the Human Environment (1972), United Nations Conference on Environment and Development (1992); and World Summit on Sustainable Development (2002) have had tremendous impacts. International organizations with well defined roles are also created due to multilateral environmental agreements. These bodies are responsible for implementing the agreement. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the International Union for Conservation of Nature (IUCN) are the products of such agreements.

The opinions of international courts and tribunals provide the background for International environmental law. The declarations, codes, guidelines are considered as soft law. They are not binding. Soft laws result because of the following reasons: (1) lack of consensus in arriving at a universal law, (2) lack of one supreme body for making law, and (3) diverse cultures, religion etc. However, the soft laws facilitate collective action by states when required, without restricting their freedom of action.

1.1 OBJECTIVES

After reading this unit, you should be able to:

- comprehend the need for international environmental law;
- understand the implications of Stockholm conference, Rio conference and Johannesburg treaty; and
- explain some other important international environmental legislations.

1.2 STOCKHOLM CONFERENCE

The idea of holding a United Nations conference centred on human interactions with the environment is attributed to the proposal of Sweden in the United Nations Economic and Social Council in the year 1968. After the idea got support from the ECOSOC, the General Assembly decided in 1969 to hold the conference in 1972. The General Assembly proposed that the conference should result in “stimulating and providing guidelines for action by national government and international organizations”. Extensive background work by 115 governments for the conference lasted for about four years. Stockholm, Sweden hosted the United Nations Conference on the Human Environment in

June 1972. It was the first comprehensive conference on international environmental issues with the backing of the UN. This event marked a major milestone in international environmental politics.

1.2.1 Positive Outcomes

The conference agreed upon the following:

1. A Declaration about environment and development (26 principles);
2. An clear cut plan of action (109 recommendations), and
3. Resolutions relating to the financial and Institutional arrangements.
 - a. The Stockholm resolution supported the pre-Stockholm treaties and conventions (relating to the marine pollution, transboundary air pollution, endangered species).
 - b. Action plan dealing with creation of institutions and co-operation amongst already existing ones. It also gave an action plan for the international community.
 - c. The conference gave 26 principles, which include:
 - Fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being.
 - Intergenerational equity, maintenance, restoration and improvement of renewable resources.
 - Appeal to the people to manage the environment, so as to avoid irreversible damage to the ecosystem.
 - Recognition of the relationship between economic, social and environmental development. Encouraging development through transfer of technology and financial aid.
 - That the States should cooperate in developing international environmental law.
 - The States should adopt and implement suitable environmental standards.
 - The International Organizations should co-ordinate in such activities that facilitate better environmental management.

The UN General Assembly considered the report submitted by the Stockholm Conference. The recommendations were considered in the development of environment related standards and activities at all levels: regional, national and global level. It led to the development of a precursor to the formation of an International Environmental Organization through the United Nations Environment Programme. This directed the future course of the environmental policies in Europe. However, the Stockholm conference did not result in the adoption of binding legal obligations for the State parties.

1.3 RIO CONFERENCE

The Rio conference was held 20 years after the first International conference on environmental issues at Stockholm. The main objective of the Rio conference

was to stop environmental degradation of the planet. Following the Stockholm conference, UN in the year 1983 set up a Commission on Environmental and Development led by Brundtland from Norway. The Commission suggested the concept of Sustainable Development. This is defined as “the development which meets the needs of the present generation without compromising the ability of the future generations to meet their own needs”. Based on the Brundtland report, 1987- the UN General Assembly called for the convention of UNCED (United Nations Conference on Environment and Development). UNCED was held at Rio De Janeiro, Brazil in June, 1992 represented by 172 governments. Several representatives of non-governmental organizations (NGOs) attended. It focussed on balancing development that support socio-economic development and avoids damage to the environment. It also stressed on the need to bring about global partnership to tackle the issues.

1.3.1 Issues Covered

The issues addressed in the Rio conference include the following:

- Comprehensive study of production patterns which include toxic components such as lead in gasoline, toxic wastes including radioactive chemicals.
- The use of other sources of energy replacing fossil fuels.
- Promoting the use of public transportation systems. This will reduce vehicular emissions, congestion in cities and the associated health risks.
- The increasing demands and diminishing water availability.

The UNCED adopted three important non-binding instruments in the forms of:

- Rio Declaration on Environment and Development
- Agenda 21
- Forest Principles

The Rio declaration on Environment and Development contains twenty seven principles. The unique feature was that it made efforts to maintain balance of priorities of the developed and developing countries. It also gave guidelines regarding principles for sustainable development. Though this is a form of soft law, the legal implications is immense as a large number of treaties, protocols, regulations and judicial decisions were based on this. Even the International Court of Justice has referred to it in a number of cases.

The adoption of Forestry principles led to the revision of the International Timber Trade Agreement in 1994. This was the first legal consensus reached on forests. It posed responsibility on the developed countries through reforestation and forest conservation. At the same time, they were given the liberty to develop the forests depending on their socio-economic needs.

1.3.2 Agenda 21

Agenda 21 is a dynamic programme and a voluntary action plan. It is called so because it is a comprehensive blue-print for local, national, regional and global

actions. The proposed actions will enable the transition to sustainable development in the 21st century. It was adopted by more than 178 Governments at the Rio Conference. It comprises of 40 chapters and hundreds of programme areas. Agenda 21 lays down the ways and means in the reduction of wasteful and inefficient consumption patterns. It recognized the need of developed countries like extending financial support and aiding technology transfer to developing countries to achieve sustainable development.

1.3.3 Important Agreements

Some legally binding agreements (Rio Convention) came into force. They are given below.

- *Framework Convention on Climate Change (UNFCCC)*
- *Convention on Biological Diversity*

One major outcome of the summit was an agreement on the Climate Change Convention. This resulted in the formulation of Kyoto Protocol and the Paris Agreement. Another agreement was to “not to carry out any activities on the lands of indigenous peoples that would cause environmental degradation or that would be culturally inappropriate”.

The Convention on Biological Diversity was signed at the Earth Summit. It emphasized the protection of natural eco-regions and avoiding economically unsustainable growth. Despite its success, many of the agreements made in Rio such as fighting poverty and cleaning up our environment are yet to be accomplished.

Check Your Progress 1

Note: a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. What is environmental law?

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2. What was the importance of the Rio conference?

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3. Explain Agenda 21.

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1.4 JOHANNESBURG TREATY

The World Summit on Sustainable Development, also referred to as the Earth Summit was held at Johannesburg, South Africa from 26 August to 4 September 2002. The United Nations convened the summit to discuss sustainable development. The summit brought together several leaders from business and non-governmental organizations. It was held 10 years after the first Earth Summit in Rio de Janeiro. The goal of WSSD was to hold a 10 year review of the 1992 UNCED to reinvigorate global commitment to sustainable development. It was therefore also informally nicknamed “Rio+10”. The main outcome of the Summit was the Johannesburg Declaration and the WSSD plan of implementation. A number of partnerships were launched to help implement commitments made at WSSD.

1.4.1 Plan of Implementation

It is conceived as a framework to implement the sustainable developments originally agreed at UNCED in 1992. The plan contains chapters on the following:

(ii) Poverty eradication, (ii) consumption and production, (iii) the natural resource base, (iv) health, (v) small island developing states, (vi) Africa (vii) other regional initiatives, (viii) means of implementation, and (ix) institutional framework. The Plan of Implementation contains over 30 targets, the majority of which have been established in the Millennium Declaration.

Some of the most significant targets include:

- (i) To halve the number of the world’s poor living on less than \$ 1 a day 2015.
- (ii) Significantly improve the lives of at least 100 million slum dwellers by 2020
- (iii) To halve the proportion of people without safe drinking water by 2015.
- (iv) To halve the proportion of people without access to sanitation by 2015.
- (v) Cease destructive fishing practices and establish representative marine protective areas and networks by 2012,
- (vi) Maintain or restore fish stocks to levels that can be sustainably harvested by not later than 2015,
- (vii) Phase out chemicals with detrimental health impacts by 2020 and
- (viii) Significantly reduce biodiversity loss by 2010.

1.4.2 Johannesburg Declaration on Sustainable Development

It did not set out international principles which could be invoked in legal or political contexts. It was a general philosophical contextualization for the more detailed commitments in the plan of implementation. It reaffirms political commitment to sustainable development and building a humane, equitable and caring global society. It highlights the integration of economic development, social development, and environmental protection, the three pillars of

sustainable development. It emphasises the need to eradicate poverty, change production and consumption patterns, and protect and manage the natural resource base. The declaration reaffirms the Millennium Development Goals, and welcomes decision taken at WSSD on targets, timetables and partnerships to improve access to clean water, sanitation, energy, healthcare, and food, and to protect biodiversity. It underscores the need for access by developing countries to financial resources, for opening of markets and the transfer of technology, and for the private sector to enforce accountability. It also addresses issues like armed conflict, terrorism, intolerance, combating communicable and chronic diseases. Finally, the Declaration reaffirms all countries commitment to the UN Charter and international law, calls for strengthening multilateralism and pledges to an inclusive process involving all groups.

Voluntary Partnerships: Partnership programs were launched in the form of voluntary agreements between one or more countries, international institutions, private sector and/or non-governmental organizations. More than 300 such partnerships were launched at the Summit, including 32 energy initiatives, 21 major water programs for biodiversity and ecosystem management.

1.5 SOME LEGISLATIONS OF INTERNATIONAL IMPORTANCE

Let us now learn about some more legislations of international importance. They include the following:

1.5.1 Cites

The increase in the trade in life forms and their products for commercial purposes beyond frontiers has been one major cause for the decline in the biodiversity. In order to prevent this, in the year 1973, CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) was convened. This multilateral treaty protects endangered plants and animals. This treaty was drafted as an outcome of the deliberations of the meeting of members of the International Union for Conservation of Nature (IUCN) in 1963. The convention was opened for signature in 1973. CITES came into existence on 1st July 1975. The primary objective was to curb the international trade in specimens of wild animals and plants in order to protect the survival of the species in the wild. Participation by member states to join this treaty is voluntary. Those nations that have agreed to be bound by the Convention are known as Parties. The parties to CITES are collectively referred to as the Conference of the Parties. They meet every 2 or 3 years to review the implementation. CITES is also attended by agencies of the UN, NGOs working in the relevant areas. CITES is legally binding on the Parties, but does not replace the existing national laws. It provides broad guidelines and the nations must design their own domestic laws to implement CITES. CITES Secretariat is administered by UNEP and is located at Geneva, Switzerland and all activities relating to the convention are co-ordinated.

Regulation of trade:

CITES functions by regulating international trade in specimens of some identified species. Licensing system is followed for all import, export, re-exports covered by the Convention. Each Party to the Convention must designate one or more Management Authorities of administering the licensing system (Article

IX of the Convention). Further, Scientific Authorities are to play advisory role on the effects of trade on the status of CITES-listed species.

Limitations:

CITES focuses on trade at the species level. Unfortunately it does not deal with ecosystem approaches to conservation or destruction of habitat. CITES only protects charismatic species-mega fauna or animals - with high market value. CITES only controls their trade. It does nothing to hunting or killing of animals.

1.5.2 Vienna Convention

The ozone layer is that layer of the stratosphere, which protects the living beings on the earth from the harmful effects of ultraviolet rays from the sun. The widespread use and their release into the atmosphere of ozone-depleting compounds have increased levels of ultraviolet rays reaching the earth. In the Vienna Conference, 1985, the Vienna Convention for the Protection of the Ozone Layer was agreed upon. It is a multilateral environmental agreement and came into force in 1988. It is one of the most successful environmental treaties, ratified by 197 states as well as the European Union. The objectives of the Convention were to facilitate cooperation by research and information exchange on the effects of human activities on the ozone layer. It also aimed to adopt legislative or administrative measures against activities likely to have adverse effects on the ozone layer. It is the basis for international efforts to save the ozone layer. CFCs are the main chemical agents responsible for ozone depletion. This treaty does not include legally binding reduction goals regarding the use of CFCs.

1.5.3 Montreal Protocol

The Montreal Protocol on Substances that Deplete the Ozone Layer (a protocol to the Vienna Convention for the Protection of the Ozone Layer) is an international treaty for the protection of the ozone layer. Its objectives include phasing out the production of ozone depleting substances. It was agreed on 16 September 1987. It entered into force on 1 January 1989, followed by a first meeting in Helsinki, May 1989. Since then, it has undergone several revisions. It aims at the reduction in the production of CFC (substance) itself and not just emission of the CFCs. The parties are expected to reduce their consumption and production of CFC to the 1986 level, which is considered to be the base year. The protocol takes into consideration the different position of the developed and the developing countries. It has laid obligations on them, where the phasing out time is different. It requires phasing out all consumptions or production of most of the substances that deplete the Ozone layer by Jan 1996 by the developed countries and the consumption of HCFC to be frozen in 1996 and to be completely phased out by 2030. The complete elimination time that is fixed for the developing countries, unlike the developed countries is the year 2010 and the elimination period for Hydro Chlorofluorocarbons (HCFC'S) is 2040. Due to its universal acceptance, it is considered an environmental success story in the field of international co-operation.

1.5.4 Rotterdam Convention

The Rotterdam Convention (formally, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides

in International Trade) is a multilateral treaty to promote shared responsibilities in relation to importation of hazardous chemicals. The Convention was adopted in the year 1988. The Governments thought that here was a need to strengthen the procedure of acquiring prior consent for transboundary movement of certain hazardous substances to make it legally binding. It seeks to ensure that the hazardous chemicals are managed in an environmentally sound manner. The Convention also provides space for information exchange. The Convention empowers the national governments to decide on the entry of such hazardous chemicals into their country. The convention promotes open exchange of information. It calls on exporters of hazardous chemicals to use proper labelling, include directions on safe handling, and educate purchasers of any known restrictions or bans. Signatory nations can decide whether to allow or ban the importation of chemicals listed in the treaty, and exporting countries are obliged to make sure that producers within their jurisdiction comply.

1.5.5 Stockholm Convention on POP

Another important international environmental treaty is the Stockholm Convention on Persistent Organic Pollutants signed in 2001. The objective of this treaty is to eliminate or restrict the production and use of persistent organic pollutants (POPs) and became effective from May, 2004. This treaty is the first international legal instrument to focus attention on the dangers of persistent organic pollutants. These chemicals that are commonly used as pesticides in agriculture and to control insects causing diseases like malaria. The United Nations Environment Programme (UNEP) initiated for global action to be taken on POPs in 1995. POPs are chemicals that remain in the environment and have bio-accumulating properties in the food chains. They also cause toxicity to human health and the environment. The Intergovernmental Forum on Chemical Safety and the International Programme on Chemical Safety assessed the impact of twelve POPs popularly known as the dirty dozen. The parties agreed to phase out nine of the dirty dozen chemicals. They decided to use DDT for malaria control, and reduce inadvertent production of dioxins and furans. Parties to the convention have agreed to a procedure by which persistent toxic chemicals can be reviewed and added to the convention, provided they meet certain criteria for persistence and transboundary threat. The main feature of the Convention is that the developed countries provide new and additional financial resources and measures to eliminate production and use of intentionally produced POPs. They are also required to eliminate unintentionally produced POPs wherever possible, and handle POPs wastes in an eco-friendly way. Precaution is exercised throughout the Stockholm Convention, with specific references in the preamble, the objective, and the provision on identifying new POPs.

1.5.6 Basel Convention

The international treaty regarding the control of transboundary movements of hazardous wastes and their disposal is known as the Basel Convention. The primary objective is to reduce the movements of hazardous waste between nations. Further, it specifically prevents the movement of hazardous wastes from developed to the lesser developed countries. This treaty does not include the movement of radioactive waste. This Convention also aims to reduce the amount and toxicity of waste generation, to ensure their safe disposal close to the source of generation. The Convention also aims to help in the safe disposal

of the hazardous and other wastes generated by the lesser developed countries. The Convention was opened for signature on 22nd March 1989, and entered into force on 5th May 1992.

The key objectives of the Convention are as follows:

- i) Reduce transboundary movements of hazardous wastes and environmentally sound management of hazardous waste,
- ii) Provide for the treatment and disposal of hazardous wastes as close as possible to their sources of generation,
- iii) Minimize generation of hazardous wastes in terms of quantity and hazards.

The Basel Ban, adopted in 1994 by certain countries, bars shipments of hazardous waste from developed countries to less- developed countries.

1.5.7 Cartagena Protocol on Biosafety

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement on biosafety. It is a supplement to the Convention on Biological Diversity effective since 2003. This Protocol aims to protect biodiversity from the potential threats resulting from genetically modified organisms. The Protocol outlines that precautionary principles should be applied for products that result from modern biotechnology. It permits developing countries to balance public health against economic benefits. In case there is insufficient scientific evidence regarding product safety it allows countries to ban imports of genetically modified organisms. It also requires exporters to label the shipments containing genetically altered commodities. This protocol is in accordance with the precautionary approach, contained in Principle 15 of the Rio Declaration on Environment and Development. The objective of the Protocol is to ensure an adequate level of protection for the safe transfer, handling and use of living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity. They also take into account human health risks, specifically focusing on transboundary movements.

The protocol defines a 'living modified organism' as any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology. Living organism means any biological entity capable of transferring or replicating genetic material. Modern biotechnology is defined in the Protocol to mean the application of *in vitro* nucleic acid techniques, or fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers. These are not the techniques used in traditional breeding and selection. 'Living modified organism (LMO) Products' are defined as processed material that are of living modified organism origin, containing detectable novel combinations of replicable genetic material obtained through the use of modern biotechnology. Some examples of LMOs are genetically modified agricultural crops for increased productivity and pest resistance. Examples of modified crops include tomatoes, cassava, corn, cotton and soybeans. Living modified organism intended for direct use as food or feed, or for processing are agricultural commodities from GM crops. Overall the term 'living modified organisms' is equivalent to genetically modified organism. The Protocol did not make any distinction between these terms and did not use the term 'genetically modified organism.' The Protocol applies to the transboundary movement, transit, handling and use of all living modified organisms that may adversely affect conservation and the sustainable

use of biodiversity (Article 4 of the Protocol, SCBD 2000). The Protocol promotes biosafety by establishing rules and procedures for the safe transfer, handling, and use of LMOs, with specific focus on transboundary movements of LMOs. It features a set of procedures including one for LMOs that are to be intentionally introduced into the environment called the advance informed agreement procedure, and one for LMOs that are intended to be used directly as food or feed or for processing. Parties to the Protocol must ensure that LMOs are handled, packaged and transported under conditions of safety. Furthermore, the shipment of LMOs subject to transboundary movement must be accompanied by appropriate documentation specifying, among other things, identity of LMOs and contact point for further information. These procedures and requirements are designed to provide importing Parties with the necessary information needed for making informed decisions about whether or not to accept LMO imports and for handling them in a safe manner. The Party of import makes its decisions in accordance with scientifically sound risk assessments. The Protocol sets out principles and methodologies on how to conduct a risk assessment. In case of insufficient relevant scientific information and knowledge, the Party of import may use precaution in making their decisions on import. Parties may also take into account, consistent with their international obligations, socio-economic considerations in reaching decisions on import of LMOs. Parties must also adopt measures for managing any risks identified by the risk assessment, and they must take necessary steps in the event of accidental release of LMOs. To facilitate its implementation, the Protocol establishes a Biosafety Clearing-House for Parties to exchange information, and contains a number of important provisions, including capacity-building, a financial mechanism, compliance procedures, and requirements for public awareness and participation.

Check Your Progress 2

- Note:** a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. What was the significance of the Johannesburg treaty?
.....
.....
.....

2. What did the Montreal protocol aim to achieve?
.....
.....
.....

3. Explain the significance of Cartagena protocol on biosafety.
.....
.....
.....

1.6 LET US SUM UP

In this unit we have studied about the need for environmental law and its evolution. The very significant environmental conferences and their achievements were discussed. Some important international environmental law agreements like CITES, Cartagena protocol on biosafety, Stockholm convention on POP's, Montreal protocol, Vienna convention, Rotterdam convention were discussed.

1.7 KEY WORDS

- POP's** : They are persistent organic pollutants (POPs). These chemical substances that persist in the environment, bio-accumulate through the food web, and cause adverse effects to human health and the environment.
- The Biosafety Protocol** : It aims to protect biological diversity from the potential risks posed by genetically modified organisms, resulting from modern biotechnology.
- Hazard** : It can be defined as a potential threat to humans and their welfare and risk as the probability of hazard occurrence.
- Living modified organism (LMO) Products** : They are defined as processed material that are of living modified organism origin, containing detectable novel combinations of replicable genetic material obtained through the use of modern biotechnology.
- IPCC** : Intergovernmental Panel on Climate Change.

1.8 REFERENCES AND SUGGESTED FURTHER READINGS

- Tiwari, H.N. 2008. Environmental law. Allahabad Law Agency. 548 p.
- Jaswal, P.S and Nishtha Jaswal. 2011. Environmental Law. Allahabad Law Agency. 612 p.

1.9 ANSWERS TO CHECK YOUR PROGRESS

Answers to Check Your Progress 1

1. Your answer should include the following points:
 - Global environmental issues are examined under the subject of International Environmental law. Debates over environmental issues are based on the principles of international law, numerous international agreements and declarations. International Environmental law is not a separate branch of law but a part of the International law which governs relations between states.

- Environmental international law has evolved from a number of sources. The most important source is the customary international law. Customary international laws are the norms followed by most countries as a matter of custom. They are responsible for the common thread that binds all countries. Other sources of the international law include general principles of law recognized by civilized nations.
 - International law is also evolved from subsidiary sources such as decisions of courts and tribunals and writing of jurists.
2. Your answer should include the following points:
- The Rio conference was held 20 years after the first International conference on environmental issues at Stockholm. The main objective of the Rio conference was to stop environmental degradation of the planet. Following the Stockholm conference, UN in the year 1983 set up a Commission on Environmental and Development led by Brundtland from Norway. The Commission suggested the concept of Sustainable Development. This is defined as “the development which meets the needs of the present generation without compromising the ability of the future generations to meet their own needs”. Based on the Brundtland report, 1987- the UN General Assembly called for the convention of UNCED (United Nations Conference on Environment and Development). UNCED was held at Rio De Janeiro, Brazil in June, 1992 represented by 172 governments. Several representatives of non-governmental organizations (NGOs) attended. It focussed on balancing development that support socio-economic development and avoids damage to the environment. It also stressed on the need to bring about global partnership to tackle the issues.
 - Issues covered
 - Agenda 21
 - Important agreements
3. Your answer should include the following points:
- Agenda 21 is a dynamic programme and a voluntary action plan. It is called so because it is a comprehensive blue-print for local, national, regional and global actions. The proposed actions will enable the transition to sustainable development in the 21st century. It was adopted by more than 178 Governments at the Rio Conference. It comprises of 40 chapters and hundreds of programme areas. Agenda 21 lays down the ways and means in the reduction of wasteful and inefficient consumption patterns. It recognized the need of developed countries like extending financial support and aiding technology transfer to developing countries to achieve sustainable development.

Answers to Check Your Progress 2

1. Your answer should include the following points:
- The World Summit on Sustainable Development, also referred to as the Earth Summit was held at Johannesburg, South Africa from 26

August to 4 September 2002. The United Nations convened the summit to discuss sustainable development. The summit brought together several leaders from business and non-governmental organizations. It was held 10 years after the first Earth Summit in Rio de Janeiro. The goal of WSSD was to hold a 10 year review of the 1992 UNCED to reinvigorate global commitment to sustainable development. It was therefore also informally nicknamed “Rio+10”. The main outcome of the Summit was the Johannesburg Declaration and the WSSD plan of implementation. A number of partnerships were launched to help implement commitments made at WSSD.

2. Your answer should include the following points:

- The Montreal Protocol on Substances that Deplete the Ozone Layer (a protocol to the Vienna Convention for the Protection of the Ozone Layer) is an international treaty for the protection of the ozone layer.
- Its objectives include phasing out the production of ozone depleting substances. It was agreed on 16 September 1987. It entered into force on 1 January 1989, followed by a first meeting in Helsinki, May 1989. Since then, it has undergone several revisions. It aims at the reduction in the production of CFC (substance) itself and not just emission of the CFCs. The parties are expected to reduce their consumption and production of CFC to the 1986 level, which is considered to be the base year.
- The protocol takes into consideration the different position of the developed and the developing countries. It has laid obligations on them, where the phasing out time is different. It requires phasing out all consumptions or production of most of the substances that deplete the Ozone layer by Jan 1996 by the developed countries and the consumption of HCFC to be frozen in 1996 and to be completely phased out by 2030. The complete elimination time that is fixed for the developing countries, unlike the developed countries is the year 2010 and the elimination period for Hydro Chlorofluorocarbons (HCFC’S) is 2040.

3. Your answer should include the following points:

- The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement on biosafety. It is a supplement to the Convention on Biological Diversity effective since 2003. This Protocol aims to protect biodiversity from the potential threats resulting from genetically modified organisms. The Protocol outlines that precautionary principles should be applied for products that result from modern biotechnology. It permits developing countries to balance public health against economic benefits. In case there is insufficient scientific evidence regarding product safety it allows countries to ban imports of genetically modified organisms. It also requires exporters to label the shipments containing genetically altered commodities. This protocol is in accordance with the precautionary approach, contained in Principle 15 of the Rio Declaration on Environment and Development. The objective of the Protocol is to

ensure an adequate level of protection for the safe transfer, handling and use of living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity. They also take into account human health risks, specifically focusing on transboundary movements.

**International Environmental
Policies, Agreements and
Treaties**



UNIT 2 NATIONAL ENVIRONMENTAL LEGISLATION AND PROGRAMMES - I

Structure

- 2.0 Introduction
- 2.1 Objectives
- 2.2 Historical Content
- 2.3 Tiwari Committee
- 2.4 The water (Prevention & Control of pollution) Act 1974
- 2.5 The Air (Prevention & Control of pollution) Act 1981
- 2.6 Establishment of MOEF
- 2.7 The Environmental (Protection) Act 1986; CPCB, CPHEO and SPCBs
- 2.8 Environmental Impact Assessment Notification 2006
- 2.9 National Water Quality Programme
- 2.10 National Air Quality Monitoring Programme
- 2.11 National Wetland Conservation Programme
- 2.12 National Health Policy 2002
- 2.13 National Rural Health Mission
- 2.14 National Vector Borne Disease Control Programme
- 2.15 National Tobacco Control Programme
- 2.16 National Programme for Prevention and Control of Fluorosis
- 2.17 National Iodine Deficiency Disorder Control Programme
- 2.18 Let Us Sum Up
- 2.19 Key Words
- 2.20 References and Suggested Further Readings
- 2.21 Answers to Check Your Progress

2.0 INTRODUCTION

Environmental Legislation is the collection of laws and regulations pertaining to air quality, water quality, the wilderness, endangered wildlife and other environmental factors. The umbrella of environmental legislation covers many laws and regulations, yet they all work together toward a common goal, which is regulating the interaction between man and the natural world to reduce threats to the environment and increase public health.

As you might imagine, environmental legislation is a broad topic, mainly because the natural environment encompasses so many different aspects. So, environmental laws need to consider everything, from the air we breathe to the natural resources we rely on to the plants and animals that share this world with us.

To better understand environmental law, let's look at an example. Let's say that an energy company wants to build a coal-burning power plant to create electricity for the community. Where should this power plant be built? What type of pollutants might result from the coal burning, and what measures will need to be taken to control harmful emissions? If the power plant is built at the edge of town to lessen air pollution for the human population, how will this impact lesser species that inhabit the land downwind of the plant? These are all considerations to be evaluated within the scope of environmental law.

2.1 OBJECTIVES

After reading this unit, you should be able to:

- Understand the various National Environmental Legislations viz The Water (Prevention & Control of pollution) Act 1974, The Air (Prevention & Control of pollution) Act 1981, The Environmental (Protection) Act 1986, Environmental Impact Assessment Notification 2006
- Explain various National Programme viz National Wetland Conservation Programme, National Health Policy 2002, National Rural Health Mission, National Vector Borne Disease Control Programme, National Tobacco Control Programme, National Programme for Prevention and Control of Fluorosis, National Iodine Deficiency Disorder Control Programme, their objectives, goal etc.

2.2 HISTORICAL CONTENT

Debates over how to preserve air and water quality are not new. These topics, along with many other environmental issues, have been subjected to laws for thousands of years. There is evidence of early Roman law regarding the handling of water and sewage. In fact, it is speculated that the Roman Empire lasted as long as it did because they paid so much attention to sewage networks and extensive freshwater distribution channels.

However, the official timeline of environmental law in the United States did not start until the 20th century. The United States is regarded as a world leader when it comes to development and application of environmental law, and the 1960s are when the process got started.

This time period in U.S. history was marked by a surge in economic and industrial growth. Along with an increase in factories and industrial activities, came a mounting concern about the impact these practices were having on the earth's natural environment. This was also a time when environmentalism, which is a movement toward protecting the natural environment against hazards and pollutants, matured into a public and political force.

2.3 TIWARI COMMITTEE

The Government of India set up a committee in January 1980 under the Chairmanship of Shri. N.D. Tiwari, then Deputy Chairman of the Planning Commission to review the existing environmental legislations and recommend legislative measures and administrative machinery for environmental protection. The committee stressed the need for the proper management of the country's natural resources of land, forest and water in order to conserve the nation's ecological bases.

The committee's recommendations were

- Creation of comprehensive environmental code to cover all types of pollution and environmental degradation.
- Constitution of environmental Courts in all district headquarters and appointment of experts to assist the Court.
- Creation of Department of Environment.
- Setting up a Central Land Commission.
- provisions of economic incentives to industries to encourage environment friendly products, income tax and sales tax benefits for adapting cleaner technology, investment tax, credits for purchases of purification devices, replacement cost of purification equipment in annual operating costs and minimal tax or no tax on the manufacture of pollution control devices.
- Making environmental impact assessment, not only a prerequisite for industry to start but also repeated periodically.

The emphasis laid in the planning commissions' reports and Tiwari committee's recommendations led the Government of India to set up a separate department namely Department of Environment in the year 1980. To improve the implementation of laws and policy directives the Department of Environment was replaced by an integrated Department of Environment, Forests and Wild life in the year 1985, which later on expanded into a Ministry namely Ministry of Environment and Forests. Now a days it is named as Ministry of Environment, Forest and Climate Change.

2.4 THE WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974

Water (Prevention & Control of Pollution) Act, 1974 is a comprehensive legislation that regulates agencies responsible for checking on water pollution and ambit of pollution control boards both at the centre and states. The government formulated this act in 1974 to prevent the pollution of water by industrial, agricultural and household wastewater that can contaminate our water sources. Wastewaters with high levels of pollutants that enter wetlands, rivers, lakes, wells as well as the sea are serious health hazards. Controlling the point sources by monitoring the levels of different pollutants is one way to prevent pollution, by punishing the polluter.

The main objectives of the Water Act are to provide for prevention, control and abatement of water pollution and the maintenance or restoration of the

wholesomeness of water. The Water Act, 1974 with certain amendments in 1978 is an extensive legislation with more than sixty sections for the prevention and control of water pollution. Among other things, the Act provides for constitution of central and State Boards for preventing water pollution, power to take water samples and their analysis, discharge of sewage or trade effluents, appeals, revision, minimum and maximum penalties, publication of names of offenders, offences by companies and Government departments, cognizance of offences, water laboratories, analysis etc.

Prevention and control of water pollution is achieved through a permit or 'consent administration' procedure. Discharge of effluents is permitted by obtaining the consent of the State Water Board, subject to any condition they specify. Any person who fails to comply with a directive of the State cannot, however, entertain in suit under this Act unless the suit is brought by, or with the sanction of the State Board.

Some of the important sections regulating the prevention of water pollution as per the act are as discussed below.

Section 17 clearly lists all functions of the respective state boards for countering water pollution. The state water boards also have the right to inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review all water purification plants. The Board may establish or recognize a laboratory or laboratories to enable the Board to perform its functions under this section efficiently, including the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents.

Section 25 states that Prior Consent of the State Board under section 25 is necessary to set up any industry, plant or process which is likely to discharge sewage or trade effluent into a stream or well or sewer or on land or bring into use any new or altered outlets for the discharge of sewage or begin to make any new discharge of sewage. The section further states that every State Board is liable to maintain a register containing particulars or conditions imposed under the section related to any outlet, or to any effluent, from any land or premises which must be open to inspection by the state board.

Section 32 describes the power to take emergency measures in case of pollution of stream or well. Under the act, State Board may issue orders to remove the matter, which is, or may cause pollution; or remedy or mitigate the pollution, or issue prohibition orders to the concerned persons from discharging any poisonous or noxious or polluting matter.

Section 24 and 43 relate to prohibition on use of stream or well for disposal of polluting matter and penalty for contravention thereof. Anyone failing to abide by the laws of under is liable for imprisonment under Section 24 & Section 43 ranging from not less than one year and six months to six years along with monetary fines.

Section 42 states penalties and fines for certain acts including pulling down pillars, obstructs any person acting under the orders or direction of the Board, Damages any works or property belonging to the Board and Failure to furnish any officer other employee of the Board any information required. The fine and penalty includes Imprisonment for a term which may extend up to three months or with fine to Rs. 10,000/- or both.

Understanding Water Class

Depending on the pollution of the water, water is demarked under various water classes in accordance with the Water (Prevention & Control of Pollution) Act, 1974. Drinking water at source found without conventional treatment but after disinfection is designated as Class A while water designated for outdoor bathing comes under Class B. Any drinking water source which has been conventionally treated comes under Class C while water used for propagation of wildlife and fisheries is demarked as Class D. Water under Class E is used for irrigation and industrial cooling along with waste disposal.

Water Pollution Cess Act, 1977 According to this Act, anyone consuming water has to pay certain amount of cess depending on:

- (i) Whether the industry is using water for industrial cooling, spraying in mine pits or boilers feed,
- (ii) For domestic purposes.
- (iii) In processing, whereby water gets polluted and pollutants are easily biodegradable.
- (iv) In processing whereby water gets polluted and the pollutants are not easily bio-degradable and are toxic.
- (v) Those industries that had installed a suitable treatment plant for the treatment of industrial effluents can get a rebate of 70 per cent on the cess payable.

Some Key Points of Water Act, 1974

- Water Act 1974 aims to prevent and control water pollution.
- Under Water Act, 1974, pollution control boards were created, who are responsible for implementation of its provisions.
- One of the important provision of the Water Act, 1974 is to maintain and restore the 'wholesomeness' of our aquatic resources.
- Under Water Act 1974, Sewage or pollutants cannot be discharged into water bodies including lakes and it is the duty of the state pollution control board to intervene and stop such activity.
- Anyone failing to abide by the laws of under is liable for imprisonment under Section 24 & Section 43 ranging from not less than one year and six months to six years along with monetary fines.

2.5 THE AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981

The Air (Prevention and Control of Pollution) Act, 1981 is a central Act of Parliament, which provides for the prevention and control of air pollution and maintaining the good quality of air. It is also a comprehensive legislation with more than fifty sections.

According to the Act "Air Pollution means the presence in the atmosphere of any air pollutant", and "air pollutant" means "any solid, liquid or gaseous

substance present in the atmosphere in such a concentration as may be or tend to be injurious to human beings or other living creatures or plant or property or environment.”

It makes provisions, inter alia, for Central and State Boards, power to declare pollution control areas, restrictions on certain industrial units, authority of the Boards to limit emission of air pollutants, power of entry, inspection, taking samples and analysis, penalties, offences by companies and Government and cognizance of offences etc..

The Act specifically empowers State Government to designate air pollution areas and to prescribe the type of fuel to be used in these designated areas. According to this Act, no person can operate certain types of industries including the asbestos, cement, fertilizer and petroleum industries without consent of the State Board.

The Board can predicate its consent upon the fulfillment of certain conditions. The Air Act apparently adopts an industry wide “best available technology” requirement. As in the Water Act, courts may hear complaints under the Act only at the instigation of, or with the sanction of, the State Board.

The Government passed this Act in 1981 to clean up our air by controlling pollution. It states that sources of air pollution such as industry, vehicles, power plants, etc., are not permitted to release particulate matter, lead, carbon monoxide, sulfur dioxide, nitrogen oxide, volatile organic compounds (VOCs) or other toxic substances beyond a prescribed level.

To ensure this, Pollution Control Boards (PCBs) have been set up by Government to measure pollution levels in the atmosphere and at certain sources by testing the air. This is measured in parts per million or in milligrams or micrograms per cubic meter.

The particulate matter and gases that are released by industry and by cars, buses and two wheelers is measured by using air-sampling equipment. However, the most important aspect is for people themselves to appreciate the dangers of air pollution and reduce their own potential as polluters by seeing that their own vehicles or the industry they work in reduces levels of emissions.

This Act is created to take appropriate steps for the preservation of the natural resources of the Earth which among other things includes the preservation of high quality air and ensures controlling the level of air pollution.

Some of the important sections regulating the prevention of Air pollution as per the act are as discussed below.

Section 16 of this act prescribes the functions of the Central Board and includes giving advise to the Central Government, guidance and technical help to the State Boards, coordinating the activities of the state, training, awareness and dissemination of information and planning a nationwide program for the prevention and control of air pollution. The standards for air quality have also to be prescribed by the Central Board. The Central Board may also establish a laboratory or laboratories to assist it in performing its functions. It may also delegate any of its functions to any committee formed by it for the purpose.

Section 17 of the act prescribes functions of the State Boards. It includes training, awareness, planning and executing programs for air pollution control,

advising the state government in matters relating to air pollution, collecting and disseminating information, inspecting premises and giving suitable directions for air pollution control, assessing the ambient air quality, laying down emission standards in consultation with the Central Pollution Control Board (Standards prescribed by the Central Government or the Central Pollution Control Board cannot be relaxed by the State Boards, they can only be made more stringent), advising the state government on the suitability of any location for an air polluting industry and setting up or recognizing a laboratory or laboratories to enable the state board to perform its functions.

Section 18 states that the written directions given by the Central Government have to be followed by the Central Board. Similarly the written directions given by the State Government have to be followed by the State Board. If the directions given by the State Government do not match with the directions given by the Central Board, then the matter has to be referred to the Central Government for a decision.

Section 19 empowers state Govt. to specify air pollution control area and prohibit specific fuel therein. The State Pollution Control Board may also prohibit the burning of any fuel or non fuel material which is likely to cause air pollution or the operation of any appliance which is not an approved appliance in an air pollution control area.

Section 20 empowers state Government to give directions to the road transport officers to ensure standard of emission of air pollutants by automobiles and give such instructions as may be deemed necessary to the concerned authority in charge of registration of motor vehicles under the Motor Vehicles Act, 1939 (Act 4 of 1939), and such authority shall be bound to comply with such instructions.

Section 21 makes a provision of Consent of the State Pollution Control Board for establishing or operating any industrial plant in an air pollution control area. It also lays down procedures for making the application which has to be in the prescribed form and accompanied by such fees as may be prescribed, the manner of inquiry and a time limit of four months within which the consent has either to be granted or refused by the State Board. The consent so granted may be cancelled or refused before the expiry of the period of consent if the conditions are not complied with.

Section 22 states that no person having any industrial plant in an air pollution control area can discharge emissions of any air pollutants in the excess of the standards prescribed by the State Pollution Control Boards

Section 22A where a violation of the emission standards prescribed by the Board is apprehended the Board may make an application to a court, for restraining such person from emitting such pollutant. The court may issue necessary directions. In case the same are not complied with, by the person, the court may authorize the Board to implement the directions. Costs so incurred by the Board can be recovered as arrears of land revenue.

Section 24 states that any person authorized by a State Board has a right to enter any place with the objective of performing his duties under the Air (Prevention and Control of Pollution) Act as entrusted to him and shall be provided all assistance by the person operating the plant.

Section 25 states that the State Board or any officer empowered by the Board has a right to seek information from the occupier or any other person operating the plant (regarding functions as entrusted to the officer in this behalf). He will also have a right to inspect the premises in order to verify the correctness of the information.

Section 26 empowers the State Board or any officer in this behalf to take samples of air or emission from any chimney, flue or duct or any other outlet. It also prescribes the procedure for giving notice, dividing samples into two parts, sending one part to the Board and the other part to the State air laboratory constituted by the state government under section 28 for analysis.

Section 31 any person aggrieved by an order made by the State Board under this act may prefer an appeal before the appellate authority constituted by the state government for the purpose. The appeal has to be generally filed within thirty days from the date on which the order is communicated but the appellate authority may entertain the appeal after the expiry of thirty days, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

Section 31A empowers the State Pollution Control Boards in the exercise of their powers and performance of functions under this Act to issue any direction in writing to any person, officer or authority. It has also been provided that such person, officer or authority shall be bound to comply with the directions.

The power to issue directions under this section includes the power to direct for the closure, prohibition or regulation of any industry, operation or process or the stoppage or regulation of supply of electricity, water or any other services.

Failure to comply with the Provisions 21 or Section 22 or both with the Directions Issued under section-31

Section 37 whoever fails to comply, with the provisions of section-21 or section-22 or directions issued under section-31A, shall in respect of each such failure, be punishable with imprisonment, which shall not be less than one year and six months, but which may extend to six years and with fine and in case of failure continues, with an additional fine of five thousand rupees every day.

Section 38 any person who damages any works or property belonging to the Board, or any notice or other matter put up under the authority of the Board, furnishes false information, fails to inform violation or apprehension of violation of standards or makes a false statement for the purpose of obtaining any consent under section 21, shall be punishable with imprisonment for a term which may extend to three months or with fine which may extend to ten thousand rupees or both.

Section 39 any order or direction issued under the Air (Prevention and Control of Pollution) Act for which no penalty has been provided elsewhere in this Act, shall be punishable with imprisonment for a term which may extend to three months or with fine of ten thousand rupees or both and in case of failure continues, with an additional fine of five thousand rupees every day.

Section 40 every person who, at the time of offence was committed, was directly in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the

offence and shall be liable to be proceeded against and punished accordingly in this act prescribed.

Section 41 where an offence under this Act has been committed by any Department of Government, the head of the Department or any other officer responsible by way of consent, connivance or neglect shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly.

Thus, the main objectives of the Act are as follows:

- (a) To provide for the prevention, control and abatement of air pollution.
- (b) To provide for the establishment of central and State Boards with a view to implement the Act.
- (c) To confer on the Boards the powers to implement the provisions of the Act and assign to the Boards functions relating to pollution.

Air pollution is more acute in heavily industrialized and urbanized areas, which are also densely populated. The presence of pollution beyond certain Limits due to various pollutants discharged through industrial emission is monitored by the PCBs set up in every state.

2.6 ESTABLISHMENT OF MOEF

Environmental debates were first introduced into the national political agenda during Indira Gandhi's first term as Prime Minister of India. The 4th Five-Year Plan (1969–74), for example, proclaimed "harmonious development on the basis of a comprehensive appraisal of environmental issues." In 1976 (during the Emergency) Gandhi added Article 48A to the constitution stating that: "The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country." The same decree transferred wildlife and forests from state list to concurrent list of the constitution, thus giving the central government the power to overrule state decisions on that matter. Such political and constitutional changes prepared the groundwork for the creation of a federal Department of Environment in 1980, turned into the Ministry of Environment and Forests (MOEF) in 1985. Although tackling climate change was already a responsibility of the ministry, its priority was raised when in May 2014 the ministry was renamed to the current title of Ministry of Environment, Forest and Climate Change.

The Ministry of Environment, Forest and Climate Change (MoEFCC) is an Indian government ministry. The ministry is responsible for planning, promoting, coordinating, and overseeing the implementation of environmental and forestry programmes in the country. The main activities undertaken by the ministry include conservation and survey of the flora of India and fauna of India, forests and other wilderness areas; prevention and control of pollution; afforestation, and land degradation mitigation. It is responsible for the administration of the national parks of India.

The primary concerns of the Ministry are implementation of policies and programmes relating to conservation of the country's natural resources including its lakes and rivers, its biodiversity, forests and wildlife, ensuring the welfare of animals, and the prevention and abatement of pollution. While implementing

these policies and programmes, the Ministry is guided by the principle of sustainable development and enhancement of human well-being.

The Ministry also serves as the nodal agency in the country for the United Nations Environment Programme (UNEP), South Asia Co-operative Environment Programme (SACEP), International Centre for Integrated Mountain Development (ICIMOD) and for the follow-up of the United Nations Conference on Environment and Development (UNCED). The Ministry is also entrusted with issues relating to multilateral bodies such as the Commission on Sustainable Development (CSD), Global Environment Facility (GEF) and of regional bodies like Economic and Social Council for Asia and Pacific (ESCAP) and South Asian Association for Regional Co-operation (SAARC) on matters pertaining to the environment.

The broad objectives of the Ministry are:

- Conservation and survey of flora, fauna, forests and wildlife
- Prevention and control of pollution
- Afforestation and regeneration of degraded areas
- Protection of the environment and
- Ensuring the welfare of animals

These objectives are well supported by a set of legislative and regulatory measures, aimed at the preservation, conservation and protection of the environment. Besides the legislative measures, the National Conservation Strategy and Policy Statement on Environment and Development, 1992; National Forest Policy, 1988; Policy Statement on Abatement of Pollution, 1992; and the National Environment Policy, 2006 also guide the Ministry's work.

2.7 THE ENVIRONMENTAL (PROTECTION) ACT 1986; CPCB, CPHEO AND SPCBS

Against the backdrop of the United Nations Conference on the Human Environment held at Stockholm in June 1972, in which India was a participant, the Central Government enacted a legislation, 'The Environment (Protection) Act, 1986', with an objective for protection and improvement of the environment and for matters connected therewith. The Act came into force on Nov. 19, 1986, the birth anniversary of our Late Prime Minister Indira Gandhi, who was a pioneer of environmental protection issues in our country. The Act extends to whole of India as a remedy to the lacunae noticed in the earlier laws and to serve as a single legislation on the subject.

The Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974 were amended to bring their provisions at par with those of The Environment (Protection) Act, 1986 and to give more powers to the implementing agencies.

As per this Act, the Central Government shall have the power to take all such measures for the purpose of protecting and improving the quality of the environment and to prevent environmental pollution. Further, the Central Government shall have the power to give directions in writing to any person or officer or any authority for any of the purposes of the Act, including the power

to direct the closure, prohibition or regulation of any industry, operation or process.

No person carrying on an industry, operation or process shall discharge or emit any environmental pollutant in excess of standards prescribed by the Government. Further persons handling with hazardous substances shall comply with the procedural safeguards as may be prescribed by the authorities.

As per the Act where the discharge of any environmental pollutant in excess of prescribed standard occurs, or is apprehended to occur due to any accidental or other unforeseen act or event, the person responsible for such discharge shall be bound to prevent or mitigate the pollutant so caused as well as intimate the fact of such occurrence to the concerned authorities.

The Central Government or any other officer empowered by the Central Government shall have the powers to take the samples of air, water, soil or any other substances from any factory, premises, etc for the purpose of analysis. The said officer shall without delay send the container with the sample to the laboratory established or recognized by Central Government. The Central Government has established several environmental laboratories for the purposes of the Environment (Protection) Act.

For the purposes of protecting and improving the quality of the environment and preventing and abetting environmental pollution, the standards of emission or discharge of environmental pollutants from the industries, operations or processes are specified in Schedules 1 to 1V of the Environment (Protection) Rules.

The Central Government takes into consideration various factors while prohibiting or restricting the location of industries and carrying on of processes and operations in different areas. Every person carrying on an industry, operation or process requiring consent under the water (prevention and control of pollution) Act, 1974 or under The Air (Prevention and Control of Pollution) Act, 1981 or both or authorization under the Hazardous Waters (Management and Handling) Rules, 1989 shall submit an environmental statement for the financial year ending on the 31st March in Form V to the concerned State Pollution Control Board on or before the Thirteenth day of September every year, beginning 1993.

The Salient Features of the Environment Protection Act, 1986 (India)

This Act has been brought into force from November, 1986. Its salient features are:

- (a) Conferring powers on the Central Government to:
 - (i) Take all necessary measures for protecting quality of environment,
 - (ii) Co-ordinate actions of States, officers and other authorities under this Act,
 - (iii) Plan and execute a nationwide programme for prevention, control and abatement of environmental pollution,
 - (iv) Lay down standards for discharge of environmental pollutants,
 - (v) Empower any person to enter, inspect, take samples and test,

- (vi) Establish or recognise environmental laboratories,
 - (vii) Appoint or recognise government analysts, (viii) lay down standards for quality of environment,
 - (viii) Restrict areas in which any industries, operations or processes may not be carried out subject to certain safeguards,
 - (ix) Lay down safeguards for prevention of accidents and take remedial measures in case of such accidents,
 - (x) Lay down procedures and safeguards for handling hazardous substances,
 - (xi) Constitute an authority for exercising powers,
 - (xii) Issue directions to any person, officer or authority including the power to direct closure, prohibition or regulation of any industry, operation or process,
 - (xiii) Require any person, officer or authority to furnish any prescribed information and
 - (xiv) Delegate powers to any officer of a state or authority;
- (b) It confers powers on persons to complain to courts regarding any violation of the provisions of the Act, after a notice of 60 days to the prescribed authorities;
- (c) The Act makes it obligatory for the person in charge of a place to inform the prescribed authorities regarding any accidental discharge of any pollutant in excess of prescribed standards.
- The concerned authorities, on receipt of such information, shall take remedial measures to prevent or mitigate pollution caused by such accidents and expenses incurred by the authorities in respect of remedial measures are recoverable with interest from the polluter;
- (d) It prescribes stringent penalties for violation of the provisions of the Act; and
- (e) Jurisdiction of civil courts is barred under the Act.

CENTRAL POLLUTION CONTROL BOARD (CPCB)

The Central Pollution Control Board (CPCB), statutory organisation, was constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, CPCB was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981.

It serves as a field formation and also provides technical services to the Ministry of Environment and Forests of the provisions of the Environment (Protection) Act, 1986.

CPCB plays role in abatement and control of pollution in the country by generating relevant data, providing scientific information, rendering technical inputs for formation of national policies and programs, training and development of manpower and organizing activities for promoting awareness at different levels of the Government and public.

Principal Functions

As spelt out in the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, (i) to promote cleanliness of streams and wells in different areas of the States by prevention, control and abatement of water pollution, and (ii) to improve the quality of air and to prevent, control or abate air pollution in the country.

CPCB runs nationwide programs of ambient air quality monitoring known as National Air Quality Monitoring Programme (NAMP) with objectives to determine the present air quality status and trends and to control and regulate pollution from industries and other source to meet the air quality standards. It also provides background air quality data needed for industrial siting and towns planning.

One of the mandates of CPCB is to collect, collate and disseminate technical and statistical data relating to water pollution. CPCB in collaboration with concerned SPCBs/PCCs established a nationwide network of water quality monitoring. Hence, Water Quality Monitoring (WQM) and Surveillance are of utmost importance. The inland water quality monitoring network is operating under a three-tier program i.e. Global Environment Monitoring System (GEMS), Monitoring of Indian National Aquatic Resources System (MINARS) and Yamuna Action Plan (YAP).

CPCB programs for urban areas, also known as *EcoCity Program* comes under X Plan to improve environment through implementation of identified environmental improvement projects in the selected towns and cities.

Every municipal authority comes under the Municipal Solid Wastes (Management & Handling) Rules, 2000 (MSW rules, 2000) and responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid. CPCB collects necessary information form municipal authorities and provide them technical assistance.

According to S.O. 123(E) by MoEF, various sources like industrial activity, construction activity, generator sets, loud speakers, public address systems, music systems, vehicular horns and other mechanical devices have deleterious effects on human health. CPCB has the responsibility to regulate and control noise producing and generating sources with the objective of maintaining the ambient air quality standards.

CPCB manages environmental data statistic in which air quality data and water quality data comes through. In the case of air quality data, it measures the level of SO₂, NO₂, RSPM and SPM. CPCB measure and maintains water quality data as well. Quality level of river and ponds are the major fields which comes under the water quality data criteria

STATE POLLUTION CONTROL BOARD (SPCB)

There are State Pollution Control Boards at various state capitals of the country to advise respective state governments to control and protect environment. Till 1989 all except the states of Manipur, Mizoram, Nagaland, Arunachal Pradesh and Sikkim have their SPCBs.

All SPCBs look after the interest of the respective states where they function. They implement the directives from CPCB and all Acts which are enacted from time to time. The SPCB has also branches at different towns in the states.

A person of repute in the field of environment or environmental scientists

heads the SPCB as chairman. The SPCB has its own team of scientists and laboratories to check quality of air, soil and water of different samples collected from industrial areas.

2.8 ENVIRONMENTAL IMPACT ASSESSMENT NOTIFICATION 2006

EIA is an important procedure for ensuring that the likely effects of new development on the environment are fully understood and taken into account before the development is allowed to go ahead.

History

After Bhopal Gas tragedy, Environmental Protection Act was enacted (1986) also refer as Umbrella Act under EP Act, EIA notification was issued in 1994 (cost of project was criteria for screening). In 2006, again new EIA notification was issued, substituted old one

The Union Ministry of Environment and Forest (MoEF) notified the new EIA Notification in September 2006 after putting up the draft notification for public comment for a year.

Though, there have been some improvements in the new notification over the previous one, it has certainly failed to meet the expectations of the various stakeholders, especially members of the civil society, NGOs and local community.

The New Notification has tried bringing in more number of projects within the purview of the environmental clearance process. Most importantly, there is no categorisation of projects requiring EIA based on investment, rather size or capacity of the project determines whether it is cleared by the central or state government.

The salient features of EIA Notification, 2006 inter alia include:

- (i) The EIA Notification, 2006 has categorized the projects into two categories namely; Category 'A' and Category 'B' based on their impact potential.
- (ii) Category 'A' projects will be appraised at the Central level while Category 'B' project at the State level.
- (iii) State level Environment Impact Assessment Authorities and Committees (SEIAAs and SEACs) have been constituted for the purpose of appraisal of Category 'B' projects
- (iv) The stage of scoping for prescribing terms of reference by the Regulatory Agency for the EIA studies has been incorporated in accordance with the International practice. It is expected to improve the quality of EIA thereby improving the quality of decision making and minimizing the delays.
- (v) The public consultation process has been made more structured. It has two components i.e. comments through correspondence and by public hearing at site. Provision to video graph the proceedings of the public hearing has been made.

- (vi) NOCs from other regulatory agencies such as SPCB etc. are not a prerequisite for considering application for environmental clearance.

2.9 NATIONAL WATER QUALITY PROGRAMME

The Central Pollution Control Board (CPCB) has established a network of monitoring stations on aquatic resources across the country. The present network comprises of 2500 stations in 28 States and 6 Union Territories spread over the country. The monitoring network covers 445 Rivers, 154 Lakes, 12 Tanks, 78 Ponds, 41 Creeks/Seawater, 25 Canals, 45 Drains, 10 Water Treatment Plant (Raw Water) and 807 Wells. Among the 2500 stations, 1275 are on rivers, 190 on lakes, 45 on drains, 41 on canals, 12 on tanks, 41 on creeks/seawater, 79 on ponds, 10 Water Treatment Plant (Raw Water) and 807 are groundwater stations.

Presently the inland water quality-monitoring network is operated under a three-tier programme i.e. Global Environment Monitoring System (GEMS), Monitoring of Indian National Aquatic Resources System (MINARS) and Yamuna Action Plan (YAP). Water samples are being analysed for 28 parameters consisting of 9 core parameters, 19 other physico-chemical and bacteriological parameters apart from the field observations. Besides this, 9 trace metals and 15 pesticides are also analysed in selected samples. Bio-monitoring is also carried out on specific locations. In view of limited resources, limited numbers of organic pollution related parameters are monitored i.e. micro pollutants (Toxic Metals & POPs) are analysed once in a year to assess the water quality. The water quality data are reported in Water Quality Status Year Book.

2.10 NATIONAL AIR QUALITY MONITORING PROGRAMME

Central Pollution Control Board is executing a nation-wide programme of ambient air quality monitoring known as National Air Quality Monitoring Programme (NAMP). The network consists of Six hundred and Eighty Three (683) operating stations covering Three Hundred (300) cities/towns in twenty six (29) states and four (6) Union Territories of the country.

The objectives of the N.A.M.P. are to determine status and trends of ambient air quality; to ascertain whether the prescribed ambient air quality standards are violated; to Identify Non-attainment Cities; to obtain the knowledge and understanding necessary for developing preventive and corrective measures and to understand the natural cleansing process undergoing in the environment through pollution dilution, dispersion, wind based movement, dry deposition, precipitation and chemical transformation of pollutants generated.

Under N.A.M.P., four air pollutants viz ., Sulphur Dioxide (SO₂), Oxides of Nitrogen as NO₂, Respirable Suspended Particulate Matter (RSPM / PM₁₀) and Fine Particulate Matter (PM_{2.5}) have been identified for regular monitoring at all the locations. The monitoring of meteorological parameters such as wind speed and wind direction, relative humidity (RH) and temperature were also integrated with the monitoring of air quality.

The monitoring of pollutants is carried out for 24 hours (4-hourly sampling for gaseous pollutants and 8-hourly sampling for particulate matter) with a frequency of twice a week, to have one hundred and four (104) observations in a year. The monitoring is being carried out with the help of Central Pollution

Control Board; State Pollution Control Boards; Pollution Control Committees; National Environmental Engineering Research Institute (NEERI), Nagpur. CPCB co-ordinates with these agencies to ensure the uniformity, consistency of air quality data and provides technical and financial support to them for operating the monitoring stations. N.A.M.P. is being operated through various monitoring agencies. Large number of personnel and equipments are involved in the sampling, chemical analyses, data reporting etc. It increases the probability of variation and personnel biases reflecting in the data, hence it is pertinent to mention that these data be treated as indicative rather than absolute.

National Air Quality Index (NAQI)

The NAQI was prepared by an expert group, set up the Ministry of Environment and Forests, comprising of renowned medical practitioners from hospitals and research agencies.

The index is a part of the government's Swachh Bharat Mission. The index measures *eight major pollutants, namely, particulate matter (PM 10 and PM 2.5), nitrogen dioxide, sulphur dioxide, ozone, carbon monoxide, ammonia and lead. Currently, only particulate matter, nitrogen dioxide and sulphur dioxide.*

The index is based on real time monitoring, and the health risks are easily identified through *a colour coded system*. The risks will be signified through six levels – good, satisfactory, moderately polluted, poor, very poor, and severe. Air quality is qualified as good if the level of air pollution is at least 50% below the permissible limits set by the Pollution Control authorities.

The index will be extended to 46 cities having a population of more than one mn, and 20 state capitals over the next five years.

Check Your Progress 1

- Note:** a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. What is the function of State Board under Section 17 of the Water (Prevention & Control of Pollution) Act, 1974?

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2. Write down the silent features of EIA Notification, 2006.

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2.11 NATIONAL WETLAND CONSERVATION PROGRAMME

Wetlands are areas where water is the primary factor controlling the environment and the associated plant and animal life. They occur where the water table is at or near the surface of the land, or where the land is covered by water. Once treated as transitional habitats or serial stages in succession from open water to land, the wetlands are now considered to be distinct ecosystems with specific ecological characteristics, functions and values.

Ramsar Convention on Wetlands define wetlands as: “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres”.

Wetlands, natural and manmade, freshwater or brackish, provide numerous ecological services. The density of birds, in particular, is an accurate indication of the ecological health of a particular wetland. However, unsustainable use of wetland without reckoning of their assimilative capacity constitutes major threat to the conservation and management of these vital biodiversity rich areas.

The Government of India has been implementing the National Wetlands Conservation Programme (NWCP) in close collaboration with the State/UT Governments since the year 1985-86. Under the programme, 115 wetlands have been identified till now by the Ministry which require urgent conservation and management interventions. The objective of this programme is the conservation of wetlands in the country so as to prevent their further degradation and ensuring their wise use for the benefit of local communities and overall conservation of biodiversity.

Financial assistance under NWCP is provided for two components i.e. Management Action Plan (MAP) and Research Projects. Under the Scheme, 100% assistance is provided for activities. Conservation and management of wetlands is primarily vested with the State/UTs, who are in physical possession of the area. After identification of wetlands under the Scheme, the State/UTs are to submit long-term comprehensive Management Action Plans (MAPs) for a period of 3-5 years, preferably 5 years, coinciding with the Plan period.

The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. There are presently 158 Contracting Parties to the Convention, with 1758 wetland sites, totaling 161 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance. Ramsar Convention is the only global environment treaty dealing with a particular ecosystem.

The Ramsar Convention on Wetlands was developed as a means to call international attention to the rate at which wetland habitats were disappearing, in part due to a lack of understanding of their important functions, values, goods and services. Governments that join the Convention are expressing their willingness to make a commitment to helping to reverse that history of wetland loss and degradation.

In addition, many wetlands are international systems lying across the boundaries of two or more countries, or are part of river basins that include more than one country. The health of these and other wetlands is dependent upon the quality and quantity of the transboundary water supply from rivers, streams, lakes, or underground aquifers.

Montreux Record under the Convention is a register of wetland sites on the List of Wetlands of International Importance where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference. It is maintained as part of the Ramsar List. Sites may be added to and removed from the Record only with the approval of the Contracting Parties in which they lie.

World Wetlands Day which is celebrated each year on **2 February**, marks the date of the adoption of the Convention on Wetlands on 2 February 1971, in the Iranian city of Ramsar on the shores of the Caspian Sea. World Wetlands Day was celebrated for the first time on February 2, 1997, on the 16th anniversary of the Ramsar Convention. Each year since 1997, government agencies, non-governmental organizations, and groups of citizens at all levels of the community have taken advantage of the opportunity to undertake actions aimed at raising public awareness of wetland values and benefits in general and the Ramsar Convention in particular.

2.12 NATIONAL HEALTH POLICY 2002

A National Health Policy was last formulated in 1983, and since then there have been marked changes in the determinant factors relating to the health sector. Some of the policy initiatives outlined in the NHP-1983 have yielded results, while, in several other areas, the outcome has not been as expected. The National Health Policy-2002 aims at reviving and emerging the ailing health system and increasing the primary health sector outlay to ensure a more equitable access to health services across the social and geographical expanse of the country.

However, the main objective of the policy is to achieve an acceptable standard of good health amongst the general population by the country. The approach of the policy is to increase access to the decentralized public health system by establishing new infrastructure in deficient areas and by upgrading the infrastructure in the existing institutions.

The contribution of the private sector in providing health services is also to be enhanced, particularly for the population group which can afford to pay for services. The policy has also planned to increase health sector expenditure to 6% of GDP. The National Health Policy-2002 sets out an allocation of 55% of the total public health investment for the primary health sector, 35% for secondary health sector and 10% for tertiary health sector respectively. Apart from these, the policy envisages the gradual convergence of all health programmes under a single field administration.

Programmes for control of major diseases like TB, Malaria, HIV/AIDS, and Universal Immunisation programmes to be continued till moderate success is achieved. The policy further emphasized on the revival of the primary health system by providing some essential drugs under central governmental funding through the decentralized health system.

Apart from these major provisions of the National Health Policy-2002 are:

- (i) **Role of Local Self Government:** Policy lays great emphasis upon the implementation of public health programmes through local self government institutions.
- (ii) **Use of Generic Drugs and Vaccines:** Both for public and private sector, this is a pre-requisite for cost effective public healthcare.
- (iii) **Urban Health:** National Health Policy-2002 envisages the setting up of an organized urban primary health care structure. The structure conceived under the policy is two- tiered one, the primary centre is seen as first tier covering a population of one lakh with a dispensary providing an OPD facility and essential drugs, to enable access to all the national health programmes and a second tier of the urban health organisation at the level of the government general hospital where reference is made from primary centre.
- (iv) **Mental Health:** Policy also envisages a network of decentralized mental health services for ameliorating the main common categories of disorders. The programme outline for such a disease would involve the diagnosis of common disorders, the prescription of common therapeutic drugs by general duty medical staff. ‘
- (v) **National Disease Surveillance Network:** The policy also envisages the full operationalisation of an integrated disease control network from the lowest rung of public health administration to the central government by 2005. The programme under this includes installation of data-base handling hardware. Information Technology connectivity between different tiers of the network and in house training for data collection, and interpretation for undertaking timely and effective response.
- (vi) **Women’s Health:** The policy also noted that women along with other under privileged groups have low access to healthcare and this also recommends expansion of primary health sector infrastructure that will facilitate increased access of women to basic health care.
- (vii) **Medical Ethics:** In order to ensure that common patient is not subjected to irrational or profit driven medical regimes contemporary code of medical ethics be notified and rigorously implemented by the Medical Council of India.
- (viii) **Impact of Globalization on the Health Sector:** The health policy also takes into account the serious apprehension expressed by health experts about the possible threat to health security in globalization era, as a result of a sharp increase in the prices of drugs and vaccines. To protect the citizens from such a threat, the policy envisages a national patent regime for the future which will be consistent with TRIPS.

2.13 NATIONAL RURAL HEALTH MISSION

India’s public healthcare situation, particularly in rural regions and villages, had been a major concern since independence. Hunger, malnutrition, and high mortality had plagued the nation for decades. In 2005, India’s Infant Mortality Rate (IMR) stood

at 58, well above the global average. In 2001-03, the Maternal Mortality Ratio (MMR) estimates were pegged at 301 maternal deaths per 100,000 live births and 2004 & 2006 saw 254 maternal deaths per 100,000 live births. In 2006, when the first Global Hunger Index report was released, India was ranked 96 among 119 hungriest countries in the world. In 2005, about 43.5 percent children in the country were considered underweight.

The need for a focused initiative to tackle the health scenario led to the launch of NRHM by the Hon'ble Prime Minister on 12th April 2005, as a welfare initiative to strengthen the healthcare infrastructure and to boost the failing public health indicators in the rural areas of 18 Indian states and to provide accessible, affordable and quality health care to the rural population, especially the vulnerable groups. The Union Cabinet vide its decision dated 1st May 2013, has approved the launch of National Urban Health Mission (NUHM) as a Sub-mission of an over-arching National Health Mission (NHM), with National Rural Health Mission (NRHM) being the other Sub-mission of National Health Mission. Under the NRHM, the Empowered Action Group (EAG) States as well as North Eastern States, Jammu and Kashmir and Himachal Pradesh have been given special focus. The 18 states in focus by the NRHM include the Empowered Action Group (EAG) states, the North Eastern states, Jammu and Kashmir, and Himachal Pradesh. The NRHM now covers all Indian states and Union Territories.

Some of the NHM schemes are –

- **Rashtriya Bal Swasthya Karyakram** - The aim of this programme is to provide comprehensive child health care for all Indians from newborns to children under the age of 18. The programme intends to control, manage, and prevent “Diseases, Deficiencies, Disability, and Developmental delays”.
- **Rashtriya Kishore Swasthya Karyakram** - Targeted to improve the health of adolescents between the ages of 10 and 19, this scheme not only looks into deficiencies, diseases, and diet but also looks into important aspects of social environment such as substance abuse.
- **Janani Swasthya Shishu Suraksha Karyakram** - Launched in 2011, the scheme aims to bring health benefits to over 12 million pregnant women in the country. Apart from neonatal and postnatal care, the scheme also aims at providing newborn care and infant healthcare for 30 days since birth.

2.14 NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME

Launched in 2003-04 by merging National anti -malaria control programme, National Filariasis Control Programme and Kala Azar Control programmes, Japanese B Encephalitis and Dengue/DHF have also been included in this Program. Directorate of NAMP is the nodal agency for prevention and control of major Vector Borne Diseases

List of Vector Borne Diseases Control Programme Legislations:

- 1) National Anti - Malaria programme

- 2) Kala - Azar Control Programme
- 3) National Filaria Control Programme
- 4) Japanese Encephalitis Control Programme
- 5) Dengue and Dengue Hemorrhagic fever

1) National Anti - Malaria Programme

Malaria is one of the serious public health problems in India. At the time of independence malaria was contributing 75 million cases with 0.8 million deaths every year prior to the launching of National Malaria Control Programme in 1953. A countrywide comprehensive programme to control malaria was recommended in 1946 by the Bhore committee report that was endorsed by the Planning Commission in 1951. The national programme against malaria has a long history since that time. In April 1953, Govt. of India launched a National Malaria Control Programme (NMCP).

Objectives: To bring down malaria transmission to a level at which it would cease to be a major public health problem.

2) Kala -Azar Control Programme

Kala-azar or visceral leishmaniasis (VL) is a chronic disease caused by an intracellular protozoan (*Leishmania* species) and transmitted to man by bite of female phlebotomus sand fly. Currently, it is a main problem in Bihar, Jharkhand, West Bengal and some parts of Uttar Pradesh. In view of the growing problem planned control measures were initiated to control kala-azar.

Objectives: The strategy for kala-azar control broadly included three main activities.

- Interruption of transmission by reducing vector population through indoor residual insecticides.
- Early diagnosis and complete treatment of Kala-azar cases; and
- Health education programme for community awareness.

3) National Filaria Control Programme

Bancroftian filariasis caused by *Wuchereria bancrofti*, which is transmitted to man by the bites of infected mosquitoes - *Culex*, *Anopheles*, *Mansonia* and *Aedes*. Lymphatic filaria is prevalent in 18 states and union territories. Bancroftian filariasis is widely distributed while brugian filariasis caused by *Brugia malayi* is restricted to 7 states - UP, Bihar, Andhra Pradesh, Orissa, Tamil Nadu, Kerala, and Gujarat. The National Filaria Control Programme was launched in 1955. The activities were mainly confined to urban areas. However, the programme has been extended to rural areas since 1994.

Objectives:

- Reduction of the problem in un-surveyed areas
- Control in urban areas through recurrent anti-larval and anti-parasitic measures.

4) Japanese Encephalitis Control Programme

Japanese encephalitis (JE) is a zoonotic disease and caused by an arbovirus, group B (Flavivirus) and transmitted by Culex mosquitoes. This disease has been reported from 26 states and UTs since 1978, only 15 states are reporting JE regularly. The case fatality in India is 35% which can be reduced by early detection, immediate referral to hospital and proper medical and nursing care. The total population at risk is estimated 160 million. The most disturbing feature of JE has been the regular occurrence of outbreak in different parts of the country.

Govt. of India has constituted a Task Force at National Level which is in operation and reviews the JE situations and its control strategies from time to time. Though Directorate of National Anti-Malaria Programme is monitoring JE situation in the country.

Objectives:

- Strengthening early diagnosis and prompt case management at PHCs, CHCs and hospitals through training of medical and nursing staff.
- IEC for community awareness to promote early case reporting, personal protection, isolation of amplifier host, etc.;
- Vector control measures mainly fogging during outbreaks, space spraying in animal dwellings, and antilarval operation where feasible; and
- Development of a safe and standard indigenous vaccine. Vaccination for high risk population particularly children below 15 years of age.

5) Dengue and Dengue Hemorrhagic Fever

One of the most important resurgent tropical infectious disease is dengue. Dengue Fever and Dengue Hemorrhagic Fever (DHF) are acute fevers caused by four antigenically related but distinct dengue virus serotypes (DEN 1,2,3 and 4) transmitted by the infected mosquitoes, Aedes aegypti. Dengue outbreaks have been reported from urban areas from all states. All the four serotypes of dengue virus (1,2,3 and 4) exist in India. The Vector Aedes Aegypti breed in peridomestic fresh water collections and is found in both urban and rural areas.

Objectives:

- Surveillance for disease and outbreaks
- Early diagnosis and prompt case management
- Vector control through community participation and social mobilization
- Capacity building

Health being a state matter, the responsibility of implementation of Programme strategies and monitoring in accordance to Programme guidelines lies with Directorate of Health Services with stipulated technical components. There is a system of coordination between the state and centre for effective implementation and monitoring of Programme.

2.15 NATIONAL TOBACCO CONTROL PROGRAMME

Tobacco use is one of the main risk factors for a number of chronic diseases, including cancer, lung diseases, and cardiovascular diseases. India is the 2nd largest producer and consumer of tobacco and a variety of forms of tobacco use is unique to India. Apart from the smoked forms that include cigarettes, bidis and cigars, a plethora of smokeless forms of consumption exist in the country.

The Government of India has enacted the national tobacco-control legislation namely, “The Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003” in May, 2003. India also ratified the WHO-Framework Convention on Tobacco Control (WHO-FCTC) in February 2004. Further, in order to facilitate the effective implementation of the Tobacco Control Law, to bring about greater awareness about the harmful effects of tobacco as well as to fulfill the obligations under the WHO-FCTC, the Ministry of Health and Family Welfare, Government of India launched the National Tobacco Control Programme (NTCP) in 2007- 08 in 42 districts of 21 States/Union Territories of the country.

Objectives:

- To bring about greater awareness about the harmful effects of tobacco use and Tobacco Control Laws.
- To facilitate effective implementation of the Tobacco Control Laws.
- To control tobacco consumption and minimize the deaths caused by it.

The key activities undertaken under the National Tobacco Control Programme include:

- 1) National Level Public awareness campaigns
- 2) Monitoring, Evaluation and Research.
- 3) Advocacy and inter-sectoral linkages
- 4) Training and capacity building of multiple stakeholders.
- 5) Enforcement of the Tobacco Control Act (COTPA, 2003)
- 6) School Awareness Programmes
- 7) Setting up and expansion of cessation services.

Relevant COPTA {Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution)} Act, 2003 sections:

Section 4: Prohibition of smoking in public places

Section 5: Prohibition of direct and indirect advertisement, promotion and sponsorship of cigarette and other tobacco products.

Section 6(a): Prohibition of sale of cigarette and other tobacco products to a person below the age of eighteen years.

Section 6(b): Prohibition of sale of tobacco products within a radius of 100 yards of educational institutions.

Section 7: Mandatory depiction of statutory warnings (including pictorial warnings) on tobacco packs.)

Section 7(5): Display of tar and nicotine contents on tobacco packs.

2.16 NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF FLUOROSIS

Fluorosis is a crippling disease resulted from deposition of fluorides in the hard and soft tissues of body. It is a public health problem caused by excess intake of fluoride through drinking water/food products/industrial pollutants over a long period. Ingestion of excess fluoride, most commonly in drinking-water affects the teeth and bones.

It results in major health disorders like dental fluorosis, skeletal fluorosis and non-skeletal fluorosis. Dental Fluorosis affects children and discolours and disfigures the teeth. The teeth could be chalky white and may have white, yellow, brown or black spots or streaks on the enamel surface. Discoloration is away from the gums and bilaterally symmetrical. Skeletal Fluorosis affects the bones and major joints of the body like neck, back bone, shoulder, hip and knee joints with severe pain, rigidity or stiffness in joints. In severe forms it results in marked disability. Non-Skeletal fluorosis is an earlier manifestation of fluorosis seen as gastro-intestinal complaints etc and may overlap with other diseases leading to misdiagnosis. It affects men, women and children of all age groups.

Fluorosis is worldwide in distribution and endemic at least in 25 countries. It has been reported from fluoride belts: one that stretches from Syria through Jordan, Egypt, Libya, Algeria, Sudan and Kenya, and another that stretches from Turkey through Iraq, Iran, Afghanistan, India, northern Thailand and China. There are similar belts in the Americas and Japan.

In India fluorosis is mainly due to excessive fluoride in water except in parts of Gujarat and Uttar Pradesh where industrial fluorosis is also seen. The desirable limit of fluoride as per Bureau of Indian Standards (BIS) is 1ppm (parts per million or 1 mg per litre).

The late stages of skeletal and dental fluorosis are permanent and irreversible in nature and are detrimental to the health of an individual and the community, which in turn has adverse effects on growth, development & economy of the country.

The Rajiv Gandhi National Drinking Water Mission started by Ministry of Rural Development worked for control of fluorosis through its awareness campaign from 1987- 1993, (coordinated by Fluorosis Control Cell at the All India Institute of Medical Sciences, Delhi) had a limited coverage.

In the 11th Five Year Plan (2008-09), Ministry of Health and Family Welfare, Government of India launched a National Programme for Prevention and Control of Fluorosis (NPPCF) with the aim for prevention, diagnosis and management of fluorosis in endemic areas. 100 districts of 17 States were covered during 11th Plan and additional 32 districts have been covered during the 12th Five Year Plan.

2.17 NATIONAL IODINE DEFICIENCY DISORDER CONTROL PROGRAMME

Iodine is one of the essential elements required for normal human growth and development. Its daily per capita requirement is around 100-150 micrograms. Iodine is required for the synthesis of the thyroid hormones, thyroxine (T4) and triiodothyronine (T3) and essential for the normal growth and development. Deficiency of iodine can cause physical and mental retardation, cretinism, abortions, stillbirth, deaf mutism, squint & various types of goiter.

As per the surveys conducted by the Directorate General of Health Services, Indian Council of Medical Research, Health Institutions and the State Health Directorates, it has been found that out of 414 districts surveyed in all the 29 States and 7 UTs, 337 districts are endemic i.e where the prevalence of Iodine Deficiency Disorders (IDDs) is more than 5%.

Realizing the magnitude of the problem, the Government of India launched a 100 per cent centrally assisted National Goitre Control Programme (NGCP) in 1962. In August, 1992 the National Goitre Control Programme (NGCP) was renamed as National Iodine Deficiency Disorders Control Programme (NIDDCP) with a view of wide spectrum of Iodine Deficiency Disorders.

Objectives: The important objectives and components of National Iodine Deficiency Disorders Control Iodine Deficiency Disorders Control Programme (NIDDCP) are as follows:-

- Surveys to assess the magnitude of the Iodine Deficiency Disorders.
- Supply of iodated salt in place of common salt.
- Resurvey after every 5 years to assess the extent of Iodine Deficiency Disorders and the impact of iodated salt.
- Laboratory monitoring of iodated salt and urinary iodine excretion.
- Health education and Publicity.

Goal :

- To bring the prevalence of IDD to below 5% in the country
- To ensure 100% consumption of adequately iodated salt (15ppm) at the household level.

Policy : On the recommendations of Central Council of Health in 1984, the Government took a policy decision to Iodate the entire edible salt in the country by 1992. The programme started in April, 1986 in a phased manner. To date, the annual production of iodated salt in our country is 65 lakh metric tones per annum.

Check Your Progress 2

- Note:** a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. Describe some of the NHM Scheme.

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2. Write down the relevant COPTA {Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution)} Act, 2003 section.

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2.18 LET US SUM UP

Environmental law refers to rules and regulations governing human conduct likely to affect the environment. It reflects the legislative measures, and the administrative and judicial structures to protect the environment. Environmental law aids in: regulation of resource use; protection of the environment and biodiversity; mediation, conflict resolution and conciliation; formulation of stable, unambiguous undertakings and agreements. Legislations have evolved in response to problems, so that there is often a delay between the need and the establishment of satisfactory law. Without effective legislation, resource use, pollution control, conservation and most fields of human activity are likely to fall into chaos and conflict. Law can encourage satisfactory performance, enable authorities to punish those who infringe environmental management legislation, confiscate faulty equipment or close a company. It may also be possible for employees, bystanders and product or service users to sue for damages, if they are harmed. To protect the limited resources in the country there is a need for it to implement environmental laws that act as safeguards. In India, the Central Pollution Control Board monitors the industrial pollution at central level and state of departments of Environment and state at state level. Various Programmes have been launched at national level such as wetland conservation, National Health Policy, Rural Health Mission, to control vector borne disease, tobacco control, fluorosis, iodine deficiency etc.

2.19 KEY WORDS

The Water (Prevention & Control of pollution) Act 1974, The Air (Prevention & Control of pollution) Act 1981, MOEF, The Environmental (Protection) Act 1986; CPCB, CPHEO, SPCB, EIA Notification 2006, NWQP, NQMP, NAQ(I), National Wetland Conservation Programme, National Health Policy 2002, NRHM, NVBDCP, NTCP, National Programme for Prevention and Control of Fluorosis, NIDDCP

2.20 REFERENCES AND SUGGESTED FURTHER READINGS

- (i) Environmental Legislation in India (Vol. 4) 01 Edition by K.R. Gupta
- (ii) Environmental Law: a short introduction by Elizabeth Fisher, Publisher: Oxford
- (iii) Environmental Pollution Control, by Neelima Rajvaidya and Dilip Kumar Markandey, Publisher: APH
- (iv) Green Book: Pollution Control Act, Rules and notifications issued thereunder, 6th edition, Publisher: CPCB
- (v) Health Policy and Planning, Volume 32, Issue 1, 1 February 2017, Pages 79–90,
- (vi) <http://envfor.nic.in>
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- (viii) <http://cpcb.nic.in/nwmp>
- (ix) <http://www.yourarticlelibrary.com>
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- (xiii) <http://nhm.gov.in>
- (xiv) <http://www.nvbdc.gov.in>
- (xv) <https://nhp.gov.in>
- (xvi) <http://dghs.gov.in>
- (xvii) <http://mohfw.nic.in>
- (xviii) <http://who.int>
- (xix) <http://ircwash.org>
- (xx) <http://nrhm.gov.in>

2.21 ANSWERS TO CHECK YOUR PROGRESS

Answers to Check Your Progress 1

1. Your answer should include the following points:

Under Section 17 of the Water (Prevention & Control of Pollution) Act, 1974 clearly lists all functions of the respective state boards for countering water pollution. The state water boards also have the right to inspect sewage or trade effluents, works and plants for the treatment of sewage and trade effluents and to review all water purification plants. The Board may establish or recognize a laboratory or laboratories to enable the Board to perform its functions under this section efficiently, including

the analysis of samples of water from any stream or well or of samples of any sewage or trade effluents.

2. Your answer should include the following points:

Salient features of EIA Notification, 2006.

Answers to Check Your Progress 2

1. Your answer should include the following points:

Some of the NHM schemes are :

- Rashtriya Bal Swasthya Karyakram
- Rashtriya Kishore Swasthya Karyakram
- Janani Swasthya Shishu Suraksha Karyakram

2. Your answer should include the following points:

Relevant COPTA {Cigarettes and other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution)} Act, 2003

Mention the various Sections.



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UNIT 3 NATIONAL ENVIRONMENTAL LEGISLATION AND PROGRAMMES- II

Structure

- 3.0 Introduction
- 3.1 Objectives
- 3.2 Noise Pollution Control Laws
- 3.3 Motor Vehicle Act 1988
- 3.4 Factories Act 1948
- 3.5 National Safety Council 1966
- 3.6 Industrial Policy 1991
- 3.7 Public Liability Insurance Act
- 3.8 Hazardous Municipal Solid Waste, Bio-medical Waste ,
Recycled Plastic
- 3.9 Legal Framework on Environment
- 3.10 Important Judgements on Environment Protection
- 3.11 Let Us Sum Up
- 3.12 Key Words
- 3.13 References and Suggested Further Readings
- 3.14 Answers to Check Your Progress

3.0 INTRODUCTION

“Indian Constitution is perhaps the first constitution in the world which contains specific provisions for the protection and improvement of the environment. It reflects the human rights approach to environment protection through various constitutional mandates. Supreme Court has held that the essential feature of sustainable development such as the “Precautionary Principle” and the “Polluter Pays Principle” are part of the environmental law of the country, in the pretext of constitutional and statutory provisions.”

Environmental destruction and pollution has serious concern with human life. The proper balance of the ecosystem is the need of the hour Environment protection and development is a co-existing reality and industry needs to be conscious for sustainable development.

“The Constitution (Forty second Amendment) Act 1976, added new Part IV- A dealing with Fundamental Duties in the Constitution of India. Article 51-A of this part consisted of ten fundamental duties. Article 51-A specifically deals with fundamental duty with respect to environment, it shall be the duty of every citizen of India to protect and improve the natural environment including

forests, lakes, rivers and wild life and to have compassion for living creatures. The fundamental duties are intended to promote peoples' participation in restructuring and building a welfare society. The protection of our environment is a matter of constitutional priority" (Jaswal and Jaswal, 2014).

The Constitution (Forty second amendment) Act 1976 added a new Directive Principles in article 48 dealing with protection and improvement of environment. Fundamental rights should be interpreted in the light of directive principles. In Sachidan and Pandey v State of W.B., The Supreme Court is bound to bear in mind articles 48-A and 51-A(g) of the Constitution. In M.C. Mehta v. Union of India the court deserved that articles 39E, 47 and 48-A by themselves and collectively cast a duty on the State to secure the health and protect and improve the environment.

3.1 OBJECTIVES

After studying this unit you should be able to:

- understand the constitutional provisions related to environment;
- explain about fundamental duties, fundamental rights and Directive Principle of state;
- describe the various laws related to noise pollutions and penalty;
- explain the regulations with regard to hazardous waste and disposal guidelines; and
- discuss various case laws related to environment protection.

3.2 NOISE POLLUTION CONTROL LAWS

Meaning and concept

The term "Noise Pollution" is not defined in the Legislative Acts. The Environment (Protection) Act 1986 recognizes noise as an 'environment pollutant' and empowers the Central Government to frame rules prescribing the maximum permissible limits for noise in different areas.

Legislative Measures: It is important to adopt certain legislative measures in order to control noise pollution. "Law is the regulator to control the pollution. Different countries have different legislations to control noise pollution. In our country, there was no direct legislation for the control of noise pollution until the enactment of the Environment Protection Act 1986. Under the Law of Torts if noise affects person's comforts then it would amount to nuisance, which is actionable. It is not necessary that there has been any injury to health. The appropriate relief for the victims of the nuisance under the law of torts is available either in the form of damages or by way of injunction. In this case High Court of Madhya Pradesh in Dhanna Lal v. Chittar Singh may be referred. In Radhey Shyam v. Gur Prasad, the Allahabad High Court held that abnormal noise produced by the flour mill; The Karnataka High Court in G. Veera bhadrapa v. M. Nagamma observed the noise produced by the chilly-pounding machine which disturbed the normal work and peace" (Jaswal and Jaswal, 2014).

Noise pollution can be addressed under the Criminal Law also. Under section 268 of the Indian Penal Code noise is considered as public nuisance and a criminal liability. In *Ivour Hyden v. State* the question before the Andhra Pradesh High Court was whether a person is held guilty and punished under section 290 of the Indian Penal Code.

(i) Noise pollution control under code of criminal procedure 1973

The provision of the above can also be used to prevent the pollution of all kinds of noise pollution. There is no direct provision in CrPC to control noise pollution but chapter X Part B containing sections 133 to 143 and Part C containing section 144, provides most effective and speedy remedy for preventing and controlling public nuisance. In *Dwarka Prasad v. B.K. Roy* the Calcutta High Court considered the problem of noise pollution under section 133 of the CrPC. In *Bijayananda Patra v. District Magistrate, Cuttack*, the Orissa High Court while suggesting certain measures to control the noise pollution observed that all District Magistrates and sub-divisional Magistrates should be empowered to issue prohibitory orders under s.144 of the Code of Criminal Procedure 1973 limiting the hours of loudspeakers in religious places and for other social gatherings.

(ii) Central legislations

- a) The Police Act, 1861- Section 30 (4) of the police Act 1861 covers the problems of noise arising from music which is one aspect of noise pollution. Under this provision, the Superintendents of Police are authorized to regulate the extent to which music may be used in streets on the occasion of festivals and ceremonies.
- b) The Workmen's Compensation Act 1923- Noise pollution can be controlled in the factories under the above mentioned provision, which provides for compensation regarding the injuries caused in the course of employment.
- c) The Air Craft Act 1934 - Under this Act Government is authorized to make rules for the protection of the public health and make rules to control the noise generated by the aircrafts and take different measures to protect the people from health hazards.
- d) The Factories Act 1948- Third schedule of the Factories Act 1948 contains a list of noticeable diseases including the diseases of hearing loss caused by the noise. Entry 22 of the schedule deals with 'noise induced hearing-loss'. There is also to pay the fee for medical treatment to medical practitioners.
- e) The Air (Prevention and Control of Pollution) Act 1981- This Act was enacted for the prevention, control and abatement of air pollution. Section 2(b) of this Act defines "air pollution" to mean the presence in the atmosphere of any air pollutant. In 1987 this Act was amended and the definition was expanded to include noise.

Noise Pollution can be controlled under various provisions of this Act. Under section 16(2) (b) of the Air Act, it is the function of the Central Pollution Control Board to plan and cause to be executed a nation-wide programme for the prevention, control or abatement of air pollution.

Check Your Progress 1

- Note:** a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. What is Noise pollution?

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2. What are the sources of Noise pollution?

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3. Discuss the provisions under Central legislations?

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3.3 MOTOR VEHICLE ACT 1988

Section 110 of the Motor Vehicle Act confers powers on the Central Government to make rules regulating the construction, equipment and maintenance of motor vehicles and trailers with respect to different matters. Under section 110(1)(h) the Central Government can make rules regulating the reduction of noise emitted by or caused by vehicles and thus reduce the noise pollution. Under section 111(2)(b) of the Act the State Government has got the powers to make regulations with regard to construction, equipment and maintenance of motor vehicles and trailers prohibiting and restricting the use of audible signals at certain times or in certain places. Under Section 111(2) (c) State Government can make rules prohibiting the carrying of appliances likely to cause a noise or danger. Under the said provisions, the problem of noise in vehicles resulting from their horns, audio-visuals and tape recorders etc. can be controlled.

Under the Act 1939 every motor vehicle should be so constructed so as to meet the fuel efficiency standards prescribed by the government under this Act or any other law. A new clause may be added to include fuel efficiency as one of the criteria for which central government may make regulating rules.

The Calcutta High Court in Rabin Mukherjee v. State of West Bengal (A.I.R. 1985 Cal.222), recognized the nuisance created by noisy electric and air horns used in buses and trucks. The court directed the transport authority to strictly enforce the provisions of Motor Vehicles Act and the Bengal Motor Vehicle Rules which restricted the use of loud and shrill horns.

The Delhi High Court in Madarsa Road Residents Association v. Lt. Governor (A.I.R.1995 Del.195) entertained a public Interest Litigation to reduce the

nuisance created by plying of heavy vehicles in silence zone and issued directions for taking prohibitory measures by invoking the provisions of Bombay Police Act and Delhi Control of Vehicular and other Traffic on Roads and Streets Regulations, 1980.

In *Nayan Behari Das v. State of Orissa*, (A.I.R. 1998 Ori.39.) the petitioner sought directions for prohibiting the use of multi toned horns and other devices on the motor vehicles which produce unduly harsh and loud noise and cause disturbance and inconvenience to the public in general. It was noticed that Rule 119 of the Central Motor Vehicle Rules specifically prohibits the use of these horns and notices of these prohibition are exhibited at the bus stops and RTO offices.

The Motor Vehicles Act, 1988 is the Act, which regulates all aspects of road transport vehicles. The Act came into force from 1 July 1989. It replaced Motor Vehicles Act, 1939 which earlier replaced the first such enactment Motor Vehicles Act, 1914. The Act provides in detail the legislative provisions regarding licensing of drivers/conductors, registration of motor vehicles, control of motor vehicles through permits, special provisions relating to state transport undertakings, traffic regulation, insurance, liability, offences and penalties, etc. For exercising the legislative provisions of the Act, the Government of India made the Central Motor Vehicles Rules 1989.

3.4 FACTORIES ACT 1948

This Act was passed after the Bhopal tragedy and the Supreme Court's judgement in the *Sriram Gas Leak Case* (*M.C. Mehta v. Union of India* AIR 1987sc 965), the 1987 amendment to the Factories Act introduced special provisions on hazardous industrial activities.

Section 12 of the Factories Act of 1948 required all factories to make 'effective arrangements' for waste disposal and empowered state governments to frame rules implementing these directives. Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987)), serves to assist in formulating national policies in India with respect to occupational safety and health in factories and docks in India. It deals with various problems concerning safety, health, efficiency and well-being of the persons at work places.

The Act is administered by the Ministry of Labour and Employment in India through its Directorate General Factory Advice Service & Labour Institutes (DGFASLI) and by the State Governments through their factory inspectorates. The Act is applicable to any factory wherein ten or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on, or whereon twenty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on; but this does not include a mine, or a mobile unit belonging to the armed forces of the union, a railway running shed or a hotel, restaurant or eating place.

1987 amendment to the Factories Act introduced special provisions on hazardous industrial activities. It empowers the states to appoint a committee to advice on initial location of factories that employ hazardous substances.

The particulars regarding health hazards at the unit and also preventive arrangements are told to the workers. Every occupier should draw up an emergency disaster control plan, which must be approved by the Chief Inspector (Divan, 2003).

The permissible limits of exposure to toxic substances are prescribed in the Second Schedule to the Act. Safety committee consisting of workers and managers are required periodically to review the factory's safety measures. The occupier is required to maintain workers' medical records and must employ operations and maintain personnel who are experienced in handling hazardous substances. The permissible limits of exposure to toxic substances are prescribed in the second schedule to the Act. Safety committees consisting of workers and managers are required periodically to review the factory's safety measures.

After 1987 amendment, the Factories' Act defines occupier as a very senior level manager. Such person is held responsible for compliance with the Act's new provisions relating to hazardous processes. Non-compliance exposes the occupier to stiff penalties.

Third Schedule of the Factories Act 1948 contains a list of noticeable diseases including the diseases of hearing loss caused by the noise. Entry 22 of the schedule deals with 'noise induced hearing loss'. Under section 89 of the Act, it is the duty of the manager and the medical practitioner of the factory to report the matter to the authorities in case any person working in the factory contacts any disease specified in the Third schedule. The Chief Inspector after confirmation pays the fee to the doctor. And which can be paid by the owner later. The Fourth chapter of the Act related to health issues affected by environment pollution in industries is another available provision.

3.5 NATIONAL SAFETY COUNCIL 1966

National Safety Council is a premier, non-profit, self-financing and tripartite apex body at the national level in India. It is an autonomous body, which was set up by the Government of India, Ministry of Labour and Employment on 4 March 1966 to generate, develop and sustain a voluntary movement on Safety, Health and Environment (SHE) at the national level. It was registered as a Society under the Societies Registration Act, 1860 and subsequently, as a Public Trust under the Bombay Public Trust Act, 1950. Council provides safety training to different multinational corporations and government agencies.

3.6 INDUSTRIAL POLICY 1991

New Industrial Policy of 1991 was started as economic reforms and more reforms were derived subsequently. This policy brought major changes in economic regulations in industrial sector. Under this new policy many programmes were introduced in public sector. Foreign investment has been given options and the practice.

3.7 PUBLIC LIABILITY INSURANCE ACT

In the case of M.C. Mehta v. Union of India, (A.I.R. 1987 S.C.. 1086.), popularly known as Oleum Gas leak case, in which Supreme court has observed that the industry engaged in hazardous processes and causes health threats to persons

working there owes an absolute and non-delegable duty to the community. If any harm occurs on account of such activity, the industry must be absolutely liable to compensate. United Nations Conference on Environment and Development at Rio de Janeiro in June 1992 was called upon to develop National Laws regarding liability and compensation for victims of pollution and other environmental damage. Indian Parliament afterwards enacted The Public Liability Insurance Act 1991 and The National Environment Tribunal Act 1995.

The Public Liability Insurance Act 1991 is one of the most important legislative measures enacted in India to provide immediate relief to victims of accidents which occur while handling hazardous substance. The Act imposes 'no-fault' liability upon the owner of the hazardous substance and requires the owner to compensate the victims irrespective of any neglect or default on their part. The PLIA stipulates the maximum compensation for injury or death at Rs. 25,000 and limits compensation in respect of damage to private property to Rs. 6000. The right of victim of a victim to claim additional relief under any other law is expressly reserved.

The Act obligates the owner for insurance policy covering potential liability from an accident. An accident is to cover a sudden unintended occurrence while handling any hazardous substance resulting in continuous intermittent or repeated exposure leading to death or injury to any person or damage to property or the environment.

With the insurance premium, owner must make a contribution to an Environment Relief Fund established, by the Central Government. This fund is to provide relief to the victims of an accident. The principal administrative authority under the PLIA is the collector, who is required to verify the occurrences of an industrial accident give publicity to the event, invite applications for compensation and award relief. The Act was amended in 1992 to introduce provisions relating to the relief. Rules framed in 1991 lay down the procedure for inviting and processing compensation applications and also the cap the potential liability of an insurer at Rs. 450 million. Under Section 3 of the Act provides that where as a result from an accident, death or injury to any person, other than the worker, or damage to any property has taken place, the owner shall be liable to give relief in the form of reimbursement of medical expenses upto 12,500/- or for fatal accidents upto 25000/-Rs and fixed monthly relief of 1000/- in case of disability (Schedule of the Act).

3.8 HAZARDOUS MUNICIPAL SOLID WASTE, BIO-MEDICAL WASTE, RECYCLED PLASTIC

Industry and the manufacturing of different products are based on the maximum use of natural resources, leading towards positive and negative impacts. Due to the excessive use and its negative impacts there is problem of depletion, degradation and pollution problem rising. Majorly problem of disposal of hazardous wastes have drawn the attention about the upcoming serious problem.

Hazardous substances include flammables; explosives; heavy metals dangerous microbes, chemical toxins, and so on. Exposure to toxic substances may cause acute or chronic health effects, including cancers, birth defects, miscarriages,

damage to lungs or other organs etc. In India there are various laws, which directly or indirectly deal with hazardous and solid wastes and toxic substances. Apart from IPC 1860, India also enacted Indian Petroleum Act 1934, Insecticides Act 1968, Explosive Substances Act 1952, Atomic Energy Act 1968 and Radiation Protection Rules 1971, which deal with specified hazardous substances.

Under Section 6 of the environment Protection Act, Central Government has made the Hazardous Wastes Management and Handling Rules 1989. These rules regulate collection, treatment, transport, storage and disposal of hazardous wastes specified in the schedule to the rules. These rules further conferred the powers to the Pollution Control Boards to grant authorization for the activities connected with disposal of hazardous wastes. The Board is empowered to issue authorization in this regard, once it is sure that the operators of facilities have appropriate safe infrastructural facilities and equipments to handle the hazardous wastes. Non-compliance with the conditions of authorization empowers the board to cancel or suspend this authorization. Central Government has also issued the rules for Manufacture, Use, Import, Export and Storage of Hazardous Micro-organisms and Genetically Engineered Organisms or Cells 1989 (Ministry of Environment & Forests; Notification dated 5th Dec 1989, published in the Gazette No 621 dated 5.12.89) with a view to protecting the environment, nature and health, in connection with the application of gene technology and micro-organisms. Rules apply to two basic categories of products-

- a) The manufacture, import and storage of micro-organisms and gene technological products.
- b) To genetically engineered organisms, micro-organisms and cells and correspondingly to any substances and products and food stuffs etc of which such cells, organisms or tissues there of form a part.

Rules further extended to new gene technologies and also to organisms and cells generated by utilization of such other gene technologies and to substances and products of which such organisms and cells generated by utilization of such other gene technologies and to substances and products of which such organisms and cells form a part. In other cases like sale, export import of genetically engineered micro-organisms, production, packaging etc of genetically engineered products, drugs and pharmaceuticals and food stuffs, these rules are also applicable.

There are six levels of competitive authorities are established under the rules ranging from the international and national level to the district level.

- a) Recombinant DNA Advisory Committee (RDAC) for review of developments in biotechnology;
- b) Review committee on Genetic Manipulation(RCGM), to monitor the safety-related aspect in respect of on-going research projects and activities involving hazardous micro-organisms;
- c) Institutional Bio-safety Committee(IBSC),constituted by research institutions handling micro-organisms;
- d) Genetic Engineering Approval Committee (GEAC) functions as a body for activities involving large scale use of hazardous micro-organisms

and recombinants in research and industrial production from the environmental angle;

- e) State Bio technology Co-ordination Committee (SBCC), to inspect, investigate and take punitive action in case of violations of statutory provisions through Nodal Department and State Pollution Control Board or Directorate of Health;
- f) District Level Committee (DLC), wherever necessary to monitor the safety regulations in the use of hazardous micro-organisms and its applications in the environment.

Recycled Plastics Manufacture and Usage Rules 1999-

The Central Government in exercise of the powers conferred by section 3(2)viii, read with section 25 of the Environment protection Act 1986, has enacted these rules. These came into force in 1999. These rules have been enacted with the aim to prohibit the use of carry bags or containers made of recycled plastics for storing, carrying, dispensing or packaging of food stuffs. These rules further prescribe conditions for manufacturing of carry bags and containers of plastics. They also put obligation on the Plastic Industry Association to undertake self-regulatory measures. ('Handbook on Environmental Law-Environment Protection, Land and Energy Laws', Sanjay Upadhyay, Videsh Upadhyay Lexis Nexis Butterworths, Vol 3).

In this significant set of rules issued by the Central Government is the Recycled Plastics Manufacture and Usage Rules 1999 (The Gazette of India Extraordinary part II, SUB-S II issued by Ministry of Environment and Forests vide notification No S0 705 f- dated 2 September 1999). The SPCB and Pollution Control Committees (PCCs) have been designated as competent authorities to enforce these rules. In concerned district where no such authority has been constituted by the state government or Union Territory, the district collector or the deputy commissioner will be the authority for enforcement of the provisions of these rules. These rules prohibit the usage of carry bags or containers made of recycled plastics and prescribe conditions of manufacture of carry bags and containers, made of plastics. Standards of recycling, marking and codification of plastics have also been specified ('Handbook on Environmental Law-Environment Protection, Land and Energy Laws', Sanjay Upadhyay, Videsh Upadhyay Lexis Nexis Butterworths, Vol 3).

Rule 3 provides that the Pollution Control Boards are authority for enforcing these rules related to manufacture and recycling. Rule 6 provides that recycling of plastic bags or containers shall be undertaken strictly in accordance with the Bureau of Indian Standards specifications.

Municipal Solid Wastes (Management and Handling) Rules 2000-

Municipal solid waste (MSW) management or garbage disposal is another neglected area of urban development. In most cities nearly half of the MSW generated remains unattended. The Urban poor breathe immediate impact of the resulting unhygienic conditions but few city dwellers escape the periodic outbreaks of diseases that spread in unhealthy urban environments. A 1995 report prepared for the Planning Commission acknowledges the progressive decline in the standard of services with respect to the collection and disposal of household, hospital and industrial wastes (Based on interview with Almitra Patel, Convener, INTACH Waste Network). In this regard rules to regulate the

management and handling of the solid wastes are the Municipal Solid Wastes Management Rules 2000 (Issued by the Ministry of Environment and Forests vide notification No.908 (E) dated 25th September, 2000). These rules apply to every municipal authority responsible for collection, segregation, storage, transportation, processing and disposal of municipal solid wastes. The nodal responsibility to enforce these rules vest with the municipal authority within the territorial area of the municipality which includes any infrastructure development for setting up wastes processing and disposal facility. ('Handbook on Environmental Law-Environment Protection, Land and Energy Laws', Sanjay Upadhyay, Videsh Upadhyay Lexis Nexis Butterworths, Vol 3).

The Secretary In charge of the department of Urban Development of the concerned state or union territory shall have the overall responsibility for the enforcement of the provisions of these rules in the metropolitan cities. The Central Pollution Control Board and the State Boards are responsible for monitoring the standards regarding ground water, ambient air quality and the compost quality. Detailed procedures have been specified under the rules of the manner in which waste disposal facilities is required to be facilitated. The Central Pollution Control Board shall coordinate with the state boards and the Committees with particular reference to implementation and review of standards and guidelines and compilation of monitoring data.

The Bio-Medical Waste (Management and Handling) Rules 1998-

The Central Government in exercise of powers under sections 6, 8 and 25 of the Environment Protection Act 1986 has enacted the Bio-Medical Waste (Management and Handling) Rules 1998. These are 14 rules and 6 Schedules. These Rules came into force w.e.f. 27.07.1998. These Rules are enacted to regulate the bio-medical waste generated by hospitals, clinics, blood banks and other organizations. These Rules apply to all people who generate, collect, receive, store, transport, dispose or handle bio-medical wastes.

'Bio-Medical waste' means any waste, which is generated during the diagnosis, treatment or immunization of human beings or animals or in research activities pertaining thereto or in the production or testing of biological and including categories mentioned in Schedule 1 (Rule 3(5)).

The Bio-Medical Waste (Management and Handling Rules 1998 (Issued by Ministry of Environment and Forests vide Notification No SO630 (E) dated 20 July 1998) was enacted to regulate bio-medical wastes. The rules apply to all people who produce, collect, receive, store, or transport bio-medical waste.

The Bio-Medical waste shall be properly treated and disposed of Schedule 1 prescribes different method of treatment and standards are prescribed in Schedule V of the Rules. It prescribes the different methods of disposal of Bio-Medical waste according to their nature. Every occupier, according to the Rule 5, shall set up requisite bio-medical waste treatment facilities.

As per the rule it shall be the duty of every occupier of an institution generating bio-medical waste. This includes clinics, hospitals, veterinary centre, and labs to ensure that such waste is handled with care without damaging our environment. The rules also prescribe the manner in which the standards are to be complied with including the segregation, packaging, transportation and storage of bio-medical waste. Further it provides that no untreated bio-medical waste shall be stored for more than 48 hours. One authority, prescribed by the

government shall be responsible for implementation of different rules. The prescribed authority would be under the overall control of the state government of the union territory. There is also provision to have an Advisory Committee comprising of specialists in medical sciences, veterinary sciences, environment sciences, and administration.

A notification is also issued to use fly ash, in brick manufacturing processes and construction work. This would solve the problem of disposal of substantial amount of solid waste in the form of fly ash or pond ash that is generated through thermal power plant coal or manufacturers.

Check Your Progress 2

- Note:** a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. What is Hazardous Waste Management?

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2. What is the significance of Rules of Recycling of plastics?

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3. Throw light on the regulations for management of Bio-Medical Waste.

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3.9 LEGAL FRAMEWORK ON ENVIRONMENT

Authorities and environment Protection-

The Central Pollution Control Board (CPCB) is the nodal agency at the national level for pollution control generally. It is an autonomous body set up in September 1974, under the provisions of the Water Act, 1974. It coordinates the activities of State Pollution Control Boards and also advises the Central Government on all matters concerning the prevention and control of environmental pollution. CPCB, SPCB and PCCs are responsible for implementing the legislations relating to prevention and control of pollution. They also develop rules and regulations for standards for emissions and effluent

of air and water pollutants and noise levels. The State Board for Prevention and Control of Water Pollution constituted under the Water Act 1974, or a State Board for the Prevention and Control of Air Pollution constituted under the Air Act 1981 are the nodal state level implementing authorities for pollution control. Numerous authorities have been created under the EPA. For example the historic Taj Mahal was attempted to be resolved through the Taj Trapezium Zone Pollution Authority. Similarly the Environment Pollution Authority was created for the National Capital Region.

The legislative framework of EPA and the rules and regulations issued there under. The concept of environment Audit, EIA and CRZ are important legal tools. Several rules regarding consent of procedures, siting of industrial projects, regulations of hazardous wastes, management of solid wastes and numerous authorities created under the Act can be judiciously used for various aspects of environment protection. The courts have distinctly approached the problems of environment protection under two clear planning and schemes. On one hand there is a judicial aggression on cases where pollution is the major cause of conflict and on the other, there appears to be judicial restraint when it comes to mega projects in the area of infrastructure. The courts have relied on the wisdom of the state more often and considered that the policy not to be interfered with. The cases on nuisance and environment protection show that common law principles may be utilized for environment protection.

National Environment Appellate Authority-

The National Environment Appellate Authority was created in 1997 primarily to deal with the numerous cases that flooded the Hon'ble Supreme Court * and with a view to deal with the conflicts, by a group of experts, headed by a retired judge of the Hon'ble Supreme Court. The objective of this authority is to bring transparency in the process and ensure smooth implementation of the development schemes and projects.

Relevant legislations-

Chapter XIV of the Indian penal Code deals with offences affecting public health, safety etc. Section 268 of IPC talks about public nuisance and deems guilty a person who is indulged in any illegal act, causes common injury to the public. In *Madhavi v Thilakan*, (1988(2) klt 730) the Kerala High Court has observed that workshop is responsible for causing nuisance by air pollution but it was also the livelihood to some persons. So this was not the valid ground for causing pollution.

Under S 134 CrPC the order passed by the magistrate, has to be served on the person against whom it is made .Non-compliance with the order is punishable under S 188 of Indian Penal Code. (Section 136Cr PC)

In urgent cases of nuisance or apprehended danger (Section 144 Cr PC),the magistrate can also issue order directing a person to do or to abstain from doing something.

Section 278 of Indian Penal Code deals specifically with offence of making atmosphere noxious to health .This section provides for imposition of a fine who voluntarily vitiate the atmosphere, injurious to public health.

Section 290 of Indian Penal Code is a residual clause that provides for fine for public nuisance.

Check Your Progress 3

Note: a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. What is CPCB?

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2. What is the importance of the...Chapter XIV of the Indian penal Code?

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3. What are the objectives of Environment (Protection) Act 1986?

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3.10 IMPORTANT JUDGEMENTS ON ENVIRONMENT PROTECTION

- Municipal Council Ratlam v Vardhichand & ors
- Sachidanand Pandey v State of West Bengal
- M C Mehta v Union of India
- LK Koolwal v State of Rajasthan'
- Tehri Bandh Viridhi Sangharsh Samiti v State of UP
- Mc Mehta v State of Orissa
- Mc Mehta v Union of India
- Bhopal Gas Disaster Case
- State of Himachal Pradesh v Umed Ram Sharma
- Union Carbide Corporation v Union of India

3.11 LET US SUM UP

Right to healthy environment is firmly established .To protect the environment is prime duty of the state. New dimensions of legal control are added and new challenges are opened before Courts. There have been significant changes in the law and jurisprudence relating to environment in India. The proper balance of the ecosystem is the need of the hour Environment protection and development is a co-existing reality and industry needs to be conscious for

sustainable development. From time to time various legislations relating to protection of environment of environment from specific types of pollution have been passed by the Indian legislature. Environmental law is a synthesis of principles, concepts and norms generated by other laws. For remedying environmental harm, concepts of civil liability, which had their origin in tort, have been accepted.

3.12 KEY WORDS

National Safety Council: It is a premier, non-profit, self-financing and tripartite apex body at the national level in India.

The Air (Prevention and Control of Pollution) Act 1981: This Act was enacted for the prevention, control and abatement of air pollution

3.13 REFERENCES AND SUGGESTED FURTHER READINGS

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3.14 ANSWERS TO CHECK YOUR PROGRESS

Answers to Check Your Progress 1

Your answer should include the following points:

1. The term "noise" is derived from Latin word "nausea". It has been defined as 'unwanted sound, a potential hazard to health and communication dumped into the environment without regard to the adverse effect.
2. Noise pollution has two sources- Industrial and non-industrial .Industrial source includes the noise from various industries and big machines with high noise intensity. Non-industrial source of noise includes the noise created by transport and vehicular traffic and neighborhood noise.

3. Noise Pollution can be controlled under various provisions of this Act. Under section 16(2) (b) of the Air Act, it is the function of the Central Pollution Control Board to plan and cause to be executed a nation-wide programme for the prevention, control or abatement of air pollution.

Answers to Check Your Progress 2

Your answer should include the following points:

1. Under Section 6 of the environment Protection Act, Central Government has made the Hazardous Wastes Management and Handling Rules 1989. These rules regulate collection, treatment, transport, storage and disposal of hazardous wastes specified in the schedule to the rules.
2. Rules under, section 25 of the Environment protection Act 1986, have been enacted with the aim to prohibit the use of carry bags or containers made of recycled plastics for storing, carrying dispensing or packaging of food stuffs. These rules prohibit the usage of carry bags or containers made of recycled plastics and prescribe conditions of manufacture of carry bags and containers, made of plastics. Standards of recycling, marking and codification of plastics have also been specified.
3. The Bio-Medical Waste (Management and Handling Rules 1998 (Issued by Ministry of Environment and Forests vide Notification No SO630 (E) dated 20 July 1998) was enacted to regulate bio-medical wastes. The rules apply to all persons who generate collect, receive, store, transport bio-medical waste in any form. As per the rules apply on all institution generating bio-medical waste which includes a hospital, nursing-home, clinics, dispensary, Veterinary institution, animal house, pathological laboratory, blood bank to take all steps to ensure that such waste is handled without any adverse effect to human health and the environment.

Answers to Check Your Progress 3

1. The Central Pollution Control Board (CPCB), is the nodal agency at the national level for pollution control generally. It is an autonomous body set up in September 1974, under the provisions of the Water Act 1974.
2. Chapter XIV of the Indian penal Code deals with offences affecting public health, safety etc. Section 268 of IPC talks about public nuisance and deems guilty a person who is indulged in any illegal act, causes common injury to the public. Under S 134 CrPC the order passed by the magistrate, has to be served on the person against whom it is made. Non-compliance with the order is punishable under S 188 of Indian Penal Code. (Section 136Cr PC)
3. The objectives of Environment Act -
Protection and improvement of Environment ;saving of human beings, creatures, plants and property from hazards; fulfilling international obligations and making of general law on environment protection.

UNIT 4 NATIONAL ENVIRONMENTAL LEGISLATION AND PROGRAMMES- III

Structure

- 4.0 Introduction
- 4.1 Objectives
- 4.2 The Essential Commodities Act 1955
- 4.3 Fertilizer control order 1985
- 4.4 Insecticides Act 1968
- 4.5 Plant Quarantine and Animal Quarantine
- 4.6 Prevention of Food Adulteration Act 1954
- 4.7 Food Safety and Standards Act 2006
- 4.8 Important Judgments on Environment Protection
- 4.9 Let Us Sum Up
- 4.10 Key Words
- 4.11 References & Suggested Further Readings
- 4.12 Answers to Check Your Progress

4.0 INTRODUCTION

“Environmental Pollution” means contamination of the environment in such a way that it causes hazards or creates potential hazards to health and wellbeing of living persons and non-living beings. According to the Report of the Restoring the quality of the environment, President’s Science Advisory Committee, Washington, USA, Pollution may be defined as ‘unfavorable alteration of our surroundings wholly or largely as a by-product of man’s actions through direct or indirect effects of changes in energy patterns, radiation levels, chemical and physical constitution and the abundance of organisms.

There may be three criteria for defining pollution viz. the waste materials resulting from human activities and disposal of wastes; damages caused by disposed wastes whether directly or indirectly and; the circumstances where the effect of damage is met by third parties.

According to Section 2(c) of the Environment (Protection) Act 1986, ‘environmental pollution’ means any solid, liquid or gaseous substance present in such concentration, as may be, or tend to be injurious to environment. In other words, environmental pollution means the presence in the environment of any substance which is harmful to human beings, other living creatures, plants, micro-organism and property. ‘Environmental pollutant, according to section 2(b), means any solid, liquid or gaseous substance present in such concentration as may be, or tends to be, injurious to environment. Every

substance existing in the environment has definite composition when a foreign body is introduced into it or the proportion of its constituents is modified, then that substance loses its original character and qualities. The original form of the substance was meant to serve a definite purpose but the changed form is not suitable to serve the same purpose. Such modified form is termed as polluted or adulterated substance and the process of polluting a substance is called pollution.

According to D.M. Dixon, "Pollution includes all those activities conscious or unconscious of human beings and their domestic cattle and the result thereof, which detract in any way in the long term or short term from enjoyment of his environment and his ability to derive full benefit there from."

According to Natural Environment Research Council (NERC) 1976, "Pollution is regarded as the release of substances and energy as waste products of human activities which result in changes usually harmful within the natural environment."

Pollutants may be classified on the basis of their nature and state such as (a). Solid Particulate Pollutants e.g. Aerosols, industrial wastes such as lead, mercury, tailings, asbestos etc.(b).Gaseous Pollutants e.g. Chlorofluorocarbon gases, carbon dioxide, Sulphur dioxide etc.and(c). Liquid Pollutants e.g. leaked oil sticks in sea water, dissolved solids, ammonia, urea, nitrate, chloride, fluoride, insecticides and pesticides-all in dissolved form, oil and grease etc.

There is need to bring great awareness for harmonizing population dynamics and socio-economic development and harnessing of natural resources with due care to see that the quality of environment does not deteriorate.

4.1 OBJECTIVES

After studying this unit you should be able to:

- state the general principles of food safety and constitutional provisions;
- explain about the standards and the mechanism for the enforcement of those standards;
- describe the various laws related to food industry;
- discuss the industrial policies and issue;
- explain the regulations with regard to insecticides and pesticides Act;
- discuss various case laws related to food safety and adulteration; and
- understand various legislations, Prevention and Controlling Acts.

4.2 THE ESSENTIAL COMMODITIES ACT 1955

The increasing requirement of commercial energy has led to considerable spurt in the demand for electricity and fossil fuels. There is enormous potential for reducing energy consumption by adopting energy efficiency measures in various sectors (As per Energy Conservation Bill 2000introduced in Lok Sabha). Energy Conservation Act 2001 is a statutory measure to regulate the energy efficiency and conservation due to an increase in the demand for electricity and fossil

fuel and an increasing dependence on commercial energy. The Act tries to promote energy efficiency in the commercial sector, which is the largest user of energy. This would reduce the pressure on already existing resources and would be beneficial to the environment. This Act is very similar to the environment Protection Act with regard to delegated legislation”.

The legislation for efficient use of energy and its conservation proposes to provide for a Bureau by merging existing Energy Management Centre to effectively co-ordinate with designated consumers and agencies for performing such functions and exercise such powers which may be necessary for efficient use of energy and its conservation. The Act confers powers upon the Central Government and the state government for enforcing the provisions of the legislation; Energy Conservation Fund separately is established; impose penalties in case of contravention of the provisions of the proposed legislation; and prescribe the procedure for adjudication of the penalties and appeal to High Court.

Section 3 of The Essential Commodities Act 1955, deals with powers to control production, supply, distribution etc. If the Central Government is of the opinion that it is necessary or expedient so to do for maintain or increasing supplies of; any essential commodity or for securing their equitable distribution and availability at fair prices or for securing any essential commodity for the defense of India or the efficient conduct of military operations, it may by order, provide for regulating or prohibiting the production, supply or distribution thereof and trade and commerce therein.

Without prejudice to the generality of the powers conferred by sub section (i), an order made there under may provide for regulating by licenses, permits or otherwise the production or manufacture of any essential commodity ('Environmental Law' Dr. J.J. R. Upadhyay, Central Law Agency, Third Edition 2012).

4.3 FERTILIZER CONTROL ORDER 1985

The legislation for efficient use of energy and its conservation proposes to provide for a Bureau by merging existing Energy Management Centre to effectively co-ordinate with designated consumers and agencies.

Fertilizer (Control) Order, 1985 came into force on the date of its publication in the Official Gazette for regulating equitable distribution of fertilizers and making fertilizers available at fair prices, by notification in the Official Gazette, fix the maximum prices or rates at which any fertilizer may be sold by a dealer, manufacturer, and importer or a pool handling agency.

Here is the need to develop planned strategic Environment Initiative. New technologies must be developed in a variety of fields such as agriculture, forestry, energy production and use building technology and waste reduction and cycling. As a result of green revolution there is a vast growth in food production which is often relied on environmentally destructive techniques such as heavily subsidized fertilizers and pesticides, the extravagant use of water in poorly designed irrigation schemes, the exploitation of the short term productivity of soils which leads to massive soil erosion .In this situation SEI encourages sound policies and methods and helpful in maintaining ecological balance. The use of chemicals must be prohibited where pollution is caused by

chemicals. Ideally it should be in appropriate usage and in adequate proportion ('Environmental Law' Dr. J.J. R. Upadhyay, Central Law Agency, Third Edition 2012).

Ministry of Agriculture and Rural Development (Department of Agriculture and Cooperation) New Delhi, dated 25th September 1985 issued the Fertiliser (control) order 1985 order G.S.R. 758 (E). In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government makes the following Order, namely

1. Short title and commencement 1. This Order may be called the Fertiliser (Control) Order, 1985.
2. It shall come into force on the date of its publication in the Official Gazette. The Central Government may, with a view to regulating equitable distribution of fertilizers and making fertilizers available at fair prices, by notification in the Official Gazette, fix the maximum prices or rates at which any fertilizer may be sold by a dealer, manufacturer and importer or a pool handling agency 2. The Central Government may having regard to the local conditions of any area, the period of storage of fertilizers and other relevant circumstances, fix different prices or rates for fertilizers having different periods of storage or for different areas or for different classes of consumers.
3. No dealer, manufacturer and importer or pool handling agency shall sell or offer for sale any fertilizer at a price exceeding the maximum price or rate fixed under this clause.

Regarding the display of stock position and price list of fertilizers Every dealer, who makes or offers, has to make a retail sale of any fertilizers, shall prominently display in his place of business about the quantities of opening stock of different fertilizers held by him on each day and a list of prices or rates of such fertilizers fixed under clause 3 and for the time being in force. Every dealer shall issue a cash or credit memorandum to a purchaser of Fertilizers.

Under this Act there is description about the system of allocation of fertilizers to various States. The Central Government may, with a view to securing equitable distribution and availability of fertilizers to the farmers in time, by notification in the Official Gazette, direct any manufacturer/importer to sell the fertilizers produced by him in such quantities and In such State or States and within such period as may be specified in the said notification.

Check Your Progress 1

- Note:** a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. Explain about Environment pollution?
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4.4 INSECTICIDES ACT 1968

Water is the basic need for the survival of human beings and is part of the right to life and human rights as enshrined in Article 21 of the Constitution of India. The Resolution of UNO in 1977 to which India is a signatory, during the United Nations Water Conference resolved unanimously, inter alia, as under:

All people, whatever their stage of development and their social and economic conditions, have the right to have access to drinking water in quantum and of a quality equal to their basic needs (Narmada Bachao Andolan v. Union of India, 2000 10 SCC 664).

The United Nations also emphasized the importance of purity of water when it proclaimed on 10th November, 1980 “International Drinking Water Supply and Sanitation Decade”. India is also a signatory to this Declaration. Thus, the right to access to drinking water is fundamental to life and there is a duty on the state under Article 21 to provide clean drinking water to its citizens. (See A.P. Pollution Control Board (II) v. M.V. Nayudu, 2001 2 SCC 62 at 69).

Water Pollution may be defined as the presence of some inorganic, organic, biological, radiological, or physical foreign substances in the water that tend to degrade its quality and which makes it unsuitable for the purpose for which it would be suitable in the natural state. The polluted water undergoes physical, chemical or biological changes and thus it becomes unsuitable for use in its natural state. The polluted water is not only nuisance or injury to public health but also it poses danger to the life and health of animals, plants and aquatic organisms (Environment Law- Environment Protection, Sustainable Development And the Law’, P.S.Jaswal, Allahabad Law Agency, 2008).

According to the proclamation adopted by the United Nations Conference on Human Environment in 1972, Indian Parliament also enacted the Water Prevention and Control of Pollution Act 1974 and subsequently Water Prevention and Control of Pollution Rules 1975, Central Board for the Prevention and Control of Water Pollution Procedure for Transaction of Business Rules 1975, Water Cess Act 1977 and Water Cess Rules 1978.

As factors of water pollution, Industrial wastes, Domestic Wastes, Insecticides and Pesticides, Thermal pollution, Radioactive Wastes are the major ones. As far as Insecticides are concerned, farmers use large amount of insecticides and pesticides. Due to rain or irrigation these insecticides and pesticides either pollute the neighboring fresh water in lakes, rivers and ponds or they also down or affect the underground water. The insecticides and pesticides also kill the aquatic animals (Environment Law- Environment Protection, Sustainable Development and the Law’, P.S.Jaswal, Allahabad Law Agency, 2008).

The insecticides Act was designed to implement the recommendations of the Kerala and Madras Food Poisoning cases Inquiry Commission, which inquired into several deaths from insecticide –contaminated food in April and May 1958. The Act established a Central Insecticides Board to advise the Centre and the States on technical aspects of the Act. A Committee of this Board registers insecticides after examining their formulas and verifying claims regarding their safety and efficacy. (Environment Law and Policy in India’, Cases, Materials and Statutes’ – Shyam Divan, Armin Rosencranz, Oxford University Press, Second Edition, 2001)

The manufacture and distribution of insecticides is regulated through licensing. A violation of the Act's registration and licensing can lead to prosecution and penalties. The Central and State governments are vested with emergency powers to prohibit the sale, distribution and use of dangerous insecticides. As per the observation of Tiwari Committee Report in September 1980, this Act has not encouraged strongly enough the move away from the use of organochlorine pesticides which are in disfavor all over the world for their proven detrimental effects on the various living natural resources of the environment. The use of biological and integrated pest control in India has hardly caught on in any significant measure. The implementation of the provision of this Act for monitoring pesticide residues in the environment is totally inadequate. (Environment Law and Policy in India', Cases, Materials and Statutes' - Shyam Divan, Armin Rosencranz, Oxford University Press, Second Edition, 2001).

The Insecticides Rules of 1971 prescribe the procedures for licensing, packaging, labeling and transporting insecticides. They also provide for workers' safety during the manufacture and handling of insecticides through protective clothing, respiratory devices and medical facilities.

4.5 PLANT QUARANTINE AND ANIMAL QUARANTINE

Under plant quarantine (regulation of import into India) order, 2003 (Updated and consolidated version) In exercise of the powers conferred by sub-section (1) of Section 3 of the Destructive Insects and Pests Act, 1914 (2 of 1914), the Central Government has made the Order, for the purpose of prohibiting and regulating the import into India of agricultural articles mentioned herein. Permits for Import of plants, plant products etc. (1) No plants, plant products and other regulated articles (here in after referred to as "consignment") shall be imported into India without complying the phytosanitary conditions stipulated under this Order. The order shall regulate import of all plants, plant products and other articles including but not limited to seeds/grains, pods, nuts, fruits, bulbs, tubers, rhizomes, suckers, cuttings, grafts, saplings, bud woods, roots, rootstock, flowers, pollens, dry plant materials, timber, wood, logs, tissue culture plants, soil, earth, clay, sand, peat/moss, live insects, microbial culture, biocontrol agents, transgenic plants and genetically modified organisms etc., (2) No categories of plants/plant products in respect of the plant species or variety mentioned in Schedule-IV shall be allowed to be imported into India from the countries mentioned against each in column (4) of the said Schedule. (3) Deleted vide Sixth Amendment of 2016, vide S.O.2453 (E), dated 5th July, 2016 (4) Import of consignments of seeds of coarse cereals, pulses, oil seeds and fodder seeds and seeds/stock material of fruit plant species for propagation shall only be permitted based on the recommendations of EXIM Committee of Department of Agriculture, Cooperation & Farmers' Welfare (DAC&FW), except the trial material of the same as specified in Schedule-XII of Plant Quarantine Order. (5) Deleted vide Sixth Amendment of 2016, vide S.O.2453 (E), dated 5th July, 2016 (6) No consignment of regulated articles as referred under Clause 4, 6 & 7 shall be allowed for import unless accompanied with an import permit issued by the authority as specified under Schedule X. (7) The Plant Protection Adviser shall, after obtaining the approval of the Central Government in the Department of Agriculture, Cooperation and Farmers Welfare and based on International

4.6 PREVENTION OF FOOD ADULTERATION ACT 1954

Food is the basic need for human survival. Food is required for physical and mental development and to get energy through which he carries on his daily activities. If food is polluted and adulterated, it is harmful and injurious to health and life. Food is polluted from its source to its use. Every living being has natural sense to judge whether the food is in consumable condition or not. Some testes are intended to:

- a) make the food palatable and attractive in the local frame of value;
- b) keep the nutrient value as high as possible;
- c) handle it in storage to reduce loss;
- d) achieve abundance;
- e) keep it free of filth and objectionable additions;
- f) keep it free of poison and free of pathogenic biological agents.

Pollution of food starts on the use of termites and pests chemicals.

These chemicals are used when frequently then affect the quality of the product directly or indirectly. With the use of these chemicals food gets polluted and adulterated and when consume it badly affects the health even injurious. Human food is widely contaminated by the concentration of pesticides, insecticides and herbicides and thus these synthetic chemicals have become the part of human diet all over the world and leads to various diseases and several deaths. In order to have control, Prevention of Adulteration Act 1954 was passed by Indian Parliament (Environmental Law Dr. J.J. R. Upadhyay Central Law Agency, Third Edition 2012)

This Act called the Prevention of Food Adulteration Act, 1954. It extends to the whole of India. The Central Government shall, constituted a Committee called the Central Committee for Food Standards to advise the Central Government and the State Government on matters arising out of the administration of this Act. The Committee may appoint sub-committees as it deems fit and may appoint to them persons who are not members of the Committee to exercise such powers and perform such duties. The Committee may, subject to the previous approval of the Central Government make bye-laws for the purpose of regulating its own procedure and the transaction of its business.

The Central Government shall, by notification in the Official Gazette, establish one or more Central Food Laboratory or Laboratories to carry out the function entrusted to the Central Food Laboratory by this Act or any rules made under this Act, provided that the Central Government may, by notification in the official Gazette, also specify any laboratory or institute as a Central Food Laboratory for the purposes of this Act.

GENERAL PROVISIONS AS TO FOOD

1. Prohibition of import of certain articles of food no person shall import into India
 - a. any adulterated food;
 - b. any misbranded food;
 - c. any article of food for the import of which a license is prescribed, except in accordance with the conditions of the license; and
 - d. any article of food in contravention of any other provision of this Act or of any rule made there under.
2. Application of law relating to sea customs and powers of Customs Officers – The law for the time being in force relating to sea customs and to goods, the import of which is prohibited by Section 18 of the Sea Customs Act, 1878 (8 of 1878) shall, subject to the provisions of Section 16 of this Act, apply in respect of articles of food, the import of which is prohibited under Section 5 of this Act.
3. Prohibition of manufacture, sale etc. of certain articles of food:

No person shall himself or by any person on his behalf manufacture for sale, or store, sell or distribute the foods mentioned in point number 1.

Check Your Progress 2

- Note:** a) Write your answer in about 50 words.
b) Check your progress with possible answers given at the end of the unit.

1. What is contaminated and adulterated food?
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2. Which food items are prohibited to import in India under Prevention of Food Adulteration Act, 1954?
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3. What is the functioning of Central Food Laboratory under this Act?
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4.7 FOOD SAFETY AND STANDARDS ACT 2006

This Act to consolidate the laws relating to food and to establish the Food Safety and Standard Authority of India for laying down science based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected therewith or incidental thereto, enacted by Parliament in the Fifty-seventh year of Republic of India. Extensive deliberations were held by the Government of India and Ministry approved the proposed Integrated Food Law with certain modifications. The main objective of 'Food Safety and Standards Bill 2005' is to bring out a single statute relating to food and to provide for a systematic and scientific development of Food Processing Industries. It is proposed to establish the Food Safety and Standards Authority of India, which will fix food standards and monitor the manufacturing, import, processing, distribution and sale of food, so as to ensure safe and wholesome food for the people. The Food Authority will be assisted by Scientific Committees and Panels in fixing standards and by a Central Advisory Committee in prioritization of the work. The enforcement of legislation will be through the state commissioner for Food Safety, his officers and Panchayat Raj or Municipal bodies (Handbook of Food Adulteration & Safety Law Sumeet Malik, Eastern Book Company, 1st Edition, 2011).

The Bill inter alia, incorporates the salient provisions of the Prevention of Food Adulteration Act 1954 and is based on international legislations, instrumentalities and Codex Alimentary Commission. In a nutshell, the Bill takes care of International practices and envisages on an overarching policy framework and the provision of single window to guide and regulate persons engaged in manufacture, marketing, processing, handling, transportation import and sale of food.

Main features of the Bill are-

- a. movement from multilevel and multi departmental control to integrated line of command;
- b. integrated response to strategic issues like novel/genetically modified foods, international trade;
- c. licensing for manufacture of food products, which is presently granted by the Central Agencies under various Acts and Orders would stand decentralized to the Commissioner of Food Safety and his officer;
- d. single reference point for all matters relating to Food Safety and Standards regulations and enforcements;
- e. shift from mere regulatory regime to self-compliance through Food Safety Management Systems;
- f. responsibility on food business operators to ensure that food processed, manufactured, imported or distributed is in compliance with the domestic food laws; and
- g. provision for graded penalties depending on the gravity of offence and accordingly, civil penalties for minor offences and punishment and punishment for serious violations.

This Bill is contemporary, comprehensive and intends to ensure better consumer safety through Food Safety Management System and setting standards based on science and transparency as also to meet the dynamic requirements of Indian Food Trade and Industry and International Trade (Handbook of Food Adulteration & Safety Law Sumeet Malik, Eastern Book Company, 1st Edition, 2011).

General principles to be followed in administration of Act – The Central Government, the State Governments, the Food Authority and other agencies, as the case may be, while implementing the provisions of this Act shall be guided by the following principles :-

- a) endeavor to achieve an appropriate level of protection of human life and health and the protection of consumers' interest, including fair practices in all kinds of food trade with reference to food safety standards and practices.
- b) carry out risk management which shall include taking into account the results of risk assessment, and other factors which in the opinion of the Food Authority are relevant to the matter under consideration and where the conditions are relevant, in order to achieve the general objectives of regulations.
- c) where in any specific circumstances, on the basis of assessment of available information, the possibility of harmful effects on health is identified but scientific uncertainty persists, provisional risk management measures necessary to ensure appropriate level of health protection may be adopted, pending further scientific information for a more comprehensive risk assessment.
- d) the measures adopted on the basis of clause (c) shall be proportionate and no more restrictive of trade than is required to achieve appropriate level of health protection, regard being had to technical and economic feasibility and other factors regarded as reasonable and proper in the matter under consideration.
- e) the measures adopted shall be reviewed within a reasonable period of time, depending on the nature of the risk to life or health being identified and the type of scientific information needed to clarify the scientific uncertainty and to conduct a more comprehensive assessment.
- f) in cases where there are reasonable grounds to suspect that a food may present a risk for human health, then, depending on the nature, seriousness and extent of that risk, the Food Authority and the Commissioner of Food Safety shall take appropriate steps to inform the general public of the nature of the risk to health, identifying to the fullest extent possible the food or type of food, the risk that it may present, and the measures which are taken or about to be taken to prevent reduce or eliminate that risk; and where any food which fails to comply with food safety requirements is part of a batch, lot or consignment of food of the same class or description, it shall be presumed until the contrary is proved, that all of the food in that batch, lot or consignment fails to comply with those requirements (Handbook of Food Adulteration & Safety Laws Sumeet Malik, Eastern Book Company, 1st Edition, 2011).

GENERAL PROVISIONS AS TO ARTICLES OF FOOD

According to the general provisions of the Act, no article of food shall contain any food additive or processing aid unless it is in accordance with the provisions of this Act and regulations made there under.

No article of food shall contain any contaminant, naturally occurring toxic substances or toxins or hormone or heavy metals in excess of such quantities as may be specified by regulations.

No article of food shall contain insecticides or pesticides residues, veterinary drugs residues, antibiotic residues, solvent residues, pharmacological active substances and microbiological counts in excess of such tolerance limits as may be specified by regulations.

No person shall manufacture, distribute, sell or expose for sale or dispatch or deliver to any agent or broker for the purpose of sale, any packaged food products which are not marked and labeled in the manner as may be specified by regulations (Handbook of Food Adulteration & Safety Law Sumeet Malik, Eastern Book Company, 1st Edition, 2011).

Liability of manufacturers, packers, wholesalers, distributors and sellers –

The manufacturer or packer of an article of food shall be liable for such article of food if it does not meet the requirements of this Act and the rules and regulations made there under. The wholesaler or distributor shall be liable under this Act for any article of food which is:

- a) supplied after the date of its expiry; or
- b) stored or supplied in violation of the safety instructions of the manufacturer; or
- c) unsafe or misbranded; or
- d) unidentifiable of manufacturer from whom the article of food have been received; or
- e) stored or handled or kept in violation of the provisions of this Act, the rules and regulations made there under; or
- f) received by him with knowledge of being unsafe.

The seller shall be liable under this Act for any article of food which is:-

- a) sold after the date of its expiry; or
- b) handled or kept in unhygienic conditions; or
- c) misbranded; or
- d) unidentifiable of the manufacturer or the distributors from whom such articles of food were received; or
- e) received by him with knowledge of being unsafe.

Authorities responsible for enforcement of Act –

The Food Authority and the State Food Safety Authorities shall be responsible for the enforcement of this Act. They shall monitor and verify that the relevant

requirements of law are fulfilled by food business operators at all stages. The Food Safety Officers shall enforce and execute within their area the provisions of this Act with respect to which the duty is not imposed expressly or by necessary implication on some other authority. The Commissioner of Food Safety and Designated Officer shall exercise the same powers as are conferred on the Food Safety Officer and follow the same procedure specified in this Act. No person shall commence or carry on any food business except under a license. Nothing contained in sub-section shall apply to a manufacturer, retailer, hawker, vendor, industries relating to food business. They shall register themselves with such authority and in such manner as may be specified by regulations, without prejudice to the availability of safe and wholesome food for human consumption or affecting the interests of the consumers. Any person desirous to commence or carry on any food business shall make an application for grant of a license to the Designated Officer in such manner containing such particulars and fees as may be specified by regulations. Every license shall be in such form and subject to such conditions as may be specified by regulations. A single license may be issued by the Designated Officer for one or more articles of food and also for different establishments or premises in the same area. If the articles of food are manufactured, stores sold or exhibited for sale at different premises situated in more than one area, separate applications shall be made and separate license shall be issued in respect of such premises not falling within the same area. An appeal against the order of rejection for the grant of license shall lie to the Commissioner of Food Safety. A license unless suspended or cancelled earlier shall be force for such period as may be specified by regulations. (Handbook of Food Adulteration & Safety Laws Sumeet Malik, Eastern Book Company, 1st Edition, 2011).

Check Your Progress 3

Note: a) Write your answer in about 50 words.

b) Check your progress with possible answers given at the end of the unit.

1. How the Food Safety Bill deals with different issues under the Act?

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2. What is the liability of seller under the Act?

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3. What are the responsibilities of the State Food Safety Authorities?

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4.8 IMPORTANT JUDGMENTS ON ENVIRONMENT PROTECTION

- Dayal Singh v. State of Rajasthan (2004)
- Municipal Corp. of Delhi v. Tek Chand Bhatia, (1980) Godawat Pan Masala Products I.P. Ltd. Vs. Union of India (2004)
- Hindustan Lever Ltd. V. Food Inspector (2004)
- Bhagwan Das Jagdish Chander v. Delhi
- Braham Das v. State of H.P. (1988)

4.9 LET US SUM UP

Increase in population especially in developing countries causes increase in the demand of food supply which can be met only through increase in agricultural land and extensive cultivation and increase in the productivity and thus intensive cultivation. Increased use of chemicals to control diseases in crops and to kill undesirable insects contaminates the soils and water and enters human bodies, causing cancer. In this unit you learnt about The Essential Commodities Act 1955, Fertilizer control order 1985, Insecticides Act 1968, Plant and Animal Quarantine, Prevention of Food Adulteration Act 1954 and Food Safety and Standards Act 2006. Food Safety and Standards Act 2006 was enacted to lay down the standards to signify the change in environment of regulation. This Act is to regulate and monitor the manufacturing, import, processing, distribution and sale of food to ensure safety of food for people. You have also learnt about some important Judgments on Environment Protection

4.10 KEY WORDS

- License** : A license is an official permission or permit to do, use, or own something. A license may be granted by a party to another party as an element of an agreement between those parties. A shorthand definition of a license is “an authorization to use licensed material”
- Notified Order** : An order notified in the Official Gazette.
- Order** : A direction issued there under
- Fertilizer** : Fertilizer means any substance used or intended to be used as a fertilizer of the soil and/or crop and specified in Part A of Schedule I and includes a mixture of fertilizer and special mixture of fertilizers provisional fertilizer, customized fertilizer, Bio-fertilizers specified in Schedule III and Organic fertilizers specified in Schedule IV;
- Manufacturer** : means a person who produces fertilizers or mixtures of fertilizers and the expression “manufacture” with

its grammatical variations shall be construed accordingly.

- Organic fertilizer** : Any substances made up of one or more unprocessed material (s) of a biological nature (plant/animal) and may include unprocessed mineral materials that have been altered through microbiological decomposition process;
- Adulterant** : Any material which is or could be employed for the purposes of adulteration;
- Contaminant** : Any substance, whether or not added to food, but which is present in such food as a result of the production, manufacture, processing, preparation, treatment, packing, packaging, transport or holding of such food or as a result of environmental contamination and does not include insect fragments, rodent hairs and other extraneous matter;
- Food Safety** : Assurance that food is acceptable for human consumption according to its intended use;

4.11 REFERENCES & SUGGESTED FURTHER READINGS

Divan S, Rosencranz, A. 2001. Environment Law and Policy in India', Cases, Materials and Statutes' - Shyam Oxford University Press, Second Edition.

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4.12 ANSWERS TO CHECK YOUR PROGRESS

Answers to Check Your Progress 1

1. Your answer should include the following points:

Environmental Pollution” means contamination of the environment in such a way that it causes hazards or creates potential hazards to health

and well being of living persons and non-living

Environmental Protection Act 1990

Noise (Regulation and Control) Rules 2000

Answers to Check Your Progress 2

1. Your answer should include the following points:

Adulterated food means any item or material which is or could be employed for making the food unsafe or sub-standard or mis-branded or containing extraneous matter.

Contaminant

2. Your answer should include the following points:

Prohibition of import of certain articles of food- No person shall import into India any adulterated food; any misbranded food; any article of food for the import of which a licence is prescribed, except in accordance with the conditions of the licence; and any article of food in contravention of any other provision of this Act or of any rule made there under.

3. Your answer should include the following points:

The Food Authority may notify food laboratories and research institutions accredited by National Accreditation Board for testing and Calibration Laboratories or any other accreditation agency for the purposes of carrying out analysis of samples by food Analysts under the Act. Function of the Laboratories may be carried out the procedure of analysis or tests. On the receipt of a package containing the sample, shall compare the seal on the container with specimen impression received separately.

Answers to Check Your Progress 3

1. Your answer should include the following points:

Bill takes care of International practices and envisages an overarching policy framework and the provision of single window to guide and regulate persons engaged in manufacture, marketing, processing, handling, transportation import and sale of food. Apart from this it also leads movement from multilevel and multi-departmental control to integrated line of command; Licensing for manufacture of food products, which is presently granted by the Central Agencies under various Acts and Orders.

2. Your answer should include the following points:

The seller shall be liable under this Act for any article of food which is:-

- a. sold after the date of its expiry; or
- b. handled or kept in unhygienic conditions; or
- c. misbranded; or
- d. unidentifiable of the manufacturer or the distributors from whom such articles of food were received; or
- e. received by him with knowledge of being unsafe.

3. Your answer should include the following points:

The Food Authority and the State Food Safety Authorities are responsible for the enforcement of this Act. The Food Authority and the State Food Safety Authorities shall monitor and verify that the relevant requirements of law are fulfilled by food business operators at all stages of food business. The Food Safety Officers are responsible to enforce and execute within their area the provisions of this Act with respect to which the duty is not imposed expressly or by necessary implication on some other authority.



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