Indira Gandhi
National Open University
School of Law

WWF
World Wide Fund For Nature

MLE-022
Introduction to Environmental Law and Policy

Block

1

EMERGENCE OF ENVIRONMENTAL LAW

UNIT 1

Concept of Law and Policy **5**

UNIT 2

Environmental Law and the Indian Constitution **22**

UNIT 3

Other Major Laws and Environment (IPC, CrPC, Torts) **36**

UNIT 4

Environment and Governance **50**

Expert Committee

Prof. N.R. Madhava Menon
Chairman, Former Director
National Judicial Academy
Bhopal Member
Commission on Centre-States Relations
New Delhi

Prof. B.B. Pande
Former Professor of Criminology
Delhi University

Justice Madan B Lokur
Chief Justice
Guwahati High Court
Guwahati

Dr. Luther Rangreji
Senior Legal Officer
Legal & Treaties Division
Ministry of External Affairs

Prof. Venkata Rao
Vice-Chancellor
National Law School
Bangalore, Karnataka

Dr. K. Vijaya Lakshmi
Assistant Vice President (Environment)
Development Alternatives

Dr. R.D. Jakati
Director
Indira Gandhi National Forest Academy

Dr. Vinod B.. Mathur
Dean
Wildlife Institute of India

Mr. Samir Sinha
Head
Traffic – India

Mr. Raj Panjwani
Senior Advocate
Supreme Court

WWF-IGNOU EC Members

Mr. V.N. Rajasekharan Pillai
Vice-Chancellor, IGNOU

Mr. Ravi Singh
SG & CEO, WWF-India

Prof. Srikrishna Deva Rao
Former Director (2nd May, 2007 to 1st May 2010)
School of Law, IGNOU

Prof. K. Elumalai
Director, School of Law
IGNOU, New Delhi

Ms. Mansi Sharma
Assistant Professor, School of Law
IGNOU, New Delhi

Ms. Moulika Arabhi
Programme Coordinator
Centre for Environmental Law, WWF-India

Block Preparation Team

Programme Coordinators	:	Ms. Mansi Sharma, School of Law, IGNOU Ms. Moulika Arabhi, Centre for Environmental Law, WWF-India
Unit Writers	:	Ms.Moulika Arabhi, CEL, WWF-India (Units 1,2 & 3) Mr. Kiran Rajashekariah, Prog. & Policy, WWF-India (Unit 4)
Content Editor	:	Ms. Mansi Sharma and Ms. Moulika Arabhi, CEL, WWF-India
Language Editor	:	Ms. Mansi Sharma
Format Editor	:	Ms. Mansi Sharma

Print Production

Mr. Yashpal Section Officer (Publication) School of Law	**Cover Design** Mr. Tamal Basu	**Word Processing** Sh. Yogesh Dawar

October, 2010
© *Indira Gandhi National Open University, 2010*
ISBN: 978-81-266-4846-7
All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the copyright holder.
Further information on the Indira Gandhi National Open University courses may be obtained from the University's office at Maidan Garhi, New Delhi-110 068 or the official website of IGNOU at www.ignou.ac.in
Printed and published on behalf of Indira Gandhi National Open University, New Delhi by Director, SOL, IGNOU.
Lasertypesetted at Graphic Printers, Mayur Vihar, Phase-I, Delhi-110091.
Printed at :

MLE-022 INTRODUCTOIN TO ENVIRONMENTAL LAW AND POLICY

Introduction

*"For strengthening the professional and educational support base far environmental law and policy-**Dear participant,***

One of the principle features of School of Law, IGNOU and Centre for Environmental Law, WWF-India's educational activities is the Post Graduate Diploma Programme in Environmental Law. Jointly being launched in 2010, the Diploma is the first such comprehensive programme for enviro-legal education catering to India and International students and professionals. Special emphasis is on conservation and environmental issues, which lie at the core of all environmental law, the study of which enables participants to determine the effectiveness or ineffectiveness of the respective law.

Course II - Introduction to Environmental Law and Policy

The need for conservation and sustainable use of natural resources has been expressed in Indian scriptures, more than three thousand years old and is reflected in the constitutional, legislative and policy framework as also in the international commitments of the country. Even before India's independence in 1947, several environmental legislation existed but the real impetus for bringing about a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). Under the influence of this declaration, the National Council for Environmental Policy and Planning within the Department of Science and Technology was set up in 1972. This Council later evolved into a full-fledged Ministry of Environment and Forests (MoEF) in 1985 which today is the apex administrative body in the country for regulating and ensuring environmental protection. After the Stockholm Conference, in 1976, constitutional sanction was given to environmental concerns through the 42nd Amendment, which incorporated them into the Directive Principles of State Policy and Fundamental Rights and Duties.

Environmental Law is a body of law, which is a system of complex and interlocking statutes, common law, treaties, conventions, regulations and policies which seek to protect the natural environment which may be affected, impacted or endangered by human activities. Some environmental laws regulate the quantity and nature of impacts of human activities: for example, setting allowable levels of pollution or requiring permits for potentially harmful activities. Other environmental laws are preventive in nature and seek to assess the possible impacts before the human activities can occur.

Course II tries to explain all the above, we would be taking you through 'Emergence of Environmental Law' where the Concepts of law would be further explained in detail. Thereby, we dwell into 'International Environmental Laws' and the 'Organizations, which controls environmental functions, and the Negotiations' to which the nations are bound.

We wish you get the best from Course-II and also urge you to join the community thinking and acting for environment well being.

Best Regards and Happy Reading!
SOL-CEL Team

.

BLOCK 1 EMERGENCE OF ENVIRONMENTAL LAW

Environmental law as a distinct system arose in the 1960s in the major industrial economies. It is fast becoming an important and specialised branch of law. Many of its doctrines are gradually becoming clear. The provisions in the old Indian law, which have a bearing on the environment, have hardly been used in the past. The consciousness to protect the environment was not as strong then, as it is today. Unless there was awareness on the part of the people to approach the authorities neither the government nor the courts would have had the opportunity to make use of the statutory provisions.

Following Units will be dealt in Block 1.

Unit 1 – Concept of Law and Policy

The term Environment may be perceived in different connotations. There numerous definitions of the term as provided by different National and International legal instruments is what this unit will explain in detail.

Unit 2 – Environmental Law and the Indian Constitution

Mother of all laws 'The Constitutional Law' plays an important role in development of National Environmental Legislation, this unit is an attempt to draw and explain the linkages.

Unit 3 – Other Major Laws and Environment (IPC, CrPC, Torts)

This unit talks about how Environment has linkages with other major laws. Specific Sections, which are related to Environment, are specially culled out for better understanding.

Unit 4 – Environmental Equity and Governance

The structure of Environmental Equity and Governance is explained in the present unit, without equal distribution and implementation no law or policy can exist.

UNIT 1 CONCEPT OF LAW AND POLICY

Structure

1.1 Introduction

1.2 Objectives

1.3 Concept of Law

- 1.3.1 Law as Commands
- 1.3.2 Law as Rules
- 1.3.3 Law as Principles
- 1.3.4 Law as Ethics or Morality
- 1.3.5 Law as Social Norm and Customs
- 1.3.6 Law as Written Documents
- 1.3.7 Law Distinguished from Policy

1.4 Environmental Law and Policy

1.5 The Legal and Regulatory Framework for Environmental Protection in India

1.6 Summary

1.7 Terminal Questions

1.8 Answers and Hints

1.9 References and Suggested Readings

1.1 INTRODUCTION

'Environment' is a very comprehensive term. It includes within its ambit a wide variety of phenomenon. It is a dynamic term that may be used to describe a limited area on one hand, and the entire planet on the other. The term Environment may be perceived in different connotations. There numerous definitions of the term as provided by different National and International legal instruments.

Generally speaking, Environment includes the external conditions, resources, stimuli *etc*. with which an organism interacts. The Preamble of the United Nations Declaration on Human Environment, adopted in Stockholm in June 1972 states, *"Man is both creature and moulder of his environment, which gives him physical substance and affords him the opportunity for intellectual, moral, social and spiritual growth"*.

The environment is clearly at risk from a variety of sources of harm, mostly of human origin. In order to tackle this problem it is important that we develop strategies for modifying human behaviour towards environmentally benign practices and away from environmentally damaging ones. In very broad terms, techniques for modifying human behaviour can be thought of as falling into two types: incentives and disincentives. Law is important as it creates a framework within which incentives and disincentives can operate.

Law is all pervasive. Other methods for influencing human behaviour are to a certain extent, voluntary or optional. Education, ethics, peer and family pressure: these all apply in various degrees. Law, on the other hand, cannot easily be avoided. It is axiomatic to the "rule of law" that law in a society applies equally to everyone at all times.

1.2 OBJECTIVES

After reading this unit, you should be able to:

- study the emergence of 'concept of law'; and
- understand the relation between social occurrences and its relation to formation of law.

1.3 THE CONCEPT OF LAW

Law has been described as 'generally...a way of regulating human behaviour".[1] Yet such simple formulations leave many issues unresolved. Hence, there is a need to closely consider the concept of "law".

1.3.1 Law as Commands

One school of thought 2 is that the only thing that count as 'laws' are commands of a sovereign, backed up by sanctions in the event of disobedience. A sovereign, for Austin, is an individual or body that is clearly identifiable, habitually obeyed by society, and is not habitually obedient to any other superior. One problem with the command concept of law is that it doesn't fit very readily with laws that merely empower or permit one to do something. It fails adequately to separate legal coercion from non-legal coercion.

1.3.2 Law as Rules

Problems with 'command' theories of law led to the development of "rule" theories of law. Hart (1961), the most eminent rule theorists, divided legal rules into primary rules and secondary rules. Primary rules have substantive content (e.g. it is an offence to pollute a watercourse). Secondary rules are rules about primary rules. It is the possession of both primary and secondary rules which according to Hart, demarcates a legal system from other institutions for social control. This implies, incidentally, that less formal systems of social conventions and rules as much as those possessed by certain indigenous peoples may not achieve the status of 'legal system'.

The Rule Model of law faces certain problems. First, what should courts do if the law does not contain a rule governing a particular case or if the rule seems vague?

Hart's answer is that laws, whilst generally comprehensive and clear, there may be situations where the judges must exercise discretion. This would imply that we must accept that judges actually make law where the legislature has been unclear or left a gap. The discretion explanation itself however is subject to criticism. Second, it is not certain that any clear rules exist. Some rules are made not by the legislature but by the judges. In the case of judge-made rules (precedents) the scope of any given rule is often unclear.

1.3.3 Laws as Principles[2]

Not everyone agrees that law consists of a body of clear rules surrounded by a woolly mantle of judicial discretion. Dworkin (1977), for one, famously argued that law also contains principles and does not contain discretion. He distinguished rules and principles as follows. He said that rules apply in an "all or nothing" fashion (e.g.

1) Mc Eldowney and Mc Eldowney 1996, Volume. 3
2) Hobbes 1996, orig. 1651; Bentham 1891, orig. 1776; Austin 1954, orig. 1832

river pollution is forbidden) whereas principles have the quality of 'weight'; that is to say, a principle is never absolute and is always subject to being balanced with and against other principles. An example of a principle might be 'a polluter shall pay for environment damage caused'.

Unlike Hart, Dworkin denied that judges have discretion when faces with unclear or seemingly unjust cases. Instead he asserted that, in such hard access, judged should reach a solution based on the principles of their particular legal system.

Principles which can be found in most legal systems include- proportionality, nondiscrimination, natural justice, and equitable principles, the idea that law contains legal principles is not unproblematic. One issue is whilst Dworkin characterises principles as having 'weight', he never explains how this 'weight' is to be ascertained. It is not clear that Dworkin's characterisation of rules as absolute is correct; it may be that where rules appear to conflict they can also be 'weighted' against one another. If that is the case then the distinction between the two types of law collapses and the need for principles disappears. A third problem is that of identification. Protocols exist for identifying legal rules, the same does not appear to be true of legal principles.

1.3.4 Law as Ethics or Morality

The argument that there is some degree of necessary connection between law and morality (or ethics) is generally known as natural law theory. More specifically, natural law is the idea that law must have a certain reasonable moral content in order to be called law at all. Part of importance of natural law thinking is that it can be used to undermine unethical legislation and defeat attempts to justify morally repugnant acts (e.g. genocide) by appeal to the claims of 'only following the law'. Human rights law which is driven by natural law theories is of increasing (Toubes Muniz 1997; Alexander and Kress 1997, Aquinas 1991; Finnis 1980) importance in environmental protection. The recent development of the field of 'environmental ethics' raises the question of a role for natural law in promoting or protecting basic ethical values in nature.

Natural law theory is subject to certain criticisms. Most obvious is the difficulty of ascertaining or reaching agreement on, those ethical principles and values that should inform or limit law's content.

1.3.5 Law as Social Norm and Customs

The western concept of law is not shared universally. In particular, many indigenous peoples exist within less formalised systems of law in which the boundary between social norms and 'legal' rules is blurred or non-existent. Laws based on local custom- 'customary law'-continue to be of considerable practical importance in many developing countries, especially in Africa. Individuals often rely on customary rights to protect their environment, and their own homes, from the threat of development. Many important concepts existing within one legal culture may be absent, or present only in altered form, in others. Sometimes law cannot replace the social functions of tradition and custom. Attitudes and behaviours formed from thousands of years of custom and tradition can be almost impossible for law alone to alter. The practice in China and Hong Kong of eating wild animals, often exotic and/or endangered species has been little affected by laws rendering such practices illegal. Furthermore, the use of wild animal parts in medicinal preparations in these countries is not considered to be morally wrong.

Self Assessment Question

1) Do Customs and Social Norms govern the process of law making?

.....

.....

.....

.....

1.3.6 Law as Written Documents

It is assumed in the modern western society that laws must exist in a written form. This stems, historically, from the need for dissemination of laws. It also acts as a safeguard against corruption or mischievous interpretation. The requirement is met in modern times, by the publication of statutes, or, in civil law countries, 'codification' of the whole environmental law. In recent times access to environmental legislation-at international, regional and domestic levels-has been significantly improved by creation of numerous Internet sites which facilitate (Boyle and Anderson 1996, Stavenhagen 1990) access.

The desirability of setting laws in written form led to an increase in written reports of courts' judgment. In addition to the traditional medium of the printed page, decided cases are increasingly disseminated via electronic media such as CD ROMs and the Internet.

1.3.7 Law Distinguished from Policy

An important distinction in the concept of law is the one between law and policies. Government circulars, strategies or advice documents cannot substitute for the hard-edged character of legislation which is necessary so that 'individuals are in a position of legislation which is necessary so that 'individuals are in a position to know their rights in order to rely upon them where appropriate'. Two factors distinguish law from policy. First, policy is generally advisory in nature, recommending objectives or setting targets, rather than prescribing particular actions. Second, policy may derive from any number of institutional processes whereas law must pass strict secondary rules of recognition before it has legal quality. The 'relegation' of some instrument to the field of policy rather than law does not exclude it from legal importance. Failure to take relevant policies into account or, conversely, consideration of irrelevant policies may invalidate decisions of public bodies.

Not surprisingly, disputes not infrequently arise concerning the relevance, hence permissibility, of environmental policies taken into account by public authorities. Sometimes environmental policies must be taken into account. For instance, in UK development control law, governing advice about development controls, issued in the form of Planning Policy Guidance (PPG) notes, must be taken into consideration in the determination of applications for planning permission.

1.4 ENVIRONMENTAL LAW AND POLICY

Environmental Law is a body of law, which is a system of complex and interlocking statutes, common law, treaties, conventions, regulations and policies which seek to protect the natural environment which may be affected, impacted or endangered by human activities. Some environmental laws regulate the quantity and nature of impacts

of human activities. (Moore 1987, 176) for example, setting allowable levels of pollution or requiring permits for potentially harmful activities. Other environmental laws are preventive in nature and seek to assess the possible impacts before the human activities can occur.

Environmental law as a distinct system arose in the 1960s in the major industrial economies. It is fast becoming an important and specialised branch of law. Many of its doctrines are gradually becoming clear. The questions addressed to by environmental law are substantive in nature, whereas, the remedies of these issues are mainly procedural. In recent years, environmental law has become seen as a critical means of promoting sustainable development. Policy concepts such as the precautionary principle, public participation, environmental justice, and the polluter pays principle have informed many environmental law reforms in this respect. There has been considerable experimentation in the search for more effective methods of environmental control beyond traditional "command-and control" style regulation. Eco-taxes, tradable emission allowances, voluntary standards such as ISO 14000 and negotiated agreements are some of these innovations.

Self Assessment Question

2) How is law distinguished from policy?

.....

.....

.....

.....

1.5 LEGAL AND REGULATORY FRAMEWORK FOR ENVIRONMENTAL PROTECTION IN INDIA

Over the years, together with a spreading of environmental consciousness, there has been a change in the traditionally-held perception that there is a trade-off between environmental quality and economic growth as people have come to believe that the two are necessarily complementary. The current focus on environment is not new environmental considerations have been an integral part of the Indian culture. The need for conservation and sustainable use of natural resources has been expressed in Indian scriptures, more than three thousand years old and is reflected in the constitutional, legislative and policy framework as also in the international commitments of the country.

Even before India's independence in 1947, several environmental legislation existed but the real impetus for bringing about a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). Under the influence of this declaration, the National Council for Environmental Policy and Planning within the Department of Science and Technology was set up in 1972. This Council later evolved into a full-fledged Ministry of Environment and Forests (MoEF) in 1985 which today is the apex administrative body in the country for regulating and ensuring environmental protection. After the Stockholm Conference, in 1976, constitutional sanction was given to environmental concerns through the 42nd Amendment, which incorporated them into the Directive Principles of State Policy and Fundamental Rights and Duties.

Since the 1970s an extensive network of environmental legislation has grown in the country. The MoEF and the pollution control boards (CPCB i.e. Central Pollution Control Board and SPCBs i.e. State Pollution Control Boards) together form the regulatory and administrative core of the sector. A policy framework has also been developed to complement the legislative provisions. The Policy Statement for Abatement of Pollution and the National Conservation Strategy and Policy Statement on Environment and Development were brought out by the MoEF in 1992, to develop and promote initiatives for the protection and improvement of the environment. The EAP (Environmental Legal and regulatory framework Action Programme) was formulated in 1993 with the objective of improving environmental services and integrating environmental considerations in to development programmes.

Legislation for environmental protection in India

a) *Water*

Water quality standards especially those for drinking water are set by the Indian Council of Medical Research. These bear close resemblance to WHO standards. The discharge of industrial effluents is regulated by the Indian Standard Codes and recently, water quality standards for coastal water marine outfalls have also been specified. In addition to the general standards, certain specific standards have been developed for effluent discharges from industries such as, iron and steel, aluminium, pulp and paper, oil refineries, petrochemicals and thermal power plants. Legislation to control water pollution are listed below.

Water (Prevention and Control of Pollution) Act, 1974

This Act represented India's first attempts to comprehensively deal with environmental issues. The Act prohibits the discharge of pollutants into water bodies beyond a given standard, and lays down penalties for non-compliance. The Act was amended in 1988 to conform closely to the provisions of the EPA, 1986. It set up the CPCB (Central Pollution Control Board) which lays down standards for the prevention and control of water pollution. At the State level, the SPCBs (State Pollution Control Board) function under the direction of the CPCB and the state government.

Water (Prevention and Control of Pollution) Cess Act, 1977

This Act provides for a levy and collection of a cess on water consumed by industries and local authorities. It aims at augmenting the resources of the central and state boards for prevention and control of water pollution. Following this Act, *The Water (Prevention and Control of Pollution) Cess Rules* were formulated in 1978 for defining standards and indications for the kind of and location of meters that every consumer of water is required to install.

b) *Air*

Air (Prevention and Control of Pollution) Act, 1981

To counter the problems associated with air pollution, ambient air quality standards were established, under the 1981 Act. The Act provides means for the control and abatement of air pollution. The Act seeks to combat air pollution by prohibiting the use of polluting fuels and substances, as well as by regulating appliances that give rise to air pollution. Under the Act establishing or operating of any industrial plant in the pollution control area requires consent from state boards. The boards are also expected to test the air in air pollution control areas, inspect pollution control equipment, and manufacturing processes.

National Ambient Air Quality Standards (NAAQS) for major pollutants were notified by the CPCB in April 1994. These are deemed to be levels of air quality necessary with an adequate margin of safety, to protect public health, vegetation and property (CPCB 1995 cited in Gupta, 1999). The NAAQS prescribe specific standards for industrial, residential, rural and other sensitive areas. Industry-specific emission standards have also been developed for iron and steel plants, cement plants, fertilizer plants, oil refineries and the aluminium industry. The ambient quality standards prescribed in India are similar to those prevailing in many developed and developing countries. To empower the central and state pollution boards to meet grave emergencies, the *Air (Prevention and Control of Pollution) Amendment Act*, 1987, was enacted. The boards were authorised to take immediate measures to tackle such emergencies and recover the expenses incurred from the offenders. The power to cancel consent for non-fulfilment of the conditions prescribed has also been emphasized in the Air Act Amendment.

The Air (Prevention and Control of Pollution) Rules formulated in 1982, defined the procedures for conducting meetings of the boards, the powers of the presiding officers, decision-making, the quorum; manner in which the records of the meeting were to be set etc. They also prescribed the manner and the purpose of seeking assistance from specialists and the fee to be paid to them. Complementing the above Acts is the *Atomic Energy Act* of 1982, which was introduced to deal with radioactive waste. In 1988, the *Motor Vehicles Act*, was enacted to regulate vehicular traffic, besides ensuring proper packaging, labelling and transportation of the hazardous wastes. Various aspects of vehicular pollution have also been notified under the EPA of 1986. Mass emission standards were notified in 1990, which were made more stringent in 1996. In 2000 these standards were revised yet again and for the first time separate obligations for vehicle owners, manufacturers and enforcing agencies were stipulated. In addition, fairly stringent Euro I and II emission norms were notified by the Supreme Court on April 29, 1999 for the city of Delhi. The notification made it mandatory for car manufacturers to conform to the Euro I and Euro II norms by May 1999 and April 2000, respectively, for new non-commercial vehicle sold in Delhi.

c) *Forests and wildlife*

The WPA (Wildlife Protection Act), 1972, provides for protection to listed species of flora and fauna and establishes a network of ecologically-important protected areas. The WPA empowers the central and state governments to declare any area a wildlife sanctuary, national park or closed area. There is a blanket ban on carrying out any industrial activity inside these protected areas. It provides for authorities to administer and implement the Act; regulate the hunting of wild animals; protect specified plants, sanctuaries, national parks and closed areas; restrict trade or commerce in wild animals or animal articles; and miscellaneous matters. The Act prohibits hunting of animals except with permission of authorised officer when an animal has become dangerous to human life or property or so disabled or diseased as to be beyond recovery (WWF-India, 1999). The near-total prohibition on hunting was made more effective by the Amendment Act of 1991.

The Forest (Conservation) Act, 1980

This Act was adopted to protect and conserve forests. The Act restricts the powers of the state in respect of de-reservation of forests and use of forestland for non-forest purposes (the term ‘non-forest purpose’ includes clearing any forestland for

cultivation of cash crops, plantation crops, horticulture or any purpose other than re-afforestation).

d) *General*

Environment (Protection) Act, 1986 (EPA)

This Act is an umbrella legislation designed to provide a framework for the coordination of central and state authorities established under the Water (Prevention and Control) Act, 1974 and Air (Prevention and Control) Act, 1981. Under this Act, the central government is empowered to take measures necessary to protect and improve the quality of the environment by setting standards for emissions and discharges; regulating the location of industries; management of hazardous wastes, and protection of public health and welfare.

From time to time the central government issues notifications under the EPA for the protection of ecologically-sensitive areas or issues guidelines for matters under the EPA.

Self Assessment Question

3) List out the legislations emerged for safeguarding environment?

.....

.....

.....

.....

Some notifications issued under this Act are:

- *Doon Valley Notification (1989),* which prohibits the setting up of an industry in which the daily consumption of coal/fuel is more than 24 MT (million tonnes) per day in the Doon Valley.
- *Coastal Regulation Zone Notification (1991),* which regulates activities along coastal stretches. As per this notification, dumping ash or any other waste in the CRZ is prohibited. The thermal power plants (only foreshore facilities for transport of raw materials, facilities for intake of cooling water and outfall for discharge of treated waste water/cooling water) require clearance from the MoEF.
- *Dhanu Taluka Notification (1991),* under which the district of Dhanu Taluka has been declared an ecologically fragile region and setting up power plants in its vicinity is prohibited.
- *Revdanda Creek Notification (1989),* which prohibits setting up industries in the belt around the Revdanda Creek as per the rules laid down in the notification.
- *The Environmental Impact Assessment of Development Projects Notification,* (1994 and as amended in 1997). As per this notification:
- All projects listed under Schedule I require environmental clearance from the MoEF.
- Projects under the delicenced category of the New Industrial Policy also require clearance from the MoEF.

- All developmental projects whether or not under the Schedule I, if located in fragile regions must obtain MoEF clearance.
- Industrial projects with investments above Rs 500 million must obtain MoEF clearance and are further required to obtain a LOI (Letter of Intent) from the Ministry of Industry, and an NOC (No Objection Certificate) from the SPCB and the State Forest Department if the location involves forestland. Once the NOC is obtained, the LOI is converted into an industrial licence by the state authority.
- The notification also stipulated procedural requirements for the establishment and operation of new power plants. As per this notification, two-stage clearance for site-specific projects such as pithead thermal power plants and valley projects is required. Site clearance is given in the first stage and final environmental clearance in the second. A public hearing has been made mandatory for projects covered by this notification. This is an important step in providing transparency and a greater role to local communities.
- *Ash Content Notification (1997)*, required the use of beneficiated coal with ash content not exceeding 34% with effect from June 2001, (the date later was extended to June 2002). This applies to all thermal plants located beyond one thousand kilometres from the pithead and any thermal plant located in an urban area or, sensitive area irrespective of the distance from the pithead except any pithead power plant.
- *Taj Trapezium Notification (1998)*, provided that no power plant could be set up within the geographical limit of the Taj Trapezium assigned by the Taj Trapezium Zone pollution (Prevention and Control) Authority.
- *Disposal of Fly Ash Notification (1999)* the main objective of which is to conserve the topsoil, protect the environment and prevent the dumping and disposal of fly ash discharged from lignite-based power plants. The salient feature of this notification is that no person within a radius of 50 km from a coal- or lignite-based power plant shall manufacture clay bricks or tiles without mixing at least 25% of ash with soil on a weight-to-weight basis. For the thermal power plants the utilisation of the flyash would be as follows:
    - Every coal-or lignite-based power plant shall make available ash for at least ten years from the date of publication of the above notification without any payment or any other consideration, for the purpose of manufacturing ash based products such as cement, concrete blocks, bricks, panels or any other material or for construction of roads, embankments, dams, dykes or for any other construction activity.
    - Every coal or lignite based thermal power plant commissioned subject to environmental clearance conditions stipulating the submission of an action plan for full utilisation of fly ash shall, within a period of nine years from the publication of this notification, phase out the dumping and disposal of fly ash on land in accordance with the plan.

Genetically Engineered Organisms or Cell were introduced in 1989 with the view to protect the environment, nature and health in connection with gene technology and micro-organisms, under the Environmental Protection Act, 1986. The government in 1991, further decided to institute a national label scheme for environmentally-friendly products called the 'ECOMARK'. The scheme attempts to provide incentives to

manufactures and importers to reduce adverse environmental impacts, reward genuine initiatives by companies, and improve the quality of the environment and sustainability of available resources. Besides the above attempts, notifications pertaining *to Recycled Plastics Manufacture and Usage Rules, 1999* were also incorporated under the Environment (Protection) Act of 1986.

The Environment (Protection) Rules, 1986

These rules lay down the procedures for setting standards of emission or discharge of environmental pollutants. The Rules prescribe the parameters for the Central Government, under which it can issue orders of prohibition and restrictions on the location and operation of industries in different areas. The Rules lay down the procedure for taking samples, serving notice, submitting samples for analysis and laboratory reports. The functions of the laboratories are also described under the Rules along with the qualifications of the concerned analysts.

The National Environment Appellate Authority Act, 1997

This Act provided for the establishment of a National Environment Appellate Authority to hear appeals with respect to restriction of areas in which any industry operation or process or class of industries, operations or processes could not carry out or would be allowed to carry out subject to certain safeguards under the Environment (Protection) Act, 1986. In addition to these, various Acts specific to the coal sector have been enacted. The first attempts in this direction can be traced back to the *Mines Act, 1952*, which promoted health and safety standards in coal mines. Later the *Coal Mines (Conservation and Development) Act* (1974) came up for conservation of coal during mining operations. For conservation and development of oil and natural gas resources a similar legislation was enacted in 1959.

e) *Hazardous wastes*

There are several legislation that directly or indirectly deal with hazardous waste. The relevant legislation are the Factories Act, 1948, the Public Liability Insurance Act, 1991, the National Environment Tribunal Act, 1995 and some notifications under the Environmental Protection Act of 1986. A brief description of each of these is given below.

Under the EPA 1986, the MoEF has issued several notifications to tackle the problem of hazardous waste management.

These include:

- *Hazardous Wastes (Management and Handling) Rules, 1989*, which brought out a guide for manufacture, storage and import of hazardous chemicals and for management of hazardous wastes.
- *Biomedical Waste (Management and Handling) Rules, 1998,* were formulated along parallel lines, for proper disposal, segregation, transport etc. of infectious wastes.
- *Municipal Wastes (Management and Handling) Rules, 2000,* whose aim was to enable municipalities to dispose municipal solid waste in a scientific manner.
- *Hazardous Wastes (Management and Handling) Amendment Rules, 2000,* a recent notification issued with the view to providing guidelines for the import and export of hazardous waste in the country.

Factories Act, 1948 and its Amendment in 1987

The Factories Act, 1948 was a post-independence statute that explicitly showed concern for the environment. The primary aim of the 1948 Act has been to ensure the welfare of workers not only in their working conditions in the factories but also their employment benefits. While ensuring the safety and health of the workers, the Act contributes to environmental protection. The Act contains a comprehensive list of 29 categories of industries involving hazardous processes, which are defined as a process or activity where unless special care is taken, raw materials used therein or the intermediate or the finished products, by-products, wastes or effluents would:

- Cause material impairment to health of the persons engaged
- Result in the pollution of the general environment

Public Liability Insurance Act (PLIA), 1991

The Act covers accidents involving hazardous substances and insurance coverage for these. Where death or injury results from an accident, this Act makes the owner liable to provide relief as is specified in the Schedule of the Act. The PLIA was amended in 1992, and the Central Government was authorised to establish the Environmental Relief Fund, for making relief payments.

National Environment Tribunal Act, 1995

The Act provided strict liability for damages arising out of any accident occurring while handling any hazardous substance and for the establishment of a National Environment Tribunal for effective and expeditious disposal of cases arising from such accident, with a view to give relief and compensation for damages to persons, property and the environment and for the matters connected therewith or incidental thereto.

International Agreements on Environmental Issues

India is signatory to a number of Multilateral Environment Agreements (MEA) and conventions. An overview of some of the major MEAs and India's obligations under these is presented below. These are discussed at length in the respective chapters.

Convention on International Trade in Endangered Species of wild fauna and flora (CITES), 1973

The aim of CITES is to control or prevent international commercial trade in endangered species or products derived from them. CITES does not seek to directly protect endangered species or curtail development practices that destroy their habitats. Rather, it seeks to reduce the economic incentive to poach endangered species and destroy their habitat by closing off the international market. India became a party to the CITES in 1976. International trade in all wild flora and fauna in general and species covered under CITES is regulated jointly through the provisions of The Wildlife (Protection) Act, 1972, the Import/Export policy of Government of India and the Customs Act, 1962 (Bajaj, 1996).

Montreal Protocol on Substances that deplete the Ozone Layer (to the Vienna Convention for the Protection of the Ozone Layer), 1987

The Montreal Protocol to the Vienna Convention on Substances that deplete the Ozone Layer, came into force in 1989. The protocol set targets for reducing the (For details refer to http://envfor.nic.in) consumption and production of a range of ozone

depleting substances (ODS). In a major innovation the Protocol recognised that all nations should not be treated equally. The agreement acknowledges that certain countries have contributed to ozone depletion more than others. It also recognises that a nation's obligation to reduce current emissions should reflect its technological and financial ability to do so. Because of this, the agreement sets more stringent standards and accelerated phase-out timetables to countries that have contributed most to ozone depletion (Divan and Rosencranz, 2001). India acceded to the Montreal Protocol along with its London Amendment in September 1992. The MoEF has established an Ozone Cell and a steering committee on the Montreal Protocol to facilitate implementation of the India Country Programme, for phasing out ODS production by 2010.

To meet India's commitments under the Montreal Protocol, the Government of India has also taken certain policy decisions.

- Goods required to implement ODS phase-out projects funded by the Multilateral Fund are fully exempt from duties. This benefit has been also extended to new investments with non-ODS technologies.
- Commercial banks are prohibited from financing or refinancing investments with ODS technologies.

The Gazette of India on 19 July 2000 notified rules for regulation of ODS phase-out called the *Ozone Depleting Substances (Regulation and Control) Rules, 2000*. They were notified under the Environment (Protection) Act, 1986. These rules were drafted by the MoEF following consultations with industries and related government departments.

Basel Convention on Transboundary Movement of Hazardous Wastes, 1989

Basel Convention, which entered into force in 1992, has three key objectives:

- To reduce transboundary movements of hazardous wastes;
- To minimise the creation of such wastes; and
- To prohibit their shipment to countries lacking the capacity to dispose hazardous wastes in an environmentally sound manner.

India ratified the Basel Convention in 1992, shortly after it came into force. The Indian Hazardous Wastes Management Rules Act 1989, encompasses some of the Basel provisions related to the notification of import and export of hazardous waste, illegal traffic, and liability.

UN Framework Convention on Climate Change (UNFCCC), 1992

The primary goals of the UNFCCC were to stabilise greenhouse gas emissions at levels that would prevent dangerous anthropogenic interference with the global climate. The convention embraced the principle of common but differentiated responsibilities which has guided the adoption of a regulatory structure.

India signed the agreement in June 1992, which was ratified in November 1993. As per the convention the reduction/limitation requirements apply only to developed countries. The only reporting obligation for developing countries relates to the construction of a GHG inventory. India has initiated the preparation of its First National Communication (base year 1994) that includes an inventory of GHG sources and sinks, potential vulnerability to climate change, adaptation measures and other steps being taken in the country to address climate change.

Convention on Biological Diversity, 1992

The Convention on Biological Diversity (CBD) is a legally binding, framework treaty that has been ratified until now by 180 countries. The CBD has three main thrust areas: conservation of biodiversity, sustainable use of biological resources and equitable sharing of benefits arising from their sustainable use. The Convention on Biological Diversity came into force in 1993. Many biodiversity issues are addressed in the convention, including habitat preservation, intellectual property rights, biosafety, and indigenous peoples' rights.

UN Convention on Desertification, 1994

Delegates to the 1992 UN Conference on Environment and Development (UNCED) recommended establishment of an intergovernmental negotiating committee for the elaboration of an international convention to combat desertification in countries experiencing serious drought and/or desertification.

The UN General Assembly established such a committee in 1992 that later helped formulation of Convention on Desertification in 1994. The convention is distinctive as it endorses and employs a bottom-up approach to international environmental cooperation. Under the terms of the convention, activities related to the control and alleviation of desertification and its effects are to be closely linked to the needs and participation of local land users and non-governmental organisations. Seven countries in the South Asian region are signatories to the Convention, which aims at tackling desertification through national, regional and sub-regional action programmes. The Regional Action Programme has six Thematic Programme Networks (TPN's) for the Asian region, each headed by a country task manager. India hosts the network on agroforestry and soil conservation.

1.6 SUMMARY

- The extent of the environmental legislation network is evident from the above discussion but the enforcement of the laws has been a matter of concern. One commonly cited reason is the prevailing command and control nature of the environmental regime. Coupled with this is the prevalence of the all-or nothing approach of the law; they do not consider the extent of violation. Fines are levied on a flat basis and in addition, there are no incentives to lower the discharges below prescribed levels.

- Some initiatives have addressed these issues in the recent past. The Government of India came out with a Policy Statement for Abatement of Pollution in 1992, before the Rio conference, which declared that market-based approaches would be considered in controlling pollution. It stated that economic instruments will be investigated to encourage the shift from curative to preventive measures, internalise the costs of pollution and conserve resources, particularly water. In 1995, the Ministry of Environment and Forest (MoEF) constituted a task force to evaluate market-based instruments, which strongly advocated their use for the abatement of industrial pollution. Various economic incentives have been used to supplement the command-and-control policies. Depreciation allowances, exemptions from excise or customs duty payment, and arrangement of soft loans for the adoption of clean technologies are instances of such incentives. Another aspect that is evident is the shift in the focus from end-of-pipe treatment of pollution to treatment at source. The role of remote sensing and geographical information systems in natural resource management and environmental protection has also

gained importance over time. An important recent development is the rise of judicial activism in the enforcement of environmental legislation. This is reflected in the growth of environment-related public litigation cases that have led the courts to take major steps such as ordering the shut-down of polluting factories.

- Agenda 21 highlights the need for integration of environmental concerns at all stages of policy, planning and decision-making processes including the use of an effective legal and regulatory framework, economic instruments and other incentives. These very principles were fundamental to guiding environmental protection in the country well before Rio and will be reinforced, drawing on India's own experiences and those of other countries.

1.7 TERMINAL QUESTIONS

1) Elaborate on legal and regulatory framework for protection of environment in India.

2) Explain how Concept of law emerged? What are different phases?

3) What are the notifications issues under Environment Protection Act, 1986?

1.8 ANSWERS AND HINTS

Self Assessment Questions

1) Refer to Sub-section 1.3.5

2) Refer to Section 1.4

3) Refer to Section 1.5

Terminal Questions

1) Over the years, together with a spreading of environmental consciousness, there has been a change in the traditionally-held perception that there is a trade-off between environmental quality and economic growth as people have come to believe that the two are necessarily complementary. The current focus on environment is not newenvironmental considerations have been an integral part of the Indian culture. The need for conservation and sustainable use of natural resources has been expressed in Indian scriptures, more than three thousand years old and is reflected in the constitutional, legislative and policy framework as also in the international commitments of the country.

   Even before India's independence in 1947, several environmental legislation existed but the real impetus for bringing about a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). Under the influence of this declaration, the National Council for Environmental Policy and Planning within the Department of Science and Technology was set up in 1972. This Council later evolved into a full-fledged Ministry of Environment and Forests (MoEF) in 1985 which today is the apex administrative body in the country for regulating and ensuring environmental protection. After the Stockholm Conference, in 1976, constitutional sanction was given to environmental concerns through the 42nd Amendment, which incorporated them into the Directive Principles of State Policy and Fundamental Rights and Duties. Further elaboration on personal understanding required.

2) In detail explain Law as Commands

- Law as Rules
- Law as Principles
- Law as Ethics or Morality
- Law as Social Norm and Customs
- Law as Written Documents
- Law Distinguished from Policy

3) Some notifications issued under this Act are:

- *Doon Valley Notification (1989),* which prohibits the setting up of an industry in which the daily consumption of coal/fuel is more than 24 MT (million tonnes) per day in the Doon Valley.
- *Coastal Regulation Zone Notification (1991),* which regulates activities along coastal stretches. As per this notification, dumping ash or any other waste in the CRZ is prohibited. The thermal power plants (only foreshore facilities for transport of raw materials, facilities for intake of cooling water and outfall for discharge of treated waste water/cooling water) require clearance from the MoEF.
- *Dhanu Taluka Notification (1991),* under which the district of Dhanu Taluka has been declared an ecologically fragile region and setting up power plants in its vicinity is prohibited.
- *Revdanda Creek Notification (1989),* which prohibits setting up industries in the belt around the Revdanda Creek as per the rules laid down in the notification.
- *The Environmental Impact Assessment of Development Projects Notification,* (1994 and as amended in 1997). As per this notification:
- All projects listed under Schedule I require environmental clearance from the MoEF.
- Projects under the delicenced category of the New Industrial Policy also require clearance from the MoEF.
- All developmental projects whether or not under the Schedule I, if located in fragile regions must obtain MoEF clearance.
- Industrial projects with investments above Rs 500 million must obtain MoEF clearance and are further required to obtain a LOI (Letter of Intent) from the Ministry of Industry, and an NOC (No Objection Certificate) from the SPCB and the State Forest Department if the location involves forestland. Once the NOC is obtained, the LOI is converted into an industrial licence by the state authority.
- The notification also stipulated procedural requirements for the establishment and operation of new power plants. As per this notification, two-stage clearance for site-specific projects such as pithead thermal power plants and valley projects is required. Site clearance is given in the first stage and final environmental clearance in the second. A public hearing has been made mandatory for projects covered by this notification. This is an important step in providing transparency and a greater role to local communities.

- *Ash Content Notification (1997)*, required the use of beneficiated coal with ash content not exceeding 34% with effect from June 2001, (the date later was extended to June 2002). This applies to all thermal plants located beyond one thousand kilometres from the pithead and any thermal plant located in an urban area or, sensitive area irrespective of the distance from the pithead except any pithead power plant.
- *Taj Trapezium Notification (1998)*, provided that no power plant could be set up within the geographical limit of the Taj Trapezium assigned by the Taj Trapezium Zone pollution (Prevention and Control) Authority.
- *Disposal of Fly Ash Notification (1999)* the main objective of which is to conserve the topsoil, protect the environment and prevent the dumping and disposal of fly ash discharged from lignite-based power plants. The salient feature of this notification is that no person within a radius of 50 km from a coal-or lignite-based power plant shall manufacture clay bricks or tiles without mixing at least 25% of ash with soil on a weight-to-weight basis. For the thermal power plants the utilisation of the flyash would be as follows:
  - Every coal-or lignite-based power plant shall make available ash for at least ten years from the date of publication of the above notification without any payment or any other consideration, for the purpose of manufacturing ash based products such as cement, concrete blocks, bricks, panels or any other material or for construction of roads, embankments, dams, dykes or for any other construction activity.
  - Every coal or lignite based thermal power plant commissioned subject to environmental clearance conditions stipulating the submission of an action plan for full utilisation of fly ash shall, within a period of nine years from the publication of this notification, phase out the dumping and disposal of fly ash on land in accordance with the plan.

1.9 REFERENCES AND SUGGESTED READINGS

1) Bajaj R. 1996, *CITES and the wildlife trade in India,* New Delhi: Centre for Environmental Law, WWF-India. 182 pp.

2) Divan S and Rosencranz A. 2001 *Environmental law and policy in India, cases, materials and statutes,* 2nd edition New York: Oxford University Press. 837 pp.

3) Gupta S.1999 *Country environment review, policy measures for sustainable development,* Discussion paper, October 1999 prepared for Asian Development Bank, Programs Department (West) New Delhi: Delhi School of Economics. 127 pp.

4) *Strengthening Environmental Legislation in India* Prepared for Asian Development Bank, Manila and Ministry of Environment and Forests, Government of India Centre for Environmental Law, WWF-India

Reference Articles:

1) Bakshi, P.M., *Environmental Law: Some issues for the Future.*

2) Dr. Desai, Bharat, Environmental Law: Some reflections

3) Divan, Shyam and Rosencranz, Armin, *Environmental Policy in India, Environmental Law and Policy in India - Cases, Materials and Statutes,* Oxford University Press, New Delhi, pp. 23-39.

4) Jaiswal, P.S., *Introduction, Environmental Law*, Pioneer Publications, New Delhi, 2004, pp. 2-18.

5) Beena Kumari, V.K., *Environmental pollution and Common LawRemedies, Cochin University Law Review,* School of Legal Studies, Cochin University, Volume 8, p. 101.

Reference Books:

6) Nayak, R.K. (ed.), *Shaping the Future by Law: Children, Environment and Human Health,* Indian Law Institute, New Delhi, 1996.

7) Divan, Shyam and Rosencranz, Armin, *Environmental Law and Policy in India - Cases, Materials and Statutes,* Oxford University Press, New Delhi.

8) Thakur, Kailash, *Environmental Protection Law and Policy in India,*1997.

UNIT 2 LAW AND THE INDIAN CONSTITUTION

Structure

2.1 Introduction

2.2 Objectives

2.3 Constitution of India (selected provisions)

- 2.3.1 Part IV- Article 37, 39(e), 48A, 49, 51(c)
- 2.3.2 Part IVA- Article 51A
- 2.3.3 Part III- Article 14, 21, 32, 19(1)(g)
- 2.3.4 Article 243-B, 243-G
- 2.3.5 Article 32 and 226

2.4 Some Important Provisions

2.5 Summary

2.6 Terminal Questions

2.7 Answers and Hints

2.8 References and Suggested Readings

2.1 INTRODUCTION

Part IV of the Constitution of India contains the directive principles of State policy. These directives are the active obligations of the State; they are policy prescriptions for the guidance of the Government.

Article 37 of Part IV of the Constitution limits the application of the directive principles by declaring that these principles shall not be enforceable by any Court. Therefore, if a directive is not followed by the State, its implementation cannot be secured through judicial proceedings. On the other hand, these principles are fundamental in the governance of the country and it is the duty of the state to apply these principles during the process of law-making.

2.2 OBJECTIVES

After reading this unit, you should be able to:

- study different provisions of Constitution of India which safeguards environmental rights of citizens; and
- understand how provisions of Constitutional Law are applied in environment practice.

2.3 CONSTITUTION OF INDIA - BACKGROUND

Directive Principles of State Policy (Part IV of the Constitution of India)

Article 48A. Protection and improvement of environment and safeguarding of forests and wild life. The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.

The parliament had considerable debate over the wording of the draft Article 48-A. Several amendments were moved in both the houses of the Parliament. H.M. Seervai has correctly pointed out:

Article 48-A reflects an increasing awareness of people all over the word of the need to preserve the environment from pollution, especially in urban areas. Smoke, industrial waste, deleterious exhaust fumes from motor cars and other combustion engines are injurious to the health and well-being of the people and foul the atmosphere. The preservation of forests and their renewal by afforestation has long been recognised in India as of great importance both with reference to rainfall and to prevent erosion of the soil by depriving it of forests which protect it. The preservation of wild life is looked upon as necessary for the 'preservation of ecological balance'. Article 48-A rightly emphasis the fact that the State should try not only to protect but to improve the environment.

Article 39(e), 47 and 48-A of the Directive Principles of State Policy have a definite bearing of environmental problems. They, by themselves and collectively impose a duty on the State to secure the health of the people, improve public health and protect and improve the environment.

Environmental pollution may damage the monuments of national importance, the protection of which is a duty of the State under Article 49 of the Constitution. Article 49 of the Directive Principles of State Policy provides for the obligation of the State to protect monuments, places and objects of national importance. In the *Taj* case the Supreme Court of India seems to have got inspiration from Article 49 while protecting the Taj Mahal, a monument protected under the Ancient Monuments and Archaeological Sites and Remains Act, 1958, from harmful Industrial emissions originating in and around Agra.

Article 51(c) directs the State to foster respect for international law and treaty obligations in the dealings of organised peoples with one another. Therefore, in view of the range of international treaties law and treaty obligations in Article 51 (c), read to conjunction with the specific treaty provision, may also serve to strengthen the hands of pro-conservation judge.

- *Fundamental Duties of the Citizens (Part IV A)*

The Constitution (Forty-second Amendment) Act, 1976 inserted part IV-A into the Constitution of India. This new part prescribes certain fundamental duties for the citizens of India. The sole Article of this part, Article 51-A, specifies ten fundamental duties.

Part IVA - Fundamental Duties

Article 51A. Fundamental duties

It shall be the duty of every citizen of India …

A 51 A (g)To protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;

Then Indian Constitution has imposed a joint responsibility upon the State; and every citizen of India to protect and improve the natural environment. In the words of Ranganath Mishra, J.:

"Preservation of environment and keeping the ecological balance unaffected is a task which not only Government but also very citizen must undertake. It is a social

obligation and let is remind every citizen that it is his fundamental duty as enshrined in Article 51-A (g) of the Constitution".

After making reference to Article 48-A and Article 51-A (g), the High Court of Himachal Pradesh concluded-

Thus there is both a Constitutional pointer to the State and a Constitutional duty of the citizens not only to protect but also to improve the environment and to preserve and safeguard the forests, the flora and fauna, the rivers and lakes and all the other water resources of the country. The neglect or failure to abide by the pointer or to perform the duty is nothing short of a betrayal of the fundamental law which the State and, indeed, every Indian high or low, is bound to uphold and maintain.

The Courts have reminded time and again to both State as well as citizens about their duties towards environment while deciding environmental issues by referring to Article 48-A and 51- A(g) of the Constitution.

Self Assessment Question

1) Why Fundamental Rights should be safeguarded?

.....

.....

.....

.....

- *Fundamental Rights (Part III of the Constitution)*
- *Right to Wholesome Environment*

Part III of the Constitution of India contains fundamental rights. These rights were included in the Constitution after long debates in the Constituent assembly.

Part III - Fundamental Rights

Article 21. Protection of life and personal liberty

No person shall be deprived of his life or personal liberty except according to procedure established by law.

Article 32. Remedies for enforcement of rights conferred by this Part (1) the right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed.

The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari, whichever may be appropriate, for the enforcement of any of the rights conferred by this Part.

It was the *Maneka Gandhi* case that heralded the new era of judicial thought. The court started recognising several unarticulated liberties that were implied by Article 21 and during this process the Supreme Court interpreted, after some hesitation the right to life and personal liberty to include the right to wholesome environment. The conflict between development needs and environmental protection has been the most controversial issue before the courts in decide in environmental matters. Incidentally the *Dehradun Quarries* case that paved the way for right to wholesome environment has also focused on this continuing conflict. The judgments in Dehradun quarries

cases were passed under Article 32 of the Constitution and involved closure of some of the quarries on the ground that their operation was upsetting ecological balance of the area. The indirect approval of the right to humane and healthy environment by the Supreme Court continued further in the *Oleum gas leak* case.

Life cannot be possible without clean drinking water therefore; right to clean water is one of the attributes of the right to life in Article 21 of the Constitution. The industrial establishments in and around residential colonies are another cause of concern, more so, when the industries have mushroomed contrary to the development plans. In *V. Lakshmipathy v. State of Karnataka* the same issue came before the High Court of Karnataka. The High Court held that once a development plan had earmarked the area for residential purpose, the land was bound to be put to such use only. Thus, High Courts , it seems, were more enthusiastic and active in accepting and declaring that 'right to life' in Article 21 includes 'right to environment'.

- *Right to livelihood vis-à-vis Environment*

The Supreme Court has recognised another aspect of the right to life enshrined under Article 21 of the Constitution, viz. the right to livelihood. There is a real chance of clash of these rights, i.e. right to environment and right to livelihood as government's action to close down industrial units for protection of environment may result in loss of job, dislocation of poor workers and might disrupt badly the lifestyles of people heavily dependent on such industries.

The right to livelihood has been recognised by the Supreme Court in the case of *Olga Tellis v. Bombay Municipal Corporation*. The Court issued directions to the Municipal Corporation to provide alternative sites or accommodation to the slum and pavement dwellers near to their original sites; and to provide amenities to slum-dwellers.

In many cases the Supreme Court passed orders requiring State agencies and concerned person to resettle and rehabilitate the workers or other persons who were being displaced by the decision of the Court or of the Government displaced by the Decision of the Court or of the Government to close down an industry or to relocate at a suitable place.

- *Right to equality*

Article 14 of the Constitution guarantees to every person the right – not to be denied equality before the law or the equal protection of the laws. The possibility of infringement of this Article by a government decision having impact on the environment cannot be ruled out. Article 14 strikes at arbitrariness because an action that is arbitrary must necessarily involve a negation of equality.

Thus, permission for contractions that is contrary to town planning regulation by the municipal authority may be challenged. Similarly, Article 14 may be invoked to challenge governmental sanction of projects having adverse impact on the natural environment and where such sanctions involve arbitrary considerations.

- *Freedom of trade*

Article 19(1) (g) of the Constitution guarantees to all citizens of India, the right to practice any profession or to carry on any occupation or trade or business. The freedom however, is not uncontrolled.

The aggrieved industrialist may resort to Article 19 in case his trade and business interests are affected by the action of governmental agencies in the name of the

environmental protection. "As environmental regulation grows more stringent and its enforcement becomes more vigorous, industrial challenge to agency action is likely to increase. Courts will then need to balance environmental interests with the fundamental right it carry on any occupation, trade or business guaranteed in Article 19(1) (g). Various standards have been prescribed by the Government for the discharge of different pollutants. An industry may challenge a very stringent standard which cannot be complied with, despite best efforts by available technology or if it is otherwise unreasonable."

- *Role of Panchayat and Municipalities*

The Constitution (Seventy-third Amendment) Act, 1992 and the Constitution (Seventy -fourth Amendment) Act, 1992 have given a Constitutional status to the panchayats and the Municipalities respectively. Article 243-B provides or the establishment of intermediate and district levels. Article 243-G authorises the legislature of State to endow the Panchayats with such powers and authority as may be necessary to enable them to function as institution of self-government.

The Eleventh Schedule along with other matters contains following maters which are directly or indirectly related to environment like, agriculture, soil conservation, water management and watershed development; fisheries; social forestry and farm forestry; minor forest produce; drinking water; health and sanitation; and maintainace of community assets.

The matters which are related to environment in the twelfth Schedule may be enumerated as follows:

Urban planning including town planning regulation of land use water supply; public health, sanitation, conservancy and solid waste management, urban forestry, protection of the environment and promotion of ecological aspects; provision of urban amenities such as park grounds; cremation grounds and electric crematoriums; prevention of cruelty to animals regulation slaughter houses and tanneries.

Thus it is evident that the Constitution imposes the duty to protect and preserve the environment in all the three tiers of the Government i.e. Central, state and local.

- *Writ Jurisdiction and Public Interest Litigations*

One of the most innovative parts of the Constitution is that the Writ Jurisdiction is conferred on the Supreme Court under Article 32 and on all the High Courts under Article 226. Under these provisions, the courts have the power to issue any direction or orders or writs, including writs in the nature of *habeas corpus*, *mandamus*, prohibition, *quo warranto* and *certiorari*, whichever is appropriate.

This has paved way for one of the most effective and dynamic mechanisms for the protection of environment, that is, Public Interest Litigations.

Self Assessment Question

2) What is a Writ?

.....

.....

.....

.....

Directive Principles of State Policy

37. Application of the principles contained in this Part.—The provisions contained in this Part shall not be enforceable by any court, but the principles therein laid down are nevertheless fundamental in the governance of the country and it shall be the duty of the State to apply these principles in making laws.

39. Certain principles of policy to be followed by the State.—The State shall, in particular, direct its policy towards securing—

a) that the citizens, men and women equally, have the right to an adequate means of livelihood;

b) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good;

c) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment;

d) that there is equal pay for equal work for both men and women;

e) that the health and strength of workers, men and women, and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength;

f) that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment.

48A. Protection and improvement of environment and safeguarding of forests and wild life.—The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.

49. Protection of monuments and places and objects of national importance.—It shall be the obligation of the State to protect every monument or place or object of artistic or historic interest, declared by or under law made by Parliament to be of national importance, from spoliation, disfigurement, destruction, removal, disposal or export, as the case may be.

51. Promotion of international peace and security.—The State shall endeavour to—

a) promote international peace and security;

b) maintain just and honorable relations between nations;

c) foster respect for international law and treaty obligations in the dealings of organised peoples with one another; and

d) encourage settlement of international disputes by arbitration.

Fundamental Duties

51A. Fundamental duties.—It shall be the duty of every citizen of India—

a) to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

b) to cherish and follow the noble ideals which inspired our national struggle for freedom;

c) to uphold and protect the sovereignty, unity and integrity of India;

d) to defend the country and render national service when called upon to do so;

e) to promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women;

f) to value and preserve the rich heritage of our composite culture;

g) to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;

h) to develop the scientific temper, humanism and the spirit of inquiry and reform;

i) to safeguard public property and to abjure violence;

j) to strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.

2.4 SOME IMPORTANT PROVISIONS

Fundamental Rights

Right to Equality

14. Equality before law.—The State shall not deny to any person equality before the law or the equal protection of the laws within the territory of India.

Right to Freedom

19. Protection of certain rights regarding freedom of speech, etc.—(1) All citizens shall have the right—

a) to freedom of speech and expression;

b) to assemble peaceably and without arms;

c) to form associations or unions;

d) to move freely throughout the territory of India;

e) to reside and settle in any part of the territory of India; and [*(f) has been repealed*]

f) to practise any profession, or to carry on any occupation, trade or business.

21. Protection of life and personal liberty.—No person shall be deprived of his life or personal liberty except according to procedure established by law.

Right to Constitutional Remedies

32. Remedies for enforcement of rights conferred by this Part.—

1) The right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed.

2) The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of *habeas corpus, mandamus,* prohibition, *quo warranto* and *certiorari,* whichever may be appropriate, for the enforcement of any of the rights conferred by this Part.

3) Without prejudice to the powers conferred on the Supreme Court by clauses (1) and (2), Parliament may by law empower any other court to exercise within the local limits of its jurisdiction all or any of the powers exercisable by the Supreme Court under Clause (2).

4) The right guaranteed by this article shall not be suspended except as otherwise provided for by this Constitution.

Self Assessment Question

3) What is a State?

.....

.....

.....

.....

ARTICLE 243 B and 243 G

Panchayats

Article 243B. Constitution of Panchayats.— (1) There shall be constituted in every State, Panchayats at the village, intermediate and district levels in accordance with the provisions of this Part.

(2) Notwithstanding anything in clause (1), Panchayats at the intermediate level may not be constituted in a State having a population not exceeding twenty lakhs.

Article 243G. Powers, authority and responsibilities of Panchayats.—Subject to the provisions of this Constitution, the Legislature of a State may, by law, endow the Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government and such law may contain provisions for the devolution of powers and responsibilities upon Panchayats at the appropriate level, subject to such conditions as may be specified therein, with respect to—

a) the preparation of plans for economic development and social justice;

b) the implementation of schemes for economic development and social justice as may be entrusted to them including those in relation to the matters listed in the Eleventh Schedule.

Article 226- Power of High Courts to issue certain writs.—

1) Notwithstanding anything in Article 32 every High Court shall have power, throughout the territories in relation to which it exercises jurisdiction, to issue to any person or authority, including in appropriate cases, any Government, within those territories directions, orders or writs, including writs in the nature of *habeas corpus, mandamus,* prohibition, *quo warranto* and *certiorari,* or any of them, for the enforcement of any of the rights conferred by Part III and for any other purpose.

2) The power conferred by clause (1) to issue directions, orders or writs to any Government, authority or person may also be exercised by any High Court exercising jurisdiction in relation to the territories within which the cause of action, wholly or in part, arises for the exercise of such power, notwithstanding

that the seat of such Government or authority or the residence of such person is not within those territories.

3) Where any party against whom an interim order, whether by way of injunction or stay or in any other manner, is made on, or in any proceedings relating to, a petition under clause (1), without—

   a) furnishing to such party copies of such petition and all documents in support of the plea for such interim order; and

   b) giving such party an opportunity of being heard, makes an application to the High Court for the vacation of such order and furnishes a copy of such application to the party in whose favour such order has been made or the counsel of such party, the High Court shall dispose of the application within a period of two weeks from the date on which it is received or from the date on which the copy of such application is so furnished, whichever is later, or where the High Court is closed on the last day of that period, before the expiry of the next day afterwards on which the High Court is open; and if the application is not so disposed of, the interim order shall, on the expiry of that period, or, as the case may be, the expiry of the said next day, stand vacated.

4) The power conferred on a High Court by this article shall not be in derogation of the power conferred on the Supreme Court by clause (2) of Article 32.

2.5 SUMMARY

Evolution of Environmental Rights

I Generation right: Political rights

II Generation right: Social and Cultural

III generation: Environmental Rights

Right to Live in a Healthy Environment - A Basic Human Right (***UDHR 1948***)

- Article 3: Right to Life
- Article 25: Right to a standard of living adequate for the health and well being of himself and of his family

ICESCR 1966:

- Article 11: Right to an adequate standard of living for himself and his family and to the continuous improvement of living conditions.

  Right to Live in a Healthy Environment - A Basic Human Right

- Article 12 (1) : Right of everyone to the enjoyment of the highest attainable standard of physical and mental health.
- Article 12 (2) : Steps shall be taken by States for the improvement of all aspects of environmental and industrial hygiene.

ICCPR, 1966: Article 6: Every human being has the inherent right to life.

Right to Live in a Healthy Environment - A Basic Human Right

UNCHE Stockholm, 1972 – Stockholm Conference (UNEP)

- Principle 1: Man has the 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

UNCED Rio 1992 Earth Summit

- Human beings are at the center of our concern for Sustainable Development. They are entitled to a healthy and productive life in harmony with nature.

Draft Declaration of Principles on Human Rights and Environment

Proposed by UN Sub-commission on Prevention of Discrimination and Protection of Minorities —Study on "Human Rights and the Environment"

Principle 1: Human Rights and ecologically sound environment, Sustainable development and peace are inter-dependent and indivisible.

Principle 2: All persons have the right to a secure, healthy and ecologically sound environment. This right and other human rights including civil, cultural, economic, political and social rights, are universal, interdependent and indivisible.

Draft Declaration of Principles on Human Rights and Environment

Principle 5: All persons have the right to freedom from pollution, environmental degradation and activities that adversely affect the environment, threaten life, health, livelihood, well-being or sustainable development within, across or outside national boundaries

Right to Environment — A Constitutional Right

Greek Constitution, 1975: Art.24: "The protection of the natural and cultural environment constitutes a duty of the State".

Spanish Constitution, 1978: Art.45: "everyone has the right to enjoy an environment suitable for the development of the person as well as the duty to preserve it".

Netherlands Constitution: Art.21: "it shall be the concern of the authorities to keep the country habitable and to protect and improve the environment".

Constitution of Federal Republic of Brazil, 1988: Art.225: "everyone is entitled to an ecologically balanced environment".

Constitution of India: (Combined reading of Art.48A and 51A): The State and citizens have fundamental duty to protect the environment (Directive Principles of State Policy).

Evolution of the Right - People's movement

- Silent Valley agitation
- Chipko movement
- RLEK case
- Proactive Judgments in Article 21
- Ganga pollution

- Delhi air pollution

Case Studies - Declaration of Right by High Courts

Damodhar Rao v. Municipal Corporation, Hyderabad (AIR 1987 AP 170)

- "there can be no reason why practice of violent extinguishments of life alone would be regarded as violative of Art.21 of Constitution. The *slow poisoning* by the *polluted atmosphere caused by environmental pollution and spoilation* should also be regarded as amounting to violation of Art.21 of the Constitution."

L.K.Koolwal v. State of Rajasthan (AIR 1988 Raj 2)

- "Maintenance of health, sanitation and environment falls within Art.21 thus rendering the citizens the fundamental right to ask for affirmative action."

Attakoya Thangal v. Union of India (1990 KLT 580)

- "The right to sweet water, and the right to free air are attributes of the right to life, for these are the basic elements which sustain life itself"

V. Lakshmipathy v. State of Karnataka (AIR 1992 Kant 57)

- "Entitlement to clean environment is one of the *recognised basic human rights*…..The right to life inherent in Art.21 of the Constitution of India does not fall short of the required quality of life which is possible only in an environment of quality."

- "Where on account of human agencies, the quality of air and quality of environment are threatened or affected, the Court would not hesitate to *use its innovative power*…to *enforce and safeguard* the right to life to *promote* public interest".

Declaration of Right by Supreme Court

Chetriya Pardushan Mukti Sangarsh Samiti v. State of UP (AIR 1990 SC 2060)

- "Every citizen has a fundamental right to have the enjoyment of quality of life and living as contemplated by Article 21 of the Constitution of India. Anything, which endangers or impairs that quality of life, is entitled to take recourse to Article 32 of the Constitution of India".

Subhash Kumar v. State of Bihar (AIR 1991 SC 420)

- "the right to life enshrined in Art. 21 includes the right to enjoyment of pollution free water and air for the full enjoyment of life. If anything endangers or impairs the quality of life, an affected person or a person genuinely interested in the protection of society would have recourse to Art. 32."

Virendra Gaur v. State of Haryana (1995 2 SCC 577)

"Article 21 protects right to life as a fundamental right. Enjoyment of the life and its attainment including their right to life with human dignity encompasses within its ambit, the protection and preservation of environment, ecological balance free from pollution of air and water, sanitation without which life cannot be enjoyed. Any contra acts would cause environmental pollution. Environmental, ecological, air, water pollution etc., should be regarded as amounting to violation of Article 21."

B.L. Wadehra v. Union of India {(1996) 2 SCC 594}.

Vellore Citizens Welfare Forum v. Union of India {AIR 1996 SC 2715}

AP Pollution Control Board v. M.V. Nayudu {(1999) 2 SCC 718}

- "Environmental concerns arising in the SC under Art. 32 or under Art.136 or under Art.226 in the High Courts are of equal importance as human right concerns. In fact, both are to be traced to Art. 21 which deals with the Fundamental Right to life and liberty." It was further observed "while environmental aspects concern 'life", human rights aspects concern 'liberty'."

Further refer the following cases in detail:

Ratlam Municipal Corporation case

Narmada Baccho Andolan case

Kamal Nath case

T. N Godavarman Thirumulkpad series

Idgah Slaughter house case

Samath v. State of A.P

Ramji Patel and others v. Nagrik Upbhokta Marg

S. Jaganath v. Union of India

Centre for Social Justice v. Union of India

Goa Foundation v. Union of India

Tehri Bandh Virodhi v. State of U. P

Bangalore Medical Trust v. B. S Muddappa

Almitra Patel v. Union of India

2.6 TERMINAL QUESTIONS

1) Is the right to healthy environment guaranteed or is it illusory?

2) Why public movements emerge? What relation do such movements and environmental concerns have?

3) Is living in safe environment a fundamental right? How do you support it if yes?

4) List famous case studies in relation to environment evolution.

5) Is Judicial Activism a welcome step with regard to Environment issues?

2.7 ANSWERS AND HINTS

Self Assessment Questions

1) Refer to Section 2.3

2) Refer to Section 2.3

3) Refer to Section 2.4

Terminal Questions

1) After reading the entire unit, the student is advised to form an opinion on this answer. The fundamental rights garnteed for citizens is where the answer needs to start with further quoting different provisions safeguarding environmental rights.

2) Attitudes toward nature and viewpoints on the human species' relationship with nature have evolved over the course of history. Societies have always had to deal with environmentally related problems. As populations have grown over time and human ability to organise society has grown in technological and economic complexity, the human-environment relationship has become increasingly problematic. In recent decades, economic affluence and greater access to information have fueled increasing concern for the environment.

   The human species has spent most of history living as hunters and gatherers. Given the species' survival needs for water, access to water was an important consideration in these activities. As hunting and gathering groups were relatively small and quite mobile, water quality issues were not a major consideration. As the agricultural transition occurred, humans settled into more permanent villages, raising crops and tending animals. Access to water for irrigation enabled this agricultural transition. Many villages grew up in areas with prime access to water.

   These permanent settlements grew into cities as farming techniques became more sophisticated and enough crops could be raised so that food Water-related issues are important to environmental agendas. This is one of the examples of why movements start to emerge, basing on your understanding put your thoughts down.

3) *Right to Wholesome Environment:* Part III of the Constitution of India contains fundamental rights. These rights were included in the Constitution after long debates in the Constituent assembly.

Part III - Fundamental Rights

Article 21. Protection of life and personal liberty

No person shall be deprived of his life or personal liberty except according to procedure established by law.

Article 32. Remedies for enforcement of rights conferred by this Part (1) the right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by this Part is guaranteed.

The Supreme Court shall have power to issue directions or orders or writs, including writs in the nature of habeas corpus, mandamus, prohibition, quo warranto and certiorari, whichever may be appropriate, for the enforcement of any of the rights conferred by this Part.

It was the *Maneka Gandhi* case that heralded the new era of judicial thought. The court started recognising several unarticulated liberties that were implied by Article 21 and during this process the Supreme Court interpreted, after some hesitation the right to life and personal liberty to include the right to wholesome environment. The conflict between development needs and environmental protection has been the most controversial issue before the courts in decide in environmental matters. Incidentally the *Dehradun Quarries* case that paved the way for right to wholesome environment

has also focused on this continuing conflict. The judgments in Dehradun quarries cases were passed under Article 32 of the Constitution and involved closure of some of the quarries on the ground that their operation was upsetting ecological balance of the area. The indirect approval of the right to humane and healthy environment by the Supreme Court continued further in the *Oleum gas leak* case.

A.4 Mentioned in the unit above, add and elaborate on the same.

A.5 Purely to be written based on current trends and High court and Supreme court stand on environment matters.

2.8 REFERENCES AND SUGGESTED READINGS

1) Divan, Shyam and Rosencranz, Armin, *Constitutional and Legislative Provisions, Environmental Law and Policy in India - Cases, Materials and Statutes,* Oxford University Press, New Delhi, pp. 40-86.

2) Jaiswal, P.S., *Constitutional Provisions and Environment Protection in India, Environmental Law,* Pioneer Publications, Delhi, pp. 36-77.

3) Rosencranz, Armin; Divan, Shyam and Noble, Martha L., (Ed.) Tripathi, *Environmental Law and Policy in India - Cases, Materials and Statutes,* The Book Review Literary Trust, New Delhi, pp. 50-76.

4) Web Articles

5) Singh, Jaspal, *Constitutional Safeguards for environment and heritage: An Appraisal*.

6) Sreeram Panchu, *Constititional Provisions for Environmental Protection*.

UNIT 3 OTHER MAJOR LAWS AND ENVIRONMENT

Structure

3.1 Introduction

3.2 Objectives

3.3 Law of Crimes and Environment

- 3.3.1 Indian Penal Code, 1860
- 3.3.2 The Indian Criminal Procedure Code of 1973
- 3.3.3 Different Types of Environmental Crimes
- 3.3.4 Punishment
- 3.3.5 Indian Penal Code, 1860
- 3.3.6 The Indian Criminal Procedure Code of 1973

3.4 Law of Torts and Environment

3.5 Civil Procedure Code

3.6 Environmental Equity, Justice and Governance

3.7 Summary

3.8 Terminal Questions

3.9 Answers and Hints

3.10 References and Suggested Readings

3.1 INTRODUCTION

Environmental crime refers to the violation of laws intended to protect the environment and human health. These laws govern air and water quality and dictate the ways in which the disposal of waste and hazardous materials can legally take place. Individuals or corporations can be found guilty of environmental crimes.

3.2 OBJECTIVES

After reading this unit, you should be able to:

- study Environmental Laws and its linkages with other streams of law; and
- understand the importance of living in safe environment, which has been protected through various provisions of law.

3.3 LAW OF CRIMES AND ENVIRONMENT

Related Legislations (select provisions)

- Indian Penal Code, 1860-Section 277,278,425
- The Indian Criminal Procedure Code of 1973 (CrPC) – Section 133

3.3.1 Indian Penal Code, 1860

Public Nuisance under the Indian Penal Code focuses on the operation of the law

of nuisance through specific statutory provisions in the Civil and Criminal Codes of India. The Indian penal Code of 1860 contains elaborate provisions defining the crime of public nuisance in its various aspects and instances and prescribes punishments. Chapter XIV of the Indian Penal Code deals with offences affecting public health, safety, convenience, decency and morals. While Section 268 defines Public Nuisance, there are two specific sections dealing with the fouling of water (Section 277) and making the atmosphere noxious to health (Section 278) which could be used against perpetrators of water and air pollution. Section 277 and 278 of the Indian Penal Code read as follows: 277. Fouling water of public spring or reservoir. Whoever voluntarily corrupts or fouls the water of any public spring or reservoir, so as to render it less fit for the purpose for which it ordinarily used, shall be punished with imprisonment of either description for a term which may extend to three months, or with fine which may extend to five hundred rupees or with both.

Section 278 - Making atmosphere noxious to health. Whoever voluntarily vitiates the atmosphere in any place so as to make it noxious to the health of persons in general dwelling or carrying on business in the neighbourhood pr passing along a public way, shall be punished with fine which may extend to five hundred rupees.

The above two provisions have direct relevance to environmental protection as they seek to prevent water and air pollution through a penal strategy. However, their effective application towards achieving this objective is doubtful, because the technicalities of Indian criminal law require a complete satisfaction of the ingredients of the offence as stipulates in the penal provisions. Take for instance, the provision relating to fouling of water. The wording requires proof of the voluntary corruption or fouling of water, that the water must be of public spring or a reservoir and that the water must have been rendered less fit for the purpose for which it was ordinarily used. Such wording not only creates a burden for the prosecution to prove, but also provide the accused enough grounds to argue his way out. The above provisions did not liberate the criminal justice process from the difficulties of the common law demanding elaborate evidence for sundry matters as well as technical interpretations of obvious things and events.

Section 425: whoever with intent to cause, or knowing that he is likely to cause, wrongful loss or damage to the public or to any person, causes the destruction of any property, or any such change in any property or in the situation thereof as destroys or demises its value or utility or affects injuriously, commits “mischief”.

Explanation 1: it is not essential to the offence of mischief that the offender intended to cause loss or damage to the owner of the property injured or destroyed. It is sufficient if he intends to cause damage to any person by injuring any property, whether it belongs to that person or not.

Explanation 2: Mischief may be committed by an act affecting property belonging to the person who commits the act or to that person and others jointly causing diminution of water supply has been treated as mischief in Section 430 of the code and the possible direct cause may also be pollution. Adulterating of food or drink so as to make it noxious has also been make punishable

3.3.2 The Indian Criminal Procedure Code of 1973 (CrPC)

The Indian Criminal Procedure Code of 1973 has a significant chapter on maintenance of public order and tranquility, which falls into four parts. Part A deals with unlawful assemblies (Section 129-132), Part B with public nuisance (Sections 133-143), Part C with urgent cases of nuisance or apprehended danger (Section 144), and part D

with disputes as to immovable property (Sections 145-148). Most relevant in our present context is Section 133, which has been resorted to as an effective remedy to abate public nuisance in instances of environmental harm. This provision empowers a District Magistrate to pass conditional orders for the removal of nuisances. This section is supplemented with ancillary provisions, contained in Sections 134 to 143 of the Code, to constitute a comprehensive procedure tackling public nuisance.

Section 144 of the Code has to be seen as a significant provision conferring wide powers upon the Magistrate to deal with urgent cases of nuisance or apprehended danger and tranquillity. This magisterial power has been exercised only for the purpose of preventing public disorder arising out of public unrest or riot situations.

The potential of this provision is vast, but it does not appear to have been utilised effectively in cases of environmental harm. The provisions in the old Indian law, which have a bearing on the environment, have hardly been used in the past. The consciousness to protect the environment was not as strong then, as it is today. Unless there was awareness on the part of the people to approach the authorities neither the government nor the courts would have had the opportunity to make use of the statutory provisions.

The important role played by the judicial activism of the eighties made its impact felt mire in the area of the environmental protection than in any other field. *Municipal council, Ratlam v. Vardhichand* is a signpost. The Supreme Court identified the responsibilities of local bodies towards the protection of environment and developed the law of public nuisance in the Code of Criminal procedure as a potent instrument for enforcement of their duties.

The processes that are envisaged under Section 133 of the CrPC have a social justice component. The remedies available, and the powers exercisable, under the provison are conducive to the demands of the rule of law necessitated by the conditions of developing countries. The Supreme Court had no hesitation in the endorsing the view that the municipality should prepare a scheme and abate the nuisance which was allowed to continue only due to the lack do initiative from the municipality.

3.3.3 Different Types of Environmental Crimes

Environmental crime covers a wide range of violations that result in harm befalling the environment and human life, from errors at the administrative or record keeping level to the actual illegal dumping of pollutants into the environment.

Environmental crimes may include but are not limited to the following:

- Littering
- Improper waste disposal
- Oil spills
- Destruction of wetlands
- Dumping into oceans, streams, lakes, or rivers
- Improperly handling pesticides or other toxic chemicals
- Burning garbage
- Improperly removing and disposing of asbestos

- Falsifying lab data pertaining to environmental regulations
- Smuggling certain chemicals, such as CFC refrigerants, into the U.S.
- Bribing government officials
- Committing fraud related to environmental crime

3.3.4 Punishment

Environmental law violators are usually hit with criminal fines, probation, jail time, or a combination of these punishments. While jail time may be the most formidable punishment for individuals who commit environmental crimes, fines are intended to deter large corporations from violating environmental laws and regulations. Without the threat of heavy monetary punishment, some corporations might find that noncompliance is more cost-effective than obeying the law.

Environmental crime fines are meant to offset the financial allure of activities such as illegal dumping. Enforcement is often carried out by joint task forces, which are composed of representatives from federal, state, and local organisations. At the federal level, the Environmental Protection Agency (EPA) has enforcement authority over environmental law violations.

3.3.5 Indian Penal Code, 1860

Section 268. Public nuisance – A person is guilty of a public nuisance who does any act or is guilty of an illegal omission which causes any common injury, danger or annoyance to the public or to the people in general who dwell or occupy property in the vicinity, or which must necessarily cause injury, obstruction, danger or annoyance to persons who may have occasion to use any public right. A common nuisance is not excused on the ground that it causes some convenience or advantage.

Section 277. Fouling water of public spring or reservoir – Whoever voluntarily corrupts or fouls the water of any public spring or reservoir, so as to render it less fit for the purpose for which it is ordinarily used, shall be punished with imprisonment of either description for a term which may extend to three months, or with fine which may extend to five hundred rupees, or with both.

Section 278. Making atmosphere noxious to health – Whoever voluntarily vitiates the atmosphere in any place so as to make it noxious to the health of persons in general dwelling or carrying on business in the neighbourhood or passing along a public way, shall be punished with fine which may extend to five hundred rupees.

Of fraudulent deeds and disposition of property of mischief

Mischief – Whoever with intent to cause, or knowing that he is likely to cause, wrongful loss or damage to the public or to any person, causes the destruction of any property, or any such change in any property or in the situation thereof as destroys or diminishes its value or utility, or affects it injuriously, commits “mischief”.

Explanation 1: It is not essential to the offence of mischief that the offender should intend to cause loss or damage to the owner of the property injured or destroyed. It is sufficient if he intends to cause, or knows that he is likely to cause, wrongful loss or damage to any person by injuring any property, whether it belongs to that person or not.

Explanation 2: Mischief may be committed by an act affecting property belonging to the person who commits the act, or to that person and others jointly.

Self Assessment Question

1) What is Mischief?

.....

.....

.....

.....

Illustrations

a) A voluntarily burns a valuable security belonging to Z intending to cause wrongful loss to Z. A has committed mischief.

b) A introduces water in to an ice-house belonging to Z and thus causes the ice to melt, intending wrongful loss to Z. A has committed mischief.

c) A voluntarily throws into a river a ring belonging to Z, with the intention of there by causing wrongful loss to Z. A has committed mischief.

d) A, knowing that his effects are about to be taken in execution in order to satisfy a debt due from him to Z, destroys those effects, with the intention of thereby preventing Z from obtaining satisfaction of the debt, and of thus causing damage to Z. A has committed mischief.

e) A having insured a ship, voluntarily causes the same to be cast away, with the intention of causing damage to the underwriters. A has committed mischief.

f) A causes a ship to be cast away, intending thereby to cause damageto Z who has lent money on bottomry on the ship. A has committed mischief.

g) A having joint property with Z in a horse, shoots the horse, intending thereby to cause wrongful loss to Z. A has committed mischief.

h) A causes cattle to enter upon a field belonging to Z, intending to cause and knowing that he is likely to cause damage to Z's crop. A has committed mischief.

3.3.6 The Indian Criminal Procedure Code, 1973

CHAPTER X

MAINTENANCE OF PUBLIC ORDER AND TRANQUILLITY

Public nuisances

Section 133. Conditional order for removal of nuisance - (1) Whenever a District Magistrate or a Sub-divisional Magistrate or any other Executive Magistrate specially empowered in this behalf by the State Government, on receiving the report of a police officer or other information and on taking such evidence (if any) as he thinks fit, considers -

a) that any unlawful obstruction or nuisance should be removed from any public place or from any way, river or channel which is or may be lawfully used by the public; or

b) that the conduct of any trade or occupation, or the keeping of any goods or merchandise, is injurious to the health or physical comfort of the community, and

that in consequence such trade or occupation should be prohibited or regulated or such goods or merchandise should be removed or the keeping thereof regulated; or

c) that the construction of any building, or, the disposal of any substance , as is likely to occasion conflagration or explosion, should be prevented or stopped; or

d) that any building, tent or structure, or any tree is in such a condition that it is likely to fall and thereby cause injury to persons living or carrying on business in the neighbourhood or passing by, and that in consequence the removal, repair or support of such building, tent or structure, or the removal or support of such tree, is necessary; or

e) that any tank, well or excavation adjacent to any such way or public place should be fenced in such manner as to prevent danger arising to the public; or

f) that any dangerous animal should be destroyed, confined or otherwise disposed of, such Magistrate may make a conditional order requiring the person causing such obstruction or nuisance, or carrying on such trade or occupation, or keeping any such goods or merchandise, or owning, possessing or controlling such building, tent, structure, substance, tank, well or excavation, or owning or possessing such animal or tree, within a time to be fixed in the order-

   i) to remove such obstruction or nuisance; or

   ii) to desist from carrying on, or to remove or regulate in such manner as may be directed, such trade or occupation, or to remove such goods or merchandise, or to regulate the keeping thereof in such manner as may be directed; or

   iii) to prevent or stop the construction of such building, or to alter the disposal of such substance; or

   iv) to remove, repair or support such building, tent or structure, or to remove or support such trees; or

   v) to fence such tank, well or excavation; or

   vi) to destroy, confine or dispose of such dangerous animal in the manner provided in the said order: or, if he objects so to do, to appear before himself or some other Executive Magistrate subordinate to him at a time and place to be fixed by the order, and show cause, in the manner hereinafter provided, why the order should not bemade absolute.

(2) No order duly made by a Magistrate under this section shall be called in question in any Civil Court.

Explanation : A public place includes also property belonging to the State, camping grounds and left unoccupied for sanitary or recreative purposes.

3.4 LAW OF TORTS AND ENVIRONMENT

Related Legislations (select provisions)

- The Environment (Protection) Act, 1986
- The Factories (Amendment) Act, 1987

- The Public Liability Insurance Act, 1991 (PLIA)
- Civil Procedure Code, 1908

Introduction

Litigation related to environmental contamination and toxins has grown at a rapid pace, as businesses come under greater scrutiny for their environmental practices and face potentially costly claims. Industrialisation has posed serious concern for the protection of environment. If we follow the development around the world in last two decades or so, it is clear that both judicial and legislative processes have applied the yardstick of 'Strict or Absolute Liability' to judge the conduct of the polluters. A toxic tort is a special type of personal injury lawsuit in which the plaintiff claims that exposure to a chemical caused the plaintiff's toxic injury or disease.

Self Asessment Question

2) What is a Tort law?

.....

.....

.....

.....

Hazardous and Inherently Dangerous Activities

Strict liability for ultra-hazardous activities might also be considered a general principle of law as it is found in the national law of many states in relation to ultrahazardous activities. Under the English law, 'a person who for his own purposes brings on his own land and collects and keeps there anything likely to do mischief if it escapes, must keep it in at his peril, and, if he does not do so, is prima facie answerable for all the damage which is the natural consequence of its escape' as laid down by the landmark judgment of *Ryland v. Fletcher.*

Absolute liability for the harm caused by industry engaged in hazardous and inherently dangerous activities is a newly formulated doctrine free from the exceptions to the strict liability rule in England. The Indian rule was evolved in *MC Mehta v. Union of India*, which was popularly known as the Oleum gas leak case. It was public interest litigation under Article 32 of the Indian constitution. In the judgment, on the substantive law it was emphasized that 'the principle of absolute liability should be followed to compensate victims of hazardous and inherently dangerous activity'. Industries engaged in such activities are absolutely liable to compensate those who are affected by the harm arising from such activities.

Some Important Legislations in detail

Legislation in the late 80's and the 90's reflect the law's growing recognition of the capacity of 'hazardous substances' to cause damage to person, property and the environment. The Bhopal Gas Disaster and the judgment of the court in the *Oleum Gas Leak* case were the prelude to the Environment (Protection) Act, 1986, the Factories (Amendment) Act, 1987 and the Public Liability Insurance Act, 1991 (PLIA). The UN Conference on Environment and Development held at Rio de Janeiro in 1992 provided further spurt, as did environmental activism and environmental litigation. The National Environmental Tribunal Act, 1995 (NETA) is the most recent in the field of 'accident' law. The long title to the Act suggests that it is enacted to

provide for strict liability for damages arising out of any accident occurring while handling any hazardous substance and for establishing a National Environmental Tribunal.

The NETA and PLIA are both concerned with the aftermath of the same occurrences. While the PLIA deals with interim compensation, the NETA established a tribunal, and provides guidelines, to adjudicate all claims arising out of "accidents". There are points of convergence as well as difference, between the two Acts. The principles of liability and of compensation according to an enacted schedule are common to the PLIA and the NETA. Both legislations provide for no fault liability, making the "owner" liable for paying compensation assessed under the Acts. Both legislations exclude "workman" who is covered by the Workmen's Compensation Act. However, while PLIA resorts to the device if insurance to spread risk and cost and requires the owner to go deep only where it goes beyond the limits set in the PLIA rules and the capacity of the Environment Relief Fund (ERF), the NETA appears to leave it to the owner to find the resources to pay compensation. There is a penal provision in the NETA which provides for a term of imprisonment up to three years , or fine which may extend to Rs. 10 Lakhs or both, where any person "fails to comply with a order made by the Tribunal".

Confronted with the possibility of mass torts resulting in injury, and loss to a number of victims, the more visible efforts of the state are in the direction of expediting the computing and payment of compensation. There is a consequent delinking of these issues from questions of culpability, answerability and of safety. The schedule to the Act lists out the heads under which compensation may be claimed. It includes harm caused to the person, damage, loss or destruction of private property, expenses incurred by the government in the aftermath of an accident claims connected with harm, damage or destruction of fauna, flora and the soil, air, water, land and ecosystems; loss of business or employment and a residual head to cover "any other claim arising out of, or connected with, any activity of handling of hazardous substances.

It is significant that there is no priority of claims. The crediting of the amount ordered to be paid on the ground of damage to the environment into the ERF merits scrutiny, particularly since the amounts in the ERF are intended to be used as a buffer between the exhaustion of insurance payments and the liability of the owner to cover the difference under the PLIA.

The unresolved questions of liability of the state as a joint tortfeasor, and of compensation resurfaced in *Naresh Dutt Tyagi v. State of U.P.* In this case, the Primary Cooperative Society, Garh Mukteshwar, District Ghaziabad, said to be a federating unit of the U.P. Cooperative Union Ltd. stored certain chemical pesticides in a godown. Fumes emanating from the pesticides leaked to the contiguous property through the ventilators killing three children and causing the petitioner's wife to miscarry. Proceedings to establish fault were on when the Supreme Court was approached to rule on "whether such large scale stocks of hazardous chemicals are permissible to be stored in a residential block, whether the storage is regulated by statutory provisions, if not , whether any breach of common law duty has occurred and whether the governmental authorities are liable in damages'.

Self Assessment Question

3) Why is the need for NETA felt?

.....

.....

.....

.....

3.5 CIVIL PROCEDURE CODE, 1908

Under the Civil Procedure Code of 1908, civil suits against the perpetrators of public nuisance were allowed. By the amendment of the Civil Procedure Code in 1976, the procedure was made easier for the general public to seek recourse in the civil courts. Section 91 of the Code now reads as follows:

Public Nuisances and other wrongful acts affecting the public:-

1) In the case of a public nuisance or other wrongful act affecting, or likely to affect, the public, a suit for a declaration and injunction on for such other relief as may be appropriate in the circumstances of the case, may be instituted,-
   a) By the Advocate-General, or
   b) With the leave of the court, by two or more persons, even though no special damage has been caused to such persons by reason of such public nuisance or other wrongful act.
2) Nothing in this section shall be deemed to limit or otherwise affect any right of suit which may exist independently of its provision. Prior to the amendment in 1976 such suits were allowed only with the sanction of the Advocate General. Thus a modification was brought about to the standing requirement which had been an obstacle in civil actions against environmental degradation. This is an important instance of early relaxation of procedural rules in the wider context of developing Indian public interest litigation.

Order 1 Rule 8 under the Civil Procedure Code of 1908, as amended in 1976 complements the above section and is significant for environmental litigation in India. This rule permits one person to sue or defend on behalf of all having the same interest in what are known as representative suits over a single cause of action. Where the interest of the community at large is affected, the court has the power to direct one person or few to represent the whole community so that members of a class should have a common interest in a common subject matter and a common grievance and the relief sought should be beneficial to all. This rule is an enabling provision and does not prevent an individual from pursuing the same matter on his own right to seek relief.

An important feature of the civil litigation strategy adopted in India is the resort to injunctive relief rather than damages. Although in theory damages form an important principle in a tort action, in practice injunctive relief is used more in India for abating pollution. Lawyers in India, intent on abating pollution, often seek a temporary injunction against the polluter followed by a perpetual injunction on decree.

3.6 ENVIRONMENTAL JUSTICE, EQUITY AND GOVERNANCE

Introduction

The term ‘environment’ can describe a limited area or the entire planet, even including a part of the outer space which surrounds it. The term ‘biosphere’ used in particular

by UNESCO, corresponds to one of the broadest definitions, since it designates the totality of the human environment, the part of the universe where, according to present knowledge all life is concentrated.

The definition of environment affects the scope of legal rules which are intended to protect the environment law cannot affect the natural processes that cause environmental changes. However, the obligatory character of law and the sanctions which can ensure the enforcement of legal rules should prevent and eliminate acts and behaviours which are detrimental to the environment. Nonbinding principles and rules, formulated in recommendation or declaration by international organisation or conferences play an increasing role in international law, especially in the field of environmental protection. Their function is to guide State authorities and also other actors in their action but they can also contribute to the emergence of new obligatory rules.

3.7 SUMMARY

The social mechanism of environmental protection can be characterised by a three stage approach.

- In the first stage law mainly national Constitutions, laws with a large environmental scope and major intentional declaration or treaties defines the environmental values to be preserved and protected.
- In the second stage environmental policy determines the objectives and strategies which should be used in order to ensure the respect of environmental values, taking into account the prevailing economic, social and cultural situation.
- In the third stage legal instruments are used to reach the objectives fixed by the environmental policy. The content of such instruments can be economic, political, social or educational. As a feedback, their implementation often needs the support of public opinion, the consensus of which was the very basis of the recognition of the environment as a fundamental value.

The main characteristics of environmental law is the necessity for an inter disciplinary approach because of the complexity of the subject. In order to prepare appropriate modern legal rules, legal research should be undertaken in the two fields of legal history and comparative law.

Environmental Doctrines

Right to wholesome environment is a fundamental right protected under Article 21 of the Constitution of India. However the important question is that whether the environment can be protected at present times when almost all the countries in South-East Asia are still at their developing stages? Development comes through industrialisation, which in turn the main factor behind the degradation of environment. To resolve the issue, the experts worldwide have come up with a doctrine called ‘Sustainable Development’, i.e. there must be balance between development and ecology. The concept of ‘Sustainable Development’ had come to be known as early as in 1972 in the Stockholm declaration. It had been stated in the declaration that:

“Man has the 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 and he bears a solemn responsibility to protect and improve the environment for present and future generation”.

The concept was given a definite shape in a report by World Commission on Environment, which was known as ' our common future' (the Brundtland Report). The commission, which was chaired by the then Norway Prime Minister, Ms. G.H. Brundtland defined 'Sustainable Development' as "Development that meets the needs of the present without compromising the ability of the future generations to meet their own needs".

The concept was further discussed under agenda 21 of UN conference on environment and development held in June 1992 at Rio de Janeiro, Brazil and later on in the Johannesburg Conference held in 2002. Some of its basic principles as described in 'Brundtland report' are as follows:

- **Inter-Generational Equity:** The principle talks about the right of every generation to get benefit from the natural resources. Principle 3 of the Rio declaration states that: "The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations."

The main object behind the principle is to ensure that the present generation should not abuse the non-renewable resources so as to deprive the future generation of its benefit.

- **The Precautionary Principle:** This principle has widely been recognised as the most important principle of 'Sustainable Development'. Principle 15 the Rio declaration states that: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." In other words it means:

1) Environmental measures by the state government and the local authority must anticipate, prevent and attack the causes of environmental degradation.

2) Where there are threats of serious and irreversible damage, lack of scientific certainty should not used as a reason for postponing measures to prevent environmental degradation.

3) The 'onus of proof' is on the actor or the developer to proof that his action is environmentally beginning.

- **Polluter Pays Principle:** Principle 16 of the Rio declaration states that : "National authorities should endeavor to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."

It is quite obvious that the object of the above principle was to make the polluter liable not only for the compensation to the victims but also for the cost of restoring of environmental degradation. Once the actor is proved to be guilty, he is liable to compensate for his act irrelevant of the fact that whether he's involved in development process or not.

These concepts of have become an integral part of Environmental Law. Most of the doctrines are recognised worldwide and have been adopted and implemented everywhere, including in India. Judiciary in India, more precisely, the Supreme Court and the High Courts has played an important role in preserving the doctrine of 'Sustainable Development'. Parliament has enacted various laws to deal with the

problems of environmental degradation. In such a situation, the superior courts have played a pivotal role in interpreting those laws to suit the doctrine of 'Sustainable Development'.

"The Polluter Pays principle has been held to be a sound principle by this Court in Indian Council for *Enviro-Legal Action v. Union of India*, AIR 1996 SC 1446. The Court observed, "We are of the opinion that any principle evolved in this behalf should be simple, practical and suited to the conditions obtaining in this country". In this case the number of private companies operated as chemical companies were creating hazardous wastes in the soil, henceforth, polluting the village area situated nearby, and they were also running without licenses, so an environmental NGO, filed writ petition under Article 32 of the Constitution of India, which sought from the court to compel SPCB and CPCB to recover costs of the remedial measures from the companies. The Court ruled that "Once the activity carried on is hazardous or inherently dangerous, the person carrying on such activity is liable to make good the loss caused to any other person by his activity irrespective of the fact whether he took reasonable care while carrying on his activity. The rule is premised upon the very nature of the activity carried on". Consequently the polluting industries are "absolutely liable to compensate for the harm caused by them to villagers in the affected area, to the soil and to the underground water and hence, they are bound to take all necessary measures to remove sludge and other pollutants lying in the affected areas".

The "**Polluter Pays**" principle as interpreted by the Court means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental degradation. Remediation of the damaged environment is part of the process of 'Sustainable Development' and as such polluter is liable to pay the cost to the individual sufferers as well as the cost of reversing the damaged ecology. It is worthwhile to mention here that principle 10 of Rio declaration, 1992 states that:

"Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities, in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided". Environment and development are two sides of the same coin. Any one of these cannot be sacrificed for the other. On contrary, both are equally important for our better future. Thus the responsibility lies on the Supreme Court and the various High Courts to deal with these cases with caution of high degree. Then only, we will achieve our goal i.e. to secure a pollution free developed country for our next generation.

3.8 TERMINAL QUESTIONS

1) Which provisions of CrPC can be derived for understanding environment linkage?

2) What is Environmental Doctrine?

3) What is Environmental Equity? How is the concept explained?

3.9 ANSWERS AND HINTS

Self Assessment Questions

1) Refer to Sub-section 3.3.5

2) Refer to Section 3.4

3) Refer to Section 3.4

Terminal Questions

1) The Indian Criminal Procedure Code of 1973 has a significant chapter on maintenance of public order and tranquility, which falls into four parts. Part A deals with unlawful assemblies (Section 129-132), Part B with public nuisance (Sections 133-143), Part C with urgent cases of nuisance or apprehended danger (Section 144), and part D with disputes as to immovable property (Sections 145-148). Most relevant in our present context is Section 133, which has been resorted to as an effective remedy to abate public nuisance in instances of environmental harm. This provision empowers a District Magistrate to pass conditional orders for the removal of nuisances. This section is supplemented with ancillary provisions, contained in Sections 134 to 143 of the Code, to constitute a comprehensive procedure tackling public nuisance.

   Section 144 of the Code has to be seen as a significant provision conferring wide powers upon the Magistrate to deal with urgent cases of nuisance or apprehended danger and tranquillity. This magisterial power has been exercised only for the purpose of preventing public disorder arising out of public unrest or riot situations.

   The potential of this provision is vast, but it does not appear to have been utilised effectively in cases of environmental harm. The provisions in the old Indian law, which have a bearing on the environment, have hardly been used in the past. The consciousness to protect the environment was not as strong then, as it is today. Unless there was awareness on the part of the people to approach the authorities neither the government nor the courts would have had the opportunity to make use of the statutory provisions.

   The important role played by the judicial activism of the eighties made its impact felt mire in the area of the environmental protection than in any other field. *Municipal council, Ratlam v. Vardhichand* is a signpost. The Supreme Court identified the responsibilities of local bodies towards the protection of environment and developed the law of public nuisance in the Code of Criminal procedure as a potent instrument for enforcement of their duties.

2) Right to wholesome environment is a fundamental right protected under Article 21 of the Constitution of India. However the important question is that whether the environment can be protected at present times when almost all the countries in South-East Asia are still at their developing stages? Development comes through industrialisation, which in turn the main factor behind the degradation of environment. To resolve the issue, the experts worldwide have come up with a doctrine called ‘Sustainable Development’, i.e. there must be balance between development and ecology. The concept of ‘Sustainable Development’ had come to be known as early as in 1972 in the Stockholm declaration. It had been stated in the declaration that:

"Man has the 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 and he bears a solemn responsibility to protect and improve the environment for present and future generation". Quote more examples to support the answer.

3) The term 'environment' can describe a limited area or the entire planet, even including a part of the outer space which surrounds it. The term 'biosphere' used in particular by UNESCO, corresponds to one of the broadest definitions, since it designates the totality of the human environment, the part of the universe where, according to present knowledge all life is concentrated.

   The definition of environment affects the scope of legal rules which are intended to protect the environment law cannot affect the natural processes that cause environmental changes. However, the obligatory character of law and the sanctions which can ensure the enforcement of legal rules should prevent and eliminate acts and behaviours which are detrimental to the environment. Nonbinding principles and rules, formulated in recommendation or declaration by international organisation or conferences play an increasing role in international law, especially in the field of environmental protection. Their function is to guide State authorities and also other actors in their action but they can also contribute to the emergence of new obligatory rules.

3.10 REFERENCES AND SUGGESTED READINGS

1) Jaiswal, P.S., Common Law and Other Statutory Remedies, Environmental Law, Pioneer Publications, New Delhi, pp. 19-35.

2) Sadasivan Nair, G., *Environmental Offences—Crimes against Humanity and the Environment, Cochin University Law Review,* School of Legal Studies, Cochin University, Volume 11, p. 65.

3) Divan, Shyam and Rosencranz, Armin, *Judicial Remedies and Procedures, Environmental Law and Policy in India - Cases, Materials and Statutes,* Oxford University Press, New Delhi, pp. 87-166.

Reference Books:

1) Divan, Shyam and Rosencranz, Armin, *Environmental Law and Policy in India - Cases, Materials and Statutes,* Oxford University Press, New Delhi.

2) Rosencranz, Armin; Divan, Shyam and Noble, Martha L., (Ed.) Tripathi, *Environmental Law and Policy in India - Cases, Materials and Statutes,* The Book Review Literary Trust, New Delhi.

3) Jaiswal, P.S., *Environmental Law,* Pioneer Publications, Delhi.

UNIT 4 ENVIRONMENT AND GOVERNANCE

Structure

4.1 Introduction

4.2 Objectives

4.3 Sustainable Development

4.4 Governance for sustainability: Key Components

4.5 Policy Integration

4.6 Transition Management

4.7 Summary

4.8 Terminal Questions

4.9 Answers and Hints

4.10 References and Suggested Readings

4.1 INTRODUCTION

In this module we shall examine and elaborate on the central elements of sustainable development and governance, considering their interrelations as they have emerged from the core themes in sustainable development discourses in recent times. We discuss four key elements of governance for sustainability, which are integrated into the concept of transition management. The result is a conceptual framework for policy-making and action-taking aimed at progress towards sustainability.

Governance and sustainable development share similar history. Both the concepts emerged in the late 1980's, with shared characteristics and overlapping potential. By the mid 1990's they were common terms in popular and professional discourse, along with renewed interest in the role of institutions in societal change. However neither of these terms is yet mature or clearly defined. Perhaps more importantly, the overlaps between their wider meanings remain understudied. As a result these terms remain contested, and will continue to be for some time, because their meanings and implications bring different promises and threats to different stakeholders.

4.2 OBJECTIVE

After reding this unit, you should be able to:

- put forward a view of sustainability and examine the governance aspects of it; and
- discuss four key elements of governance for sustainability, which are integrated into the concept of transition management.

4.3 SUSTAINABLE DEVELOPMENT

The concept of sustainable development arose from two main sources: increasingly worrisome evidence of ecological degradation and other biophysical damage, both despite and because of the greater wherewithal provided by economic growth, and the largely disappointing record of post-WWII 'development' efforts, particularly the

persistence, and in some places worsening, of poverty and desperation in a period of huge overall global increases in material wealth. The United Nations and associated agencies worried about these matters separately for some decades before appointing the World Commission on Environment and Development (WCED) to address them jointly. The Commission's conclusion was that the ecological and social failures had common causes and demanded a common response. Its final report, *Our Common Future* (WCED, 1987), initiated a flood of interest in, debate about and experimentation with sustainable development, which was renewed after the publication and subsequent adoption of *Agenda 21*, the *Rio Declaration on Environment and Development*, and the *Statement of principles for the Sustainable Management of Forests* by more than 178 governments at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, in June 1992. Over the last two decades since publication of *Our Common Future*, the idea of sustainable development has been widely, if ambiguously, embraced by a great variety of institutions around the world. There has been much dispute about the meaning and implications of the concept and much criticism of the actual behaviour of bodies that have claimed devotion to it. Gradually, however, some basics have become clear.

Current paths of development are not sustainable

Current resource-intensive development patterns are ecologically and ultimately, economically unsustainable. There are also problems of inadequate worker and consumer protection, poverty and exclusion. While modern economic advances have brought a host of value improvements, including important environmental quality gains, few of the gains have been automatic and the overall results still include persistent development failures and deepening ecological decline.

Sustainability is about protection and creation

Sustainability is often seen as being about protection of amenities (including cultural diversity), but it is equally about continued advancement or *creation*: a better and more just world. Both the protection of amenities and creation of new and better services for more people require innovation in institutions of governance and socio-technical systems. Innovation can help to ease the adverse effects of some trade-offs posed by existing technology. But innovation is not without problems: it also brings risks, which should be anticipated and dealt with, something that recently being looked into by various researchers.

Requirements of sustainability are multiple and interconnected

The main dimensions consist of maintaining the integrity of biophysical systems, better services for people and freedom from hunger, nuisance and deprivation. To these one may add choice, opportunity and access to decision making – aspects of equity, within and across generations. The economist 'capital model' of sustainable development as discussed by various economists including Pearce, Atkinson, and others. Sustainability is about intermediate *and* long-term integration: the pursuit of all the requirements for sustainability at once, seeking mutually supportive benefits (Gibson, 2001).

Pursuit of sustainability hinges on integration

Because of the interconnections among its factors and purposes, sustainable development is essentially about the effective integration of social, economic, and ecological considerations at all scales from local to global, over the long haul (Schnurr and Holtz, 1998). Compromises and sacrifices become unavoidable. Given the distance between current conventional practice and potentially sustainable behaviour, it is

reasonable to expect most near term initiatives to be highly imperfect. But the objective is to recognise the intertwined importance of social, economic and ecological imperatives and to find ways of contributing to all of them. The aim is not fair treatment of each part, but choices that strengthen the whole in a lasting way. In early literature, sustainable development was often depicted as expansion of the area where circles of social, economic and ecological quality overlapped. These depictions were useful in stressing the links among desirable social, economic and ecological qualities and in indicating that much of our current activity lay outside the realm of potential sustainability. However, even where the roles of social and ecological as well as economic factors were respected, the tendency to consider them separately proved hard to overcome.

Similar problems beset the 'pillars' based approaches adopted in much of the sustainability literature and in many implementation efforts (Mebratu, 1998). Most often, three pillars – social, economic and ecological – are identified, though culture and politics are sometimes recognised as additional distinct categories (e.g., CIDA, 1997). Important work has also been done in exploring the concepts of social, ecological and economic capital for sustainability, with particular interest in the existence and limits of potential substitutions (Berkes and Folke 1993; Daly, 1996; Dixon and Hamilton, 1996; Costanza et al., 1997). In practical applications however, the pillar-focused approaches have suffered from insufficient attention to overlaps and interdependencies and a tendency to facilitate continued separation of social, economic and ecological analyses. Alternative depictions stressing interconnections and consideration of institutional aspects (as in the PRISM model, see the preface to this special issue and Spangenberg (2002)) offer a useful way forward.

Core requirements and general rules must be accompanied by context specific elaborations

What is most needed, appropriate and workable always depends heavily on the context. The detailed elaboration of sustainability requirements, and the determination of appropriate procedures for accepting or rejecting options and trade-offs must respect the place and time of application, and involve those who will live with the results. The blessing is that approaches designed to recognise local specificity can mobilise and foster local knowledge, building greater understanding of, and commitment to, sustainability objectives. One could say that sustainability is about locally suited options that are globally sustainable. But it is also about local awareness and behaviour that shares the larger agenda. A conflict is likely to occur between localism and globalism, characterised by different mindsets and different logics for action, as noted by Rosenau (2003). The tensions are difficult to reconcile as the controversy over globalisation shows.

Diversity is necessary

The importance of context means not only that there are different good answers for different situations, but also that there are many different ways of designing and strengthening the various foundations and practices of governance to respect the principles of sustainability. While this can be administratively inconvenient, diversity offers positive benefits for sustainable development. Diversity is a source of learning and the fuel of evolution. It is important to safeguard diversity in all dimensions, including socio-cultural, economic and technological. Diversity is a source of learning and a resource base for adaptation and reorganisation (Lister and Kay 2000; Kay and Schneider 1994; Rammel and van den Bergh, 2003). Diversity in product offerings is also needed for meeting heterogeneous preferences and local circumstances.

Surprise is inevitable

Precaution is one of the core requirements for sustainability because there will be surprises. Sustainable development is pursued in a world of multi-dimensional, intersecting and dynamic complex systems. We cannot expect to describe them fully, much less predict future effects. We may lack even suggestive evidence about many emerging problems, whose influences will ripple unpredictably through complex socio-ecological systems. Sustainability calls for prudence and adaptability, preferring safe-fail over fail-safe technologies, seeking broadly comprehensible options rather than those that are dependent on specialised expertise, ensuring the availability and practicality of backup alternatives, and establishing mechanisms for effective monitoring and response (Gibson, 2001, p.19).

Transparency and public engagement: key characteristics of decision making for sustainability

The importance of context, the benefits of diversity and the inevitability of surprise all suggest that transparency and active public engagement are necessary qualities of governance for sustainability. Openness and participation are favoured by the emphasis of sustainability on lively citizenship, which is seen not just as a means of building understanding and commitment, but also as an end in itself – an aspect of the necessary and richer alternatives to lives centred on material consumption.

Explicit rules and processes are needed for decisions about trade-offs and compromises

The objective of sustainability-centred decision-making is to seek positive, mutually supporting gains in all areas. But as this work begins, there will be many cases where no practical option offers benefits of all the required kinds. Inevitably there will have to be trade-offs between goals and there will be winners and losers. Trade-offs have to be faced and dealt with. As a general rule we might agree, for example, to avoid sacrificing a long-term objective to win a fleeting benefit, or to ensure that the end result of any set of compromises still leaves us with net overall positive contributions to the core sustainability requirements (Gibson, 2001). Compensation of losers is another possible strategy, but it should not be applied in all circumstances. Polluters should pay for damage, and not be paid to not damage. Certainly, open and explicit attention to the reasoning behind trade-off and compromise decisions is desirable. While we can work to create systems offering a suite of benefits, waiting for win-win-win solutions to emerge is not a useful strategy.

Self Assessment Question

1) What is sustainability centred decision-making?

.....

.....

.....

.....

The end is open

The final characteristic with implications for governance is that sustainable development is an open-ended process. It is not usefully conceived as a particular specified or specifiable target. Pursuit of sustainability is a long-term, indeed never-ending process. The notion of sustainable ‘landing places’ that is sometimes used by the European

Commission is therefore misleading. It suggests that the problem of sustainable development can be 'solved' whereas in reality only specific issues can be resolved and managed. There always will be 'problems' and needs for change (Rammel and van den Bergh, 2003; Sartorius, 2003).

Governance for sustainable development: moving from theory to practice

Implementing a commitment to sustainable development entails a substantial transition not just to a broader understanding and a more ambitious set of objectives, but also to more coherently interrelated institutional structures and processes of planning, administration, markets, tradition and choice at every scale (Gibson, 2001; Parto and Doloreux, 2003). Clearly, this is not a transition that can be accomplished quickly or easily. The challenge is to show how such a transition can be accomplished and to develop a core set of tools that would make governance for sustainability manageable.

Governance

Like sustainable development, governance is a concept that was first widely explored and embraced in the late 1980's. Also, like sustainable development it was attractive because it encompassed a broad set of factors that were increasingly important and insufficiently recognised in conventional thinking and because it encouraged a more integrated understanding of how these factors were, or should be, linked. Governance scholars viewed the political system as a complex of formal and informal arrangements that were ill-defined and unstable. This was in direct contrast to the conventional view of governments as formal, clearly identifiable, and static entities. Whereas government conjured up an image of formal structures ruling over people, the notion of governance highlighted the increasingly important role of formal and informal arrangements in the political economy.

Governance, understood as a mode of social coordination, is different from *governing;* which is an act, a purposeful effort to steer, guide, control and manage (sectors or facets of) society (Kooiman, 1993, p.2). Governance is how one gets to act, through what types of interactions (deliberation, negotiation, self-regulation or authoritative choice) and the extent to which actors adhere to collective decisions. It involves the level and scope of political allocation, the dominant orientation of state, and other institutions and their interactions. Governance structures organise negotiation processes, determine objectives, influence motivations, set standards, perform allocation functions, monitor compliance, impose penalties, initiate and/or reduce conflict, and resolve disputes among actors (Eden and Hampson 1997, p.362). The effective exercise of power is through a network of interconnected actors, in which all actors hold power, through knowledge resources, money and rights granted to them. The notion of governance fits in with complex systems approaches to understanding the workings of the political economy through the inter-relationships among identifiable parts (e.g., social, economic and ecological), rather than just the parts themselves. A complex systems approach to governance also implies explicit appreciation of complexity and uncertainty, likelihood of surprise and need for flexibility and adaptive capacity. That said, governance has been defined and used in many ways in different contexts. Often the concept is given normative as well as descriptive weight. Sometimes, for example in the OECD's and World Bank's usage, it is adopted to serve the neo-liberal agenda of reducing the role of governments in favour of market mechanisms and corporate interests (OECD, 1995; World Bank, 1992). Often it is presented as a means of serving democratic pluralism – defined as the structured ways and means in which the divergent preferences of

inter-dependent actors are translated into policy choices to allocate values, so that the plurality of interests is transformed into coordinated action and the compliance of actors is achieved (Eising and Kohler-Koch, 2000, p.5). This overlooks the authoritative role of government as seen by its citizens, something that is still very prominent in countries such as Germany and France in Europe and most Asian countries.

Arguably, since the early 1980's, authoritative control of social relations has been increasingly exercised through quasi- and non-government entities rather than just formal governments and government institutions. In several ways, citizens have become more powerful with respect to how governing is exercised (through rights of information and co-determination) and with respect to how business activity is conducted (consumer boycotts). The shift from govern*ment* to govern*ance* spells a change in decision making and numerous opportunities for the pursuit of sustainability. We recognise, however, that despite an ideological shift over the past two decades toward liberalisation, government has remained, and is likely to continue to remain, a powerful actor with a major role in discourses on governance for sustainability. This should not be understood as an argument against citizen involvement or stakeholder engagement, both of which are important for at least four reasons: it enhances the legitimacy of policy, helps to reduce the risk of conflict, offers an additional source of ideas and information; and through their involvement, people and organisations learn about environmental problems (Coenen, 2002). The most significant challenge is to ensure that multi-player governance regimes embody capacity for sustainability-oriented coordination, direction and re-direction. It is clearly reasonable and appropriate to recognise that business organisations, civil society groups and citizens, as well as formal governments have roles to play and are already important actors. Finding ways to ensure that all these players act coherently, effectively and with some efficiency in the pursuit of sustainability demands much higher ambitions and underlines the crucial role of informal institutions. A variety of tools are available including development of explicit common objectives, targets and indicators; use of multi-stakeholder deliberation and decision mechanisms; and creative application of tax and regulatory instruments to foster cost internalisation and other adjustments to business and consumer behaviour in the market place. But all of these rely, more or less heavily, on a continuing central (and formal) role for governments in coordinating and often initiating action, and in legitimising and entrenching the decisions.

4.4 GOVERNANCE FOR SUSTAINABILITY: KEY COMPONENTS

Better governance is a prerequisite for, and probably also a product of, steps towards sustainability. Much is expected from 'good governance'. According to the European Commission, good governance consists of openness and participation, accountability, effective coherence, efficiency (proportionality) and greater sensitivity to the immediate context that is promised by subsidiarity. For sustainability, other requirements include means of internalising external costs and ensuring integration of policy considerations, evaluation of options and dealing with trade-offs. It is worth noting that in the Commission's definition of good governance the emphasis is on the role of institutions as entities that are largely viewed as being 'up there' and, at least currently, insufficiently within the reach of ordinary citizens. As such, this view of governance seems concerned primarily with minimising bureaucratisation and hierarchy. The intent of the White Paper on European Governance (CEC 2001) is to make *formal* institutions – which are increasing in size and number – more accessible, accountable, and relevant to the general populace and to retain a higher degree of relevancy, credibility, and legitimacy

in the average person's mind. The White Paper's necessary but exclusive focus on formal institutions overlooks the important role played by other, less formal, institutions in European governance, particularly in policy formation and implementation. To fully appreciate the role of institutions, they should not be viewed as synonymous with bureaucracy (Parto, 2005a, 2005b). Because a major portion of sustainable development is ultimately about radical changes in the systems of production and consumption, governance for sustainability is, by implication, about working through formal *and* informal institutions to bring about societal change. Effecting change in informal governance institutions, such as habits and routines, requires identifying the levels at which the change is desired, the territorial scale at and through which the desired change is to be implemented, and the systems which are likely to be affected due to the desired change. The challenge will be to find ways of establishing governance regimes that have reasonable coherence of vision and commitment, enjoy trust and are accountable, and have sufficient capacity for coordination, direction and re-direction.

Governance for sustainability has certain key features and components. In the following we identify four of these components and elaborate on some of their main features.

4.5 POLICY INTEGRATION

An important 'interrelations' issue is the coordination of government policies and the corresponding and complementary positions and initiatives of other governance actors. The evolution of the modern state has been towards an increasing degree of sectoral specialisation to deal with differentiated problems. Specialisation has helped develop valuable responses to particular problems, but it has also led to neglect of broader considerations and to partial solutions that are inadequate or damaging from a broader sustainability point of view. Cost-increasing end-of-pipe solutions transferring a pollution problem at the site into a waste problem elsewhere are a good illustration. Sustainability requires policy integration, along with improved interaction between government and non-government institutions and the creation of a longer-term view in government (OECD, 2001, p.11).

Policy integration is not the consolidation of policies to create a single integrated policy dealing with everything. There remains a need for specialised policies (cf. Hertin and Berkhout, 2002). Effective integration for practical decision making centres on acceptance of common overall objectives, coordinated elaboration and selection of policy options, and cooperative implementation designed for reasonable consistency and, where possible, positive feedbacks. Attempts at environmental policy integration have been examined in the COMPSUS study and the OECD study 'Governance for sustainable development' for selected countries. The COMPSUS study found that much more progress has been achieved with vertical environmental policy integration – which is policy integration *within* the governmental sector – than with horizontal environmental policy integration – which is integration *across* policy sectors. The rather negative conclusion of the COMPSUS study is that 'the process of intra-ministerial integration has been more formal than substantive. …. Even where the intra-ministerial integrative ideal has been more thoroughly pursued – as in many of the developed countries – the quality of departmental engagement with environmental concerns or the broader sustainability development agenda is typically weak' (Lafferty and Meadowcroft (2001)). This clearly dampens any great optimism. Policy integration is a long and difficult process in which political will is important. Full policy integration may not be achievable but significant gains can be made. Lafferty offers several

suggestions for vertical and horizontal policy integration within the environmental realm. For vertical integration he recommends specification of major environmental impacts of policies and activities, establishment of a system of dialogue and consultation, sectoral strategies for change, action plans, budgets and monitoring programmes. For horizontal integration, he proposes use of long-term sustainability strategies for sectoral domains, specific governing bodies entrusted with overall coordination and supervision of the integration process, communication programmes, and national action plans with targets and ongoing programmes for assessment, feedback and revision and conflict resolution procedures.

Self Assessment Question

2) What is policy integration?

.....

.....

.....

.....

Common objectives, criteria, trade-off rules and indicators

Experience with environmental and other policy integration efforts indicates that in large organisations, including national governments, only limited gains are possible through structural measures (creation of inter-ministerial committees, establishment of new cross-sectoral agencies and the like). Some further improvements can be won through structural changes tied to mandatory reporting and monitoring requirements that impose a sustainability-oriented framework for justification and make institutional behaviour more transparent. Certainly multi-stakeholder decision making, co-management, advisory round tables and other mechanisms engaging multiple governance institutions can contribute to effective integration (Dorcey, 2004).

But most of these are useful only for particular cases or a few priority concerns. For more general application, a suite of additional, process-related tools are needed. Four such tools are shared long-term objectives, common criteria for planning and approval of significant undertakings, specified rules for making trade-offs and compromises, and widely accepted indicators of needs for action and progress towards sustainability. Versions of all of these have been developed and applied by particular governance institutions for limited purposes. Sometimes they have even been designed and adopted by coalitions of governance bodies with broad sustainability ends in mind. Nevertheless there remains considerable potential for more general and comprehensive application in governance systems:

Shared sustainability objectives

As we observed at the beginning of this module, debates about the meaning and implications of sustainable development have now progressed far enough to reveal the essential core requirements for sustainability. This opens the door to reasonably clear specification of related objectives for particular regions, nations and localities. Sustainability-centred objective setting processes, involving multiple governance institutions, have already been used, with some good results, in many jurisdictions (e.g., Devuyst, 2001; Köhn et al., 2001; Vaidyanathan, 2002). Perhaps the most common and practically influential examples have been those of cities and urban regions that have developed new or revised land-use plans through processes including collective development and review of future scenarios and public debate on planning

goals and alternatives (Boyle et al., 2004). But larger scale versions are certainly possible.

Sustainability-based criteria for planning and approval of significant undertakings

It is now common for governments at the national, provincial/state, and even municipal levels, to impose environmental assessment or planning approval requirements on proponents of major public and private sector undertakings. Environmental assessment, in particular, is widely applied, often at the strategic level of policies, plans and programmes, as well as at the level of physical projects. In many jurisdictions, the assessments cover a comprehensive agenda with 'environment' defined to include social, economic and cultural as well as biophysical aspects and their interrelations. And in a growing number of cases, the test of approval is an obligation to show that the purposes are sound and that the proposed undertaking is the most desirable of the potentially reasonable options and will make a positive overall contribution to sustainability (Gibson, 2000). Similar approval requirements, with explicit sustainability criteria, are also now applied in a variety of other venues including non-government product certification programmes, in investment rankings of ethical corporations, and in progressive building standards. While practice in this area is still primitive, the imposition of such 'higher test' criteria in approval processes may be expected to expand pressures for the development of generic sustainability-based evaluation criteria, better processes for specifying these locally and more frequent and advanced of associated modelling and other analytical techniques in integrated assessment and related areas (Gibson, 2001; Rotmans and van Asselt, 2002).

Specified rules for making trade-offs and compromises

As we noted above in the discussion of sustainability and its implications, prospects for progress would be much enhanced by the availability of explicit rules and processes for decisions about trade-offs and compromises. Examples of such rules include (Gibson, 2001)

i) compensations and substitutions involving direct and indirect compensation for negative effects (where these cannot be fully mitigated): e.g., later rehabilitation of aggregate mining operations on somewhat degraded agricultural lands (substitution in time), and construction of a human made wetland to replace a relatively natural one (substitution in place).

ii) net gain and loss calculations involving aggregation of net gain and no net loss calculations: e.g., weighing major damages to the interests of tribal people displaced by a new dam against more material security for larger numbers of poor farmers downstream (differences in place); and weighing efficiency gains from industrial process improvements balanced against associated job losses (substitution in kind, across principles).

Widely accepted indicators of needs for action and progress towards sustainability

A great deal of effort has already gone into the identification and elaboration of sustainability indicators. Perhaps this is partly because for many institutions, work on indicators seemed less threatening than actual interventions for change. But indicator development remains valuable as a way of clarifying what is important (thereby also contributing to objective setting), and well chosen and focused indicators can be powerful devices of education, empowerment and agitation. Taken as a set, these tools could provide a well integrated, reasonably clear and yet flexible and locally adjustable foundation for sustainability-focused decision-making. For all four tools, the core applications may be in more or less formal institutional decision-making. But

the underlying idea is to establish habitual expectations and entrenched practices that would spread to choices and activities outside the realm of formal deliberation and approval.

Information and incentives for practical implementation

By itself, a foundation for sustainability-based decision making is insufficient. Governance for sustainability also needs means of spurring and guiding appropriate action. Policy instruments of many kinds are available – tax reforms regulations, procurement rules, liability laws, education programmes, product labelling, tenure arrangements, power-sharing processes, etc., – and many combinations are possible. Because market-based or influenced decision making will necessarily continue to play a major role in governance at all levels, a key challenge will be to make prices more accurate indicators of embodied costs – social and ecological as well as economic. But simple means are rarely available. Identifying, evaluating and monetising externalised costs is often frustrated by limited knowledge, competing methodologies and moral dilemmas. And resistance to imposition of cost internalising measures is common even in simple cases involving the well-accepted 'polluter pays' principle. Here again it seems that carefully integrated, monitored and adjusted application of multiple tools will be necessary.

Programmes for system innovation

Many sustainability benefits may be obtained immediately through the use of currently available technologies. In the longer run, however, sustainability requires transitions involving system innovation. Policymaking on sustainability has, for the most part, relied on performance standards or the prescription of certain solutions. The solutions adopted helped to secure *partial* sustainability benefits. Governance for sustainability requires policymaking frameworks that actively seek to identify, nurture, and coordinate action for more sustainable technological niches. And since technological innovations promise only some of the needed improvements, governance initiatives must ensure that they are accompanied by co-evolving societal processes characterised by continuous changes in formal and informal institutions. For this, governance for sustainability has to be more anticipatory, oriented towards the long-term, using visions of sustainability, and concerned with learning, innovation and adaptation.

Substantial improvement of the current trajectories of development requires 'system innovation', a fundamental change in the systems of goods provision, by using different resources, knowledge and practices. System innovation in the socio-technical realm constitutes change beyond the level of the technical components. It is associated with new linkages, new knowledge, different rules and roles, a new 'logic of appropriateness', and often new organisations. Two examples of system innovation offering environmental benefits are the hydrogen economy (with the hydrogen generated in clean ways, for instance through the use of renewable electricity sources) and integrated mobility (or chain mobility). In the vision of integrated mobility, users use different transport modes (collective ones and individual ones such as a car and bicycle) based on information from mobility agencies that offer travel plans and facilities to make reservations. Chain mobility involves a wide range of changes, in infrastructure (in the form of park and ride stations and special bus lanes), in technology (such as light rail in conurbations) and also an array of social and organisational changes: the collective ownership and use of cars (car-sharing and riding), the creation of mobility agencies offering and selling inter-modal transport services, the integration of collective transport schemes, and the introduction of transport management system for employees by companies.

Such new systems are unlikely to emerge through the normal operation of markets. System innovation is inexorably linked with institutional change. It cannot be caused by a single variable or event and requires transition management with elements of planning. It requires replacement of old outcome-based planning with reflexive and adaptive planning (Kemp and Loorbach, 2003).

4.6 TRANSITION MANAGEMENT

Change towards sustainability in a world of complex and dynamic human-ecological systems, is an unending process of transformation. Today, many companies and governments seem to be involved in this journey. Whereas many companies have moved to adopt the model of socially responsible corporate behaviour of the World Business Council for Sustainable Development, government policy in most jurisdictions addresses problems of sustainability in a somewhat inconsistent manner and often fails to build upon socially responsible corporate strategies (Bleischwitz, 2004). In many cases it supports non-sustainable behaviour and gives only lukewarm support to system innovation. In both government and corporate sectors, visions of sustainability are rarely used as a compass for policy, and sustainability-centred policy integration remains an ideal to which policy makers are committed in words rather than in action. It is often said that the world has become more complex, defying steering attempts because of a knowledge problem and governance problem (Mayntz, 1994). In earlier section we attempted to offer suggestions for sustainability policy, in the form of conceptual equipment. Here we discuss an overall conceptual model or perspective that brings together the conceptual equipment – the model of transition management developed by Rotmans and Kemp. The Rotmans-Kemp model conceptualised the challenge for policy as a transition process: unsustainable functional systems have to undergo a transition. The model is thus oriented to functional systems, which appears as a useful target for sustainability policy. It is of course only an element of the wider transition endeavour of making a transition to a more prosperous, equitable and just world, an ongoing task that requires targeted policies besides integrated ones.

Transitions are co-evolution processes: the result of the interplay of many unlike, particular processes (Kemp and Rotmans, 2001). Transitions involving system innovation cannot be managed in a controlling sense but they can be aimed and guided in an iterative, forward-looking, adaptive manner, using markets, institutions and hierarchy (the three basic forms of coordination). However in managing transitions, four basic rules require special attention (Kemp and Loorbach, 2003):

i) *Careful not to get locked into sub-optimal solutions*

This calls for anticipation of outcomes and the use of markets for coordination and context control instead of planning. A second way of circumventing lock-in is by exploring different configurations through portfolio-management – a common strategy in finance is to hedge risks by exploring a wide variety of options, both incremental and radical.

ii) *Embed transition policy into existing decision-making frameworks and legitimise transition management.*

Transition management should be politically accepted and be a joint concern for different policy makers and society at large. Long-term goals chosen by society should guide policy, including responses to short-term concerns.

iii) *Take the long view of a dynamic mechanism of change*

Make sure that the process does not come to a halt when positive results do not immediately materialise due to setbacks. One way of keeping the process on track is to view and institute learning as a policy objective.

iv) *Engage in multi-level coordination*

Coordinate top-down policies with bottom-up initiatives (engage in vertical coordination besides horizontal coordination). Local experiments should inform national policies and there should be strategic experimentation for system innovation; two things that did not happen in the past. There should be more and better coordination between top-level policies and local policies and also among various horizontal policies. National policies should be coordinated with international policies, because go-it-alone policies can be economically harmful unless there are clear first-mover advantages.

As seen above, even many of the most desirable sustainability-oriented initiatives will involve trade-offs, bringing the danger of inequitable distribution of gains and losses. Such inequities are particularly worrisome where the losses may be borne by those who are already disadvantaged (a sadly common feature of past development assistance projects). Preparing for just transitions (Burrows, 2001) that avoid adding to disadvantages, and provide satisfactory compensation when all else fails, is crucial.

Transition management has short-term goals and long-term goals, with the latter being based on societal goals and visions of sustainability. The short-term goals are informed by the long-term goals and comprise learning goals. Sustainability visions are explored using small steps. Transition management breaks with the old plan-and-implement model aimed at achieving particular outcomes. It is based on a different, more process-oriented philosophy. This helps to deal with complexity and uncertainty in a constructive way.

Transition management is a form of process management performed against a set of goals set by society whose problem-solving capabilities are mobilised and translated into a transition programme, which is legitimised through the political process. Transition management does not aim to realise a particular path at all costs. It engages in the exploration of promising paths, in an adaptive manner with exit strategies. It does not consist of a strategy of forced development, going against the grain, but uses bottom-up initiatives and business ideas of alternative systems, offering sustainability benefits besides user benefits. Key elements of transition management are

i) development of sustainability visions and setting of transition goals

ii) use of transition agendas

iii) establishment, organisation and development of a transition-arena (for innovative actors) besides the normal policy arena

iv) portfolio management

v) use of transition-experiments and programmes for system innovation

vi) creating and maintaining public support

vii) monitoring and evaluation of the transition process

viii) use of learning goals for policy and reliance on circles of learning and adaptation.

Although in this module we have not attempted to explain the full import of environment and governance in full, we fit with all the considerations of sustainability described that incorporates key components of governance for sustainability, namely policy integration, common objectives and criteria, internalisation of external costs, and programmes for system innovation. It puts government policies in a different, longer-term perspective and tries to better align specific policies. We have introduced different visions and routes through adaptive policies of how decisions are made in an iterative way and support is temporary. In being adaptive and anticipatory, we believe transition management could help in dealing with the tension between creative change and conservation, between innovative experiments and maintaining the integrity and stability of functions. Transition management is best understood as an attempt at *goal-oriented modulation* or directed incrementalism (Grunwald, 2000), offering a model for policy integration.

Self Assessment Question

3) What is Transition Management?

.....

.....

.....

.....

4.7 SUMMARY

- Governance for sustainability presents an enormous but unavoidable challenge. Its globally recognised that continued unsustainability is not a viable option. For progress towards sustainability, we all need to establish governance structures and practices that can foster, guide and coordinate 'positive work' by a host of actors on vast complex of issues, through webs of interconnection and across multiple levels and scales, with sensitivity contexts in which they operate and respect for uncertainties. Such a conception has considerable advantages. It encompasses multiple and diverse strengths, motives and capabilities, not just of conventional government agencies and business interests, but of a full set of public, private and civil society players, collective and individual, plus their myriad interrelations. The challenge is to achieve sufficient integration of understanding, direction and action to achieve the desired transition. In the establishment of effective governance for sustainability, we must incorporate and also reach beyond the powers of commerce and command – a task best accomplished through understanding, guidance and process.

- However in governance for sustainability, a host of quite different players must be involved. They are unlikely to work together easily, which is why there should be a commitment to transitions and why government, as a democratic authoritative power is important (even when government is part of the problem). There is no single best form of governance for sustainability. The details must vary by necessity, respecting the specifics of context from case to case. Nevertheless, the deliberations on governance for sustainability so far, do point to a basic foundational outline and strategy, and there is reason to believe that we can clarify and specify much more without compromising respect for particular circumstances. The quest for sustainability may be the quest for an elusive 'Holy Grail' of integrated understanding and action that is not fully possible, and will

never be found in a single pure form. But a good deal can be done. Progress is possible.

4.8 TERMINAL QUESTIONS

1) Explain the concept of sustainable development?

2) How is Governance structure explained? What is Governance for sustainability?

3) What is Transition Management? How are the phases explained?

4.9 ANSWERS AND HINTS

Self Assessment Questions

1) Refer to Section 4.3

2) Refer to Section 4.5

3) Refer to Section 4.6

Terminal Questions

1) The concept of sustainable development arose from two main sources: increasingly worrisome evidence of ecological degradation and other biophysical damage, both despite and because of the greater wherewithal provided by economic growth, and the largely disappointing record of post-WWII 'development' efforts, particularly the persistence, and in some places worsening, of poverty and desperation in a period of huge overall global increases in material wealth. The United Nations and associated agencies worried about these matters separately for some decades before appointing the World Commission on Environment and Development (WCED) to address them jointly. The Commission's conclusion was that the ecological and social failures had common causes and demanded a common response. Its final report, *Our Common Future* (WCED, 1987), initiated a flood of interest in, debate about and experimentation with sustainable development, which was renewed after the publication and subsequent adoption of *Agenda 21*, the *Rio Declaration on Environment and Development*, and the *Statement of principles for the Sustainable Management of Forests* by more than 178 governments at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, in June 1992. Over the last two decades since publication of *Our Common Future*, the idea of sustainable development has been widely, if ambiguously, embraced by a great variety of institutions around the world. There has been much dispute about the meaning and implications of the concept and much criticism of the actual behaviour of bodies that have claimed devotion to it. Gradually, however, some basics have become clear.

2) Better governance is a prerequisite for, and probably also a product of, steps towards sustainability. Much is expected from 'good governance'. According to the European Commission, good governance consists of openness and participation, accountability, effective coherence, efficiency (proportionality) and greater sensitivity to the immediate context that is promised by subsidiarity. For sustainability, other requirements include means of internalising external costs and ensuring integration of policy considerations, evaluation of options and dealing with trade-offs. It is worth noting that in the Commission's definition of good governance the emphasis is on the role of institutions as entities that are

largely viewed as being 'up there' and, at least currently, insufficiently within the reach of ordinary citizens. As such, this view of governance seems concerned primarily with minimising bureaucratisation and hierarchy. The intent of the White Paper on European Governance (CEC 2001) is to make *formal* institutions – which are increasing in size and number – more accessible, accountable, and relevant to the general populace and to retain a higher degree of relevancy, credibility, and legitimacy in the average person's mind. The White Paper's necessary but exclusive focus on formal institutions overlooks the important role played by other, less formal, institutions in European governance, particularly in policy formation and implementation. To fully appreciate the role of institutions, they should not be viewed as synonymous with bureaucracy (Parto, 2005a, 2005b). Because a major portion of sustainable development is ultimately about radical changes in the systems of production and consumption, governance for sustainability is, by implication, about working through formal *and* informal institutions to bring about societal change. Effecting change in informal governance institutions, such as habits and routines, requires identifying the levels at which the change is desired, the territorial scale at and through which the desired change is to be implemented, and the systems which are likely to be affected due to the desired change. The challenge will be to find ways of establishing governance regimes that have reasonable coherence of vision and commitment, enjoy trust and are accountable, and have sufficient capacity for coordination, direction and re-direction.

3) Transition management is a form of process management performed against a set of goals set by society whose problem-solving capabilities are mobilised and translated into a transition programme, which is legitimised through the political process. Transition management does not aim to realise a particular path at all costs. It engages in the exploration of promising paths, in an adaptive manner with exit strategies. It does not consist of a strategy of forced development, going against the grain, but uses bottom-up initiatives and business ideas of alternative systems, offering sustainability benefits besides user benefits. Key elements of transition management are:

   i) development of sustainability visions and setting of transition goals

   ii) use of transition agendas

   iii) establishment, organisation and development of a transition-arena (for innovative actors) besides the normal policy arena

   iv) portfolio management

   v) use of transition-experiments and programmes for system innovation

   vi) creating and maintaining public support

   vii) monitoring and evaluation of the transition process

   viii) use of learning goals for policy and reliance on circles of learning and adaptation.

4.10 REFERENCES AND SUGGESTED READINGS

1) Berkes, F. and Folke, C. (1993) 'A systems perspective on the interrelationahips between natural, human-made and cultural capital', *Ecological Economics*, Vol. 5, No. 1, pp.1–8

2) Boyle, M., Gibson, R.B. and Curran, D. (2004) 'If not here, then perhaps not anywhere: urban growth management as a tool for sustainability planning in British Columbia's capital regional district', *Local Environment*, Vol. 9, No. 1, pp.21–43.

3) Burrows, M. (2001) 'Just transition', *Alternatives Journal*, Vol. 27, No. 1, pp.29–32

4) Dorcey, A.H.J. (2004) 'Sustainability governance: surfing the waves of transformation', in.

5) Mitchell, B. (Ed.): *Resource and Environmental Management in Canada: Addressing Conflict and Uncertainty*, 3rd ed., Oxford University Press, Toronto.

6) Eising, R. and Kohler-Koch, B. (2000) 'Introduction: Network Governance in the European

7) Union', in Eising, R. and Kohler-Koch, B. (Eds.): *The Transformation of EU Governance*, Routledge, pp.3–13, London and New York.

8) Geels, F.W. (2002) 'Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study', *Research Policy*, Vol. 31, Nos.8–9, pp.1257–1274.

9) Lafferty, W.M. and Meadowcroft, J. (2001) *Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies*, Oxford University Press, Oxford and New York.

10) Mayntz, R. (1994) 'Governing failures and the problem of governability: some comments on a theoretical paradigm', in Kooiman, J. (Ed.): *Modern Governance. New Government-Society Interactions*, Sage, London, pp.9–20.

11) Mebratu, D. (1998) 'Sustainability and sustainable development: historical and conceptual review', *Environmental Impact Assessment Review*, Vol. 18, pp. 493–520.

12) OECD (2002) *Governance for Sustainable Development: Five OECD Case Studies*, OECD, Paris, France.

13) Rammel, C. and van den Bergh, J.C.J.M. (2003) 'Evolutionary policies for sustainable development adaptive flexibility and risk minimising', *Ecological Economics*, Vol. 47, pp.121–133.

14) Rammel, C., Hinterberger, F. and Bechthold, U. (2004) *Governing Sustainable Development – a Co-evolutionary Perspective on Transitions and Change*, GoSD Working Paper 1, http://www.gosd.net/pdf/gosd-wp1.pdf.

15) Rotmans, J. and van Asselt, M. (2002) 'Integrated assessment: current practices and challenges for the future', in Abaza, H. and Baranzini, A. (Eds.): *Implementing Sustainable Development: Integrated Assessment and Participatory Decision-making Processes*, Edward Elgar, Cheltenham, pp.78–116

Recommended Readings

1) Bleischwitz, R. (2004), 'Governance of sustainable development: co-evolution of corporate and political strategies', *International Journal of Sustainable Development*, Vol. 7, No. 1, pp.27–43.

2) Canadian International Development Agency (CIDA) (1997) 'Our commitment to sustainable development, chapter 2', *The Sustainable Development Framework*, CIDA, Ottawa/Hull.

3) Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J., Raskin, R.G., Sutton, P. and van den Belt, M. (1997).

4) 'The value of the world's ecosystem services and natural capital', *Nature*, Vol. 387, pp.253–260.

5) Daly, H. (1996) *Beyond Growth: The Economics of Sustainable Development*, Beacon Press, Boston.

6) Hemmati, M. (2002) *Multi-Stakeholder Processes for Governance and Sustainability*, Earthscan, London.

7) Kemp, R. and Rotmans, J. (2005) 'The management of the co-evolution of technical, environmental and social systems', in Weber, M. and Hemmelskamp, J. (Eds.): *Towards Environmental Innovation Systems*, Springer, pp.33–55, Berlin-Heidelberg-New York.

8) Köhn, J., Gowdy, J. and van der Straaten, J. (Eds.) (2001) *Sustainability in Action: Sectoral and Regional Case Studies*, Edward Elgar, Cheltenham UK.

9) Kooiman, J. (Ed.) (1993) *Modern Governance. New Government-Society Interactions*, Sage, London.

10) Parto, S. (2005b). 'Good governance and policy analysis: what of institutions?', *MERIT/Infonomics Research Memorandum 2005-001*, available at: http://www.merit.unimaas.nl/

11) Pearce, D.W., Markandya, A. and Barbier E.B (1989) *Blueprint for a Green Economy*, Earthscan, London.

12) WCED (1987) *Our Common Future*, Oxford University Press, Oxford.

13) World Bank (1992) *Governance and Development*, World Bank, Washington.