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**ENVIRONMENTAL LAWS
IN PAKISTAN:
A CRITICAL ANALYSIS**

BY

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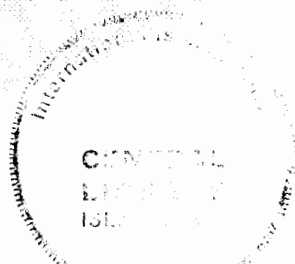
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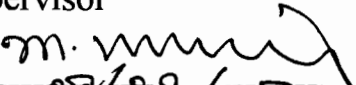
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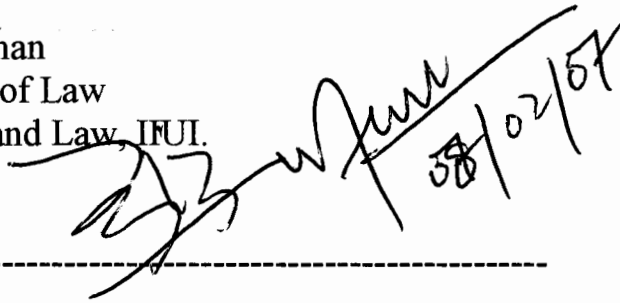
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LIST OF ACRONYMS

AND	Advocacy Development Network
BoG	Board of Governors
CBO	Community Based Organizations
CEESP	Commission on Environmental, Economic and Social Policy
CIDA	Canadian International Development Assistance
CORIN	Coalition of Rawalpindi and Islamabad NGOS
CPC	Citizens Peace Committee
CPO	Canadian Partners Organization
CSE	Centre for Science and Environment
CUTS	Consumer Unity and Trust Society
DA	Development Alternatives
DFID	Department for International Development
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
ESC	Environmental Standards Committee
EU	European Union
FES	Frederich Eibert Stiftung
GCO	Green Circle Organization
GRI	Global Reporting Initiative
HDFNA	Human Development Foundation of North America
ICIMOD	International Centre for Integrated Mountain Development
IDS	Institute of Development Studies
IIED	International Institute for Environment and Development
IISD	International Institute for Sustainable Development
ILO	International Labour Organization
IPRI	Islamabad Policy Research Institute
IT	Information Technology
ITDG	Intermediate Technology Development Group
IUCN	International Union for Conservation of Nature
JAC	Joint Action Committee
LEAD	Leadership in environment and Development
LUMS	Lahore University of Management Sciences
MIS	Management Information Service
MOE	Ministry of Environment
MSU	Multi-Sector Support Unit
NEAP	National Environment Action Plan
NCS	National Conservation Strategy
NEQS	National Environmental Quality Standards

NET	National Environmental Trust
NGO	Non-Governmental Organization
NRB	National Reconstruction Bureau
PAEC	Pakistan Atomic Energy Commission
PBR	Plant Breeders Rights
PED	Pakistan Environment Digest
PEP	Pakistan Environment Programme
PEPA	Pakistan Environment Protection Agency
PEPC	Pakistan Environmental Protection Council
PILER	Pakistan Institute of Labour Education and Research
RC	Resource Centre
RCSS	Regional Centre for Strategic Studies
RING	Research Institute Networking group
SAAG	Sustainable Agriculture Action Group
SANEI	South Asian Network or Economic Institute
SANFEC	South Asian Network on Food, Ecology and Culture
SDC	Sustainable Development Conference
SID	Society for international Development
SIP	Sustainable Industrial Production
SMART	Self Monitoring and Reporting Tool
SNPO	Swiss NGO Programme Office
TAF	The Asia Foundation
TTSID	Technology Transfer for Sustainable Industrial Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organization
UNEP	United Nations Environment Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
WAF	Women Action Forum
WAPDA	Water and Power Development Authority
WCD	World Commission on Dams
WTO	World Trade Organization

DEDICATION

This work is dedicated to my family whose financial and moral assistance gave me the determination and will-power to complete this research work. May Allah bestow them high blessing in this world and the world hereafter.

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ABSTRACT

The purpose of this dissertation is to examine the expansion of public interest in environment legislation from pillar to post. The necessity of the study lies in the rapid degradation of environment and need of the efficient environmental management in the country. Here we have tried our best to critically analyze the development of Environmental laws in Pakistan, developing legal system for enforcement and implementation of environmental management with the historical perspective. This research may further discuss about the new ideas and directions and is a critical analysis of the legal provisions which may help to construe environmental awareness. It may offer the legislators a chance to find out what can be applied in their own domain for dynamic application of the existing legal mechanism for sustainable development and to extend a helping hand for preservation of natural environment, free from all types of obnoxious pollution.

The pros and cons of this research and venture are compiled in the form of thesis comprising; firstly brief introduction of development of Environmental Laws in Pakistan, secondly critical scenario of Environmental Legislation in Pakistan, thirdly Enforcement of the laws in Different Sectors, fourthly Critical Review of Environmental Case Laws in Pakistan fifthly recommendations for improvement of environmental conditions in Pakistan and finally highlighting the ultimate solution as bona fide conclusion.

The cornerstone of environmental legislation is the new Pakistan Environmental Protection Act 1997 which has superceded the Pakistan Environmental Protection Ordinance (PEPO), promulgated in 1983. Although this law is the main federal environmental legislation, other laws also deal with issues of environment. In Pakistan there are reams of laws protecting the environment which go no further than the statute book.

The Constitution of the Islamic Republic of Pakistan 1973 itself contains no statement of principles or policy in relation to the rights and obligations of the State and its citizens with respect to the environment. However, it confers concurrent legislative power on the Federal government and the Provinces to legislate in respect of environmental pollution and ecology.

The relevant articles of the Constitution of the Islamic Republic of Pakistan dealing with the protection of environment are Articles 9, 14, 184(3), and 199(1)(c). These provisions were used in the landmark Supreme Court of Pakistan environmental case law of *Shehla Zia Vs. WAPDA*. Nowadays, many environmental writ petitions have been filed in the Supreme Court of Pakistan and High Courts of Pakistan against air, noise, solid waste and water/marine pollution. All of these petitions indicate that the growing pollution in the cities of Pakistan is detrimental and devastatingly hazardous to human life and a constant danger for the future generations.

The Environmental Protection Act, 1997 illustrates that a slow but perceptible growth of environmental consciousness is gradually developing in Pakistan. This public and government consciousness has emerged as a reaction to the neglect of development planning that had no regard for environmental factors. The result has been environmental degradation that affects practically every door step in Pakistan. It may be mentioned that deteriorating environment of the cities of Kasur, Faisalabad, Gujranwala, Lahore and Karachi is an example in the reign of environmental panorama. The Act became operational in 1997 but has remained largely un-enforced because of the lack of public awareness regarding its effective existence especially with regard to the complaint procedure that an aggrieved person has to follow. The non-functioning of the Environmental Tribunals and Environmental Magistrates, irregular meetings of the Council, the non publishing of the National Environmental Reports by the concerned Environmental Agency, the lack of ambient air quality standards, stringent National Environmental Quality Standards (NEQS)

which are difficult for industry to achieve, and lack of trained, dynamic and motivated personnel in the Environmental Agencies/Departments remained the main obstacles.

The National Environmental Quality Standards (NEQS) were notified in 1993 under the Ordinance and amended in 2000 under the Act but have never been properly implemented. Therefore, the Ministry of Environment, has nominated Dr Parvez Hassan as the Chairman of the NEQS Implementation Committee. The Committee assigned to facilitate, monitor and supervise the implementation of the recommendations of the Environmental Standards Committee and would supervise the implementation of Self-monitoring and Reporting Programmes in the country. So as to amicably resolve conflicts between the industry and the monitoring agencies.

The committee will have to improve the implementation of the National Environmental Quality Standards (NEQS) in consultation with the stakeholders and will review the NEQS and suggest changes, where necessary, based on environmental conditions in Pakistan.

The Environmental Protection Act, 1997 to some extent, is comprehensive as every section can be read with the rules and regulations prescribed under it. There has been a delay in the notification of the Rules and Regulations for implementing the provisions of the Act. The following regulations have been notified including:

- National Environmental Quality Standards (Self-Monitoring and Reporting by Industries) Rules,2001;
- Industrial Pollution Charge (Calculation and Collection) Rules,2001;
- Environmental Samples Rules, 2001.
- Provincial Sustainable Development Fund (Procedure) Rules,2001;
- Provincial Sustainable Development Fund (Utilization) Rules 2001;

In addition, Pakistan Environmental Protection Act, 1997, other federal and provincial laws which have been dealing in different degrees, with issues concerning the environment. These laws including:-

- The Factories Act 1934;
- The Forest Act 1927;
- The West Pakistan Regulation and Control of Loudspeakers and Sound Amplifiers Ordinance 1965;
- The Agricultural Pesticides Ordinance 1971 and Rules 1973;
- The Canal and Drainage Act 1873;
- The West Pakistan Fisheries Ordinance 1961;
- The Motor Vehicles Ordinance 1965 and Rules 1969;
- The Balochistan, NWFP, Punjab and Sindh Local Government Ordinance(s) 1979/80
- The Pakistan Penal Code, 1860; and
- The Explosive Act 1884 etc.

Another environmental development in Pakistan has been taken place when Pakistan National Conservation Strategy (NCS) was introduced in March 1992. The NCS is designed as a broad-based policy program aimed at the sustainable use of renewable resources, preventive action against pollution and other adverse effects of industrial and urban growth, mandatory environmental impact assessment of new projects, and more stringent controls on toxic chemicals and hazardous substances. NCS has many areas for policy action. Moreover, Pakistan is formulating the provincial conservation strategies in collaboration with IUCN. The National Conservation Strategy (NCS) sets out the basic guidelines for an integrated effort at protecting the environment and natural resources of the country. This broad framework provides a comprehensive point of reference for all agencies, departments, private sector companies, financial institutions, and donor agencies for undertaking systematic efforts at bringing about an effective change for sustainable development.

Efforts are being made for protection, conservation, preservation and rehabilitation of environmental conditions in Pakistan. Needless to say that the public awareness, in the arena is vital where inclusion of NGOs, CBOs, and general masses as a whole is the need of the hours. Time is not far away, when environmental rights will be demanded as fundamental rights by the masses and the Environmental Agencies will have to consider the demands of clean water, clear sky and the natural environment free from the CFCs, NO_x, SO_x, & CO_x.

INTRODUCTION

ENVIRONMENTAL LAWS IN PAKISTAN: A CRITICAL ANALYSIS

Are Environmental Laws effective in Pakistan to implement a comprehensive environmental management plan to save the natural environmental phenomenon for all generations to come? The pros and cons of Environmental Laws in Pakistan can be examined in the historical perspective as well as the present-day panorama. At the time of independence in 1947, Pakistan had no industrial base. Rapid development took place during the 1950s and 1960s, which was based on building second-hand and pollution-prone plants from Europe. Throughout the country industrial base, a combination of old designs, poor operation and lack of maintenance has resulted in abnormally high levels of effluents and emissions per unit of production. Resultantly, Pakistan falls among the worst industrial polluted developing countries. Poverty, over-population, illiteracy, ill-health, unmanaged land use patterns, inefficient energy use and unplanned sprawl of human settlements are identified as severe pressures on the environment of Pakistan. Moreover, Pakistan faces a number of serious environmental problems such as soil erosion, pesticides misuse, deforestation and urban pollution. The key constraints to their solution are population growth in relation to the limited availability of resources and presently unsustainable pattern of resource use. To make the present paradigm of Environmental Laws effective, Pakistan has to delegate full powers to the concerned institutions, establish more environmental courts with their jurisdiction, form rules and regulations on enforcement and compliance procedures, provide extensive training in technical, legal and operational fields to the Staff, enjoin various agencies of Government charged with formidable environmental protection to coordinate their activities, synchronize and harmonize their rules and regulations to safeguard the future of generations.

1.1 Brief Description Of The Environment

Mankind and all flora and fauna are dependent for their survival on perfect ecological balance¹ of nature. The growth of economic power and unbalanced industrial expansion has exerted unbearable pressure on the limited natural resources thereby causing the depletion of such precious resources and depriving future generations of their right to development. Further, such developmental activities result in environmental pollution thereby affecting mankind's most crucial fundamental right i.e. right to life. Inherent in the depletion of natural resources and environmental degradation is the clear and present danger of threat to the survival of life on the planet earth. It is therefore desirable that mankind may exploit and enjoy the natural resources and carry out development work in a balanced manner with a view to getting optimal benefits and without having to compromise the future of succeeding generations.

Due to mankind continued and persistent interference with the nature, thanks to the development of science and technological innovations, the problem of environmental imbalance and degradation of the environment have assumed alarming proportions resulting in air, water and soil pollution, desertification, deforestation, and soil erosion.

Development and progress are desirable but must be in harmony with the requirement of maintaining a proper ecological balance of nature. Natural resources are the bounty of nature and should be utilized in a gainful and un-wasteful manner. Nearly one and half century ago, an Indian Chief, while responding to an offer of sale of his land to a White man stated:

¹Source Justice Sh. Riaz Ahmad Former Chief Justice of Pakistan "*Legal and Institutional Framework for the Protection of Environment in Pakistan.*"
http://www.unep.org/dpdl/symposium/Documents/Country_papers/PAKISTAN.doc (last visited on 1.10.2006).

“How can you buy or sell the sky, the warmth of the land; the idea is strange to us. If you do not own freshness of the air and sparkle of the water, how can you buy them?

This we know, the earth does not belong to a man; man belongs to the earth. This we know, all things are connected like the blood which unites one family. All things are connected. Whatever befalls the earth befalls the sons of the earth. Man did not weave the web of life; he is merely strand in it. Whatever he does to the web he does to himself.”²

This is indeed a profound statement and epitomizes the whole philosophy of the ecological balance of nature.

1.2 Definition of the Environment

The definition of the term "environment" establishes the philosophical basis of any legislation drafted and implemented to protect the environment. The way that the term environment is defined indicates the value placed on various aspects of the environment and the perceptions which policy makers have about the environment, particularly humans' place in it. Such a definition also reflects the focus of the environmental legislation and the commitment of the State to protecting the environment. It is therefore essential to begin with defining the environment.

The term “environment” means different things to different people. Some would consider the term to refer to the basic elements of the earth, such as the air; land and water. Some definitions, particularly in the context of which we are presently speaking of the environment, consider the environment to consist only of those natural resources upon which humans place a value, that is aspects of the earth, sky and waters that can be polluted or used up. Another definition might include all living elements of the earth as well as the natural resources, but not include humans in the definition or define the environment as it relates to humans. The primary criticism of such definitions is that they fail to place humans within the

² Source Justice Sh. Riaz Ahmad Former Chief Justice of Pakistan, “*Legal and Institutional Framework for the Protection of Environment in Pakistan.*”

http://www.unep.org/dpdl/symposium/Documents/Country_papers/PAKISTAN.doc (last visited on 1.10.2006).

environment, divorcing humans from the natural environment and implying that humans are somehow above or beyond nature.

Increasingly, the environment is described in a much more holistic sense. The place of humans in the environment was recognized at the UN Conference on the Human Environment held in Stockholm in 1972: "Man is both creature and moulders of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social, and spiritual growth." The World Charter for Nature, adopted by the UN General Assembly in 1982 states: "Mankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients. Civilization is rooted in nature, which has shaped human culture and influenced all artistic and scientific achievement, and living in harmony with nature gives man the best opportunities for the development of his creativity and for rest and relaxation."

As per Pakistan Environmental Protection Act, 1997 "environment"³ means:

- (a) air, water and land;
- (b) all layers of the atmosphere;
- (c) all organic and inorganic matter and living organisms;
- (d) the ecosystem and ecological relationships;
- (e) buildings, structures, roads, facilities and works;
- (f) all social and economic conditions affecting community life; and
- (g) the inter-relationships between any of the factors specified in sub-clauses (a) to (f);

1.3 Need of Environmental Legislation In Pakistan

The ever-increasing problem of environmental pollution and degradation of the environment attracted the attention of international community and voices were raised for international efforts to respond to the emerging threat. The international community must be

³ Section 2 (x) of Pakistan Environmental Protection Act, 1997 – Extraordinary published by Authority in the Gazette of Pakistan.

commended for a timely action. It succeeded in convening the United Nations Conference on Human Environment in Stockholm in 1972 to deliberate upon the issues and problems of the environment. The participating states agreed upon collaboration and co-operation in preparing and launching an action plan to prevent the environmental degradation and preserve the nature. The Declaration issued by the Conference was indeed a laudable achievement of mankind. The Declaration states, inter alia, “man has the fundamental right to freedom, equality and condition of life and bears a solemn responsibility to protect and improve the environment” The Conference further emphasized upon individual and collective efforts to preserve the environment⁴.

The Government of Pakistan has actively pursued the cause of environmental protection. It has been party to several international declarations, agreements and conventions on the subject. It signed and ratified the U. N. Framework Convention on Climate Change. It has also ratified the Convention on Biological Diversity. It participated in the 1992 Conference at Rio-de-Jeniro and played an effective role in preparing and finalizing the guidelines for adoption by the member states. Pakistan has also created structures and enacted rules for the implementation of various international environmental agreements such as International Plant Protection Convention, Rome, 1951; Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention), Paris, 1972; Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1973; Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 1979; Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985 etc.⁵

Solid legal framework at all levels, supported by sound institutions that has a respect for the rule of law is critical in achieving desired environmental objectives. The scenario of

⁴Source Justice Sh. Riaz Ahmad Former Chief Justice of Pakistan “*Legal and Institutional Framework for the Protection of Environment in Pakistan.*”

http://www.unep.org/dpdl/symposium/Documents/Country_papers/PAKISTAN.doc(lastvisited on 1.10.2006).

⁵ Ibid.

present world challenges to develop the best possible international treaties and agreements to ensure that each legal document will effectively be implemented for sustainability of the resources for the protection of basic rights. To adopt a unique and innovative approach for law making, public consultation is the dire need of the hours. Pakistan inherited a number of laws from the colonial period that have been converted to environmental provisions. The Constitution of Pakistan has environmental objectives in the preamble⁶. The Pakistan Environmental Protection Ordinance (PEPO) was passed in 1983. It highlighted the need to have a particular framework of environmental laws in Pakistan to address an emerging national phenomenon. PEPO established the Pakistan Environmental Protection Council (PEPC) and Pakistan Environmental Protection Agency as well as introduced the concept of Environmental Impact Assessment. The irony of the fate is that PEPO remained mostly unimplemented and a cosmetic document.

To overcome the environmental problems the Government drafted cornerstone legislation to protect the environment in Pakistan. It was the first clear-cut governmental commitment to environmental improvement. The 1983 Ordinance enabled both Federal and Provincial legislatures to enforce and control environmental pollution to some extents. The Ordinance established the Pakistan Environmental Protection Council (PEPC) as the supreme environmental policy-making body in the country and the Pakistan Environmental Protection Agencies both at the Federal and Provincial levels to implement the Ordinance⁷.

Little or no action appeared to have been taken under the Ordinance, as there was no provision for the establishment of any tribunal in the Ordinance. Therefore most of the provisions of the Ordinance remained in cold storage. More importantly it read the environment only in negative terms such as pollution control without any court. However, there was a need for an overall comprehensive legislation for the environment to consolidate

⁶ Preamble of the Constitution of the Islamic Republic of Pakistan by Ministry of Law, Justice and Human Rights, pp.1-3.

⁷Source Prof. Jawad Hassan, "*Development of Environmental Laws in Pakistan*"

and update the existing laws with the specialized tribunals and agencies. After lapse of the PEPO, long consultation of four years has taken place for drafting a new Act that was finally approved by the Federal Cabinet in 1997.

1.4 Objectives of Enforcement of Environmental Laws

The Constitution of Pakistan contains provisions for environmental protection and resource conservation. The Constitution mentions “Environmental Pollution and Ecology”⁸ as a subject in the Concurrent Legislative List, meaning that both the Federal and Provincial Governments may initiate and make legislation for the purpose.

Several laws existed for the protection of the environment. Some of these laws are Federal and the rest Provincial in character. The important laws on the subject are the Canal and Drainage Act 1873; The Explosives Act 1884; The Ports Act 1908; The Forest Act 1927; The Fisheries Ordinance 1961; The Punjab Wildlife (Protection, Conservation and Management) Act 1964; The Fire Wood and Charcoal (Restriction) Act 1964; Motor Vehicles Ordinance 1965; The W. P. Regulation and Control of Loudspeaker and Sound Amplifier Ordinance 1965; The Agricultural Pesticide Ordinance 1971; The Antiquities Act 1975; etc.

Besides, the Pakistan Penal Code 1861, which is a general criminal law, and applies all over the country, contains specific provisions on the subject. Thus, it prohibits mischief by killing or maiming animals, or damaging works of irrigation or a river or a road or a bridge or drainage or firing explosive substances with intent to cause damage. The Code also prohibits public nuisance by acting negligently to spread the infection of disease or disobeying quarantine rule or causing adulteration of food or drink or drug, or fouling water or making the atmosphere noxious to health, etc. The promulgation of the Environmental Protection Ordinance 1983 was the first codifying legislation on the issue of environmental

⁸ Serial 24 of Concurrent Legislative List of the Constitution of the Islamic Republic of Pakistan by Ministry of Law, Justice and Human Rights, pp. 259-263.

protection. This was indeed an enactment to plug the gaps and remove defects/deficiencies in the legislation.⁹

1.5 Existing Environmental Legislation in Pakistan

The cornerstone of environmental legislation is the new Pakistan Environmental Protection Act (PEPA), 1997, which has superceded the Pakistan Environmental Protection Ordinance (PEPO), promulgated in 1983. Though this law is the main Federal Environmental Legislation, other laws have also been dealing with issues of environment. In Pakistan there are reams of law to protect the environment which go no further than the statute book. The Constitution of Islamic Republic of Pakistan confers concurrent legislative power on the Federal government and the Provinces to legislate in respect of environmental pollution and ecology. The relevant Articles of the Constitution of the Islamic Republic of Pakistan are 9¹⁰, 14¹¹, 184(3)¹² and 199(1) (c)¹³. These provisions have also been used in the landmark environmental law case of Shehla Zia Vs. WAPDA by the Honorable Supreme Court of Pakistan. Nowadays, various environmental writ petitions have been filed in different courts of law against air, noise, and waste and water pollution. All petitions indicate

⁹ Source Justice Sh. Riaz Ahmad Former Chief Justice of Pakistan “*Legal and Institutional Framework for the Protection of Environment in Pakistan.*”

http://www.unep.org/dpdl/symposium/Documents/Country_papers/PAKISTAN.doc (last visited on 1.10.2006).

¹⁰ Article 9 “No person shall be deprived of life or liberty save in accordance with law.”

¹¹ Article 14 “The dignity of man and, subject to law, the privacy of home, shall be inviolable.”

¹² Article 184 “(1) The Supreme Court shall, to the exclusion of every other court, have original jurisdiction in any dispute between any two or more Governments. Explanation.-In this clause, “Governments” means the Federal Government and the Provincial Governments.

(2) In the exercise of the jurisdiction conferred on it by clause (1), the Supreme Court shall pronounce declaratory judgments only.

(3) Without prejudice to the provisions of Article 199, the Supreme Court shall, if it considers that a question of public importance with reference to the enforcement of any of the Fundamental Rights conferred by Chapter I of Part II is involved have the power to make an order of the nature mentioned in the said Article.”

¹³ Art. 199(1) © “On the application of any aggrieved person, make an order giving such directions to any person or authority, including any Government exercising any power or performing any function in, or in relation to, any territory within the jurisdiction of that Court as may be appropriate for the enforcement of any of the fundamental Rights conferred by Chapter 1 Part II.”

that the growing pollution in the cities of Pakistan is devastatingly hazardous and detrimental to human life.

1.6 Conclusion

The Environmental Protection Ordinance, 1983, since repealed difficulties were experienced in its enforcement as the ordinance was narrow in scope and lacked adequate legal mechanism for its enforcement. It provided only for the establishment of Environmental Protection Agency at the Federal level and no legal provision existed for the creation of similar environmental agencies at the provincial level and a frame work for the delegation of Provincial Environmental Protection. Pakistan Environmental Protection Act, 1997 attempted to overcome all these shortcomings.

Pakistan as well as other developing countries are facing a number of problems in terms of its environmental laws. Pakistan has also drafted its new laws with more strict provisions and enforcement. To make the present environmental law effective, Pakistan needs to delegate full powers to provincial Environmental Protection Agencies as set out in the Pakistan Environmental Protection Act, form more environmental courts with the extensive jurisdiction, draft rules and regulations on enforcement and compliance procedures, provide extensive training in technical, legal and operational fields to Environmental Protection Agencies staff, enjoin various agencies of Government charged with environmental protection to coordinate their activities and synchronize, and harmonize their rules and regulations in order to implement a comprehensive environmental management plan. No stone may be unturned in strict compliance of the provisions of the Environmental Laws and especially emphasis on the implementation/monitoring side is the most desirous element.

CRITICAL REVIEW OF ENVIRONMENTAL LEGISLATION IN PAKISTAN

The roots of the Pakistani's judiciary's receptivity to environmental rights lie in the recognition that they are yet another facet of human rights, which it is the special duty of the judiciary to protect. As protection of human rights has been channeled through public interest litigation in Pakistan, this form of litigation came, over the years, to be inextricably linked to the environmental movement in the region. A brief overview of the relevant Articles of the Constitution of the Islamic Republic of Pakistan may clear the picture for the importance of environmental rights in the nation of pure.

2.1 Relevant Articles of the Constitution of Pakistan

The relevant articles of the constitution of the Islamic Republic of Pakistan present the following scenario:-

Part II, Art. 9¹

No person shall be deprived of life or liberty save in accordance with law.

Part II, Art. 14²

(1) The dignity of man and, subject to law, the privacy of home, shall be inviolable.

Part VII, Art. 184³

(1) The Supreme Court shall, to the exclusion of every other court, have original jurisdiction in any dispute between any two or more Governments.

Explanation.-In this clause, "Governments" means the Federal Government and the Provincial Governments.

¹ The Constitution of the Islamic Republic of Pakistan by Ministry of Law, Justice and Human Rights. p.10.

² Ibid., p.15.

³ Ibid., pp.116-117.

- (2) In the exercise of the jurisdiction conferred on it by clause (1), the Supreme Court shall pronounce declaratory judgments only.
- (3) Without prejudice to the provisions of Article 199, the Supreme Court shall, if it considers that a question of public importance with reference to the enforcement of any of the Fundamental Rights conferred by Chapter I of Part II is involved have the power to make an order of the nature mentioned in the said Article.

Art. 199(1) ©⁴

On the application of any aggrieved person, make an order giving such directions to any person or authority, including any Government exercising any power or performing any function in, or in relation to, any territory within the jurisdiction of that Court as may be appropriate for the enforcement of any of the fundamental rights conferred by Chapter 1 Part-II.

2.2 Introduction to Pakistan Environmental Protection Ordinance, 1983

Pakistan Environmental Protection Ordinance (PEPO), promulgated in 1983. The foundation-stone of environmental legislation is the new Pakistan Environmental Protection Act (PEPA), 1997, which has superceded the PEPO, 1983 and now is the main⁵ Federal Environmental Legislation. The description of chronological prominent events of environmental protection and sustainable developments during the last twenty years, in Pakistan, is as follows:-

Chronology of Major Events leading to Environment Protection & Sustainable Development, during the last two decades⁶.

- | | |
|------|---|
| 1983 | Development of the Environment Protection Ordinance; |
| 1984 | Establishment of the Pakistan Environmental Protection Council (PEPC) under |

⁴ Ibid., pp.124-125.

⁵ http://www.sacep.org/html/mem_pakistan.htm (Last visited on July 28, 2006)

⁶ http://www.sacep.org/html/mem_pakistan.htm (Last visited on July 28, 2006)

- the Environment Protection Ordinance;
- 1992 Development of the Forestry Sector Master Plan for the period of 1993-2018
Adoption of the National Conservation Strategy;
- 1994 The establishment of the Ministry of Environment, Local Government and Rural
Development;
- 1997 Enactment of the Pakistan Environmental Protection Act, which replaced the
Environment Protection Ordinance of 1983;
- 2000 Mid term review of the NCS, which recommended the development of NCS-2
for the period of 2002-2012;

There are two codified pieces of legislation enacted by the Pakistani government that are intended to provide an overriding legislative framework for environmental issues: the Pakistan Environmental Protection Ordinance 1983 and the Pakistan Environmental Protection Act 1997. The Act, 1997 is complimented by the implementation of various Rules and Regulations that provide a framework for dealing with the many complex environmental issues that confront Pakistan as a nation.

To administer these laws, the Government of Pakistan has established an institutional framework. For example, Pakistan Environmental Protection Agencies (PEPAs) have been established in all four of the nation's provinces to promote the overriding objectives of conservation, sustainable development and to improve the decision making process. This role is particularly important in the context of increased development and industrial activity.

At the federal level the Ministry of Environment is the main institution that deals with issues relevant to the environment. It has divisions dedicated to the environment, urban development and wildlife and is responsible for the coordination of its derivative institutions, such as the Pakistan Environmental Protection Council (PEPC) and the Pakistan Environmental Protection Agency (Pak EPA). The PEPC formulates environmental legislation and the Pak EPA is the agency charged with planning and implementation duties.

2.3 Introduction to Pakistan Environmental Protection Act, 1997

The Government passed and promulgated the Pakistan Environmental Protection Act on December 6, 1997. The Act is providing for the protection, conservation, rehabilitation and improvement of the environment. It contains concrete action plan and programme for the prevention of pollution and preservation of clean and healthy environment.

2.4 Salient Features of the Act

The salient features⁷ of the Pakistan Environmental Protection Act, 1997 are as follows:

- (1) The Act covers the air, water, soil, marine and noise pollution including pollution caused by vehicles.
- (2) The Act provides for fixing the National Environment Quality Standards (NEQS) and their strict enforcement. For default, the Government has been empowered to levy a pollution charge.
- (3) The Government has been empowered to issue environmental protection orders so as to effectively deal with and respond to the actual or potential violation of the law leading to environmental degradation.
- (4) The law provides for an Environmental Impact Assessment (EIA) of various projects being launched in the country including the construction of roads, buildings, factories or other installations, or any alteration, expansion or repair of the same, or mineral prospecting or mining or quarrying, etc. The law states that no project may be launched without an EIA being carried out and safeguards provided to the effect that the proposed project will not pollute the environment.
- (5) The imports of hazardous waste into the country has been banned and the transport of hazardous substances and dangerous chemicals or toxic material or explosive substances etc. has been regulated, through licenses, under prescribed rules and procedure.

⁷Source Justice Sh. Riaz Ahmad Former Chief Justice of Pakistan “*Legal and Institutional Framework for the Protection of Environment in Pakistan.*”

http://www.unep.org/dpdl/symposium/Documents/Country_papers/PAKISTAN.doc(last visited on 1.10.2006).

- (6) To ensure compliance with the NEQS, the law provides for an appropriate mechanism including the installation of devices so as to control the pollution caused by motor vehicles.
- (7) A fairly high level body called, Pakistan Environmental Protection Council, headed by the Prime Minister and comprising the Chief Ministers of the provinces, relevant Ministers of the Federal and provincial governments, representative of trade, commerce and industry and members of the academia, has been constituted to formulate policy and provide guidelines for enforcing the law.
- (8) For the effective implementation of the provisions of the law, the Pakistan Environmental Protection Agency, headed by a Director General with other staff has been constituted. This Agency is responsible for enforcing the policy and implementing the provisions of the law. On the same pattern, Provincial Environmental Protection Agencies have been created in each province.
- (9) There has been established Provincial Sustainable Development Fund, regulated and managed by a Board.
- (10) The Environmental Tribunals with exclusive jurisdiction to try serious offences have been provided. The law also provides for the appointment of Magistrates to try minor offences. Appeal against an order/judgment of a Magistrate lies before the Court of Session, whose decision is final. Appeal against the judgment of Tribunal lies to the High Court. Stringent punishment through heavy fine and imprisonment has been prescribed.
- (11) The Act also empowers the Federal Government to make rules for the implementation of international environmental agreements and conventions to which Pakistan is a party.

2.5 BRIEF REVIEW OF THE PAKISTAN ENVIRONMENTAL PROTECTION ACT, 1997

An Act to provide for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution and promotion of sustainable development. The brief review of the Act indicates the main characteristics; enumerated as per details below.

Pakistan Environmental Protection Act-1997 elaborates the powers and functions of the Pakistan Environmental Protection Council including Prime Minister of Pakistan its Chairman, Minister Incharge as its Vice Chairman and all the four Chief Ministers as its Members including thirty five other Members belonging to Agriculture, Trade, Industry, Medical, Legal and Trade Unions etc.

Pakistan Environmental protection Agency (Federal EPA) and Provincial Environmental Protection Agencies are the important environmental controlling authorities/bodies to implement the provisions of the Act.

Provincial Sustainable Development Funds are established in each province. The source of income include grants, loans, financial assistance, advances, donations and other non-obligatory funds from the foreign governments, national and international governments and non-governmental organizations. This fund can be utilized for protection, conservation, rehabilitation and improvement of the environmental protection and prevention of pollution and sustainable national development.

National Environmental Quality Standards (NEQS) have been devised by the Pakistan Environmental Protection Agency where the Industry and relevant establishments are bound not to emit the pollutants more than the prescribed limits.

Protection Orders can be issued by the Federal Agency/Provincial Agency where the Agency is satisfied that the discharge/emission of effluent, waste, air pollution, noise and handling of hazardous substances are occurring in violation of the provisions of the Act. Here the Agency can take preventive measures for installation, replacement, alteration of the equipment and to eliminate the discharge, disposal, handling the act of emission or omission.

Enforcement Mechanism including the Environmental Magistrate, Environmental Protection Tribunals and Environmental Protection Orders can become more effective if the

complete environmental mechanism is working to protect, preserve, conserve, rehabilitate and improve the environmental conditions.

Contravention of Section 14; handling of hazardous substances and Section 15; motor vehicle pollution is tantamount to fine of Rs.100,000 and daily additional fine upto Rs.1000 for every day if the same contravention will be continued. Moreover the contravention of Section 11, 12, 13, and 16 of the Act lead towards the penalties upto one million rupees and additional daily fine of upto Rs.100,000 for everyday if the contravention is still continued. Additional fine shall be commensurate with the amount of monetary values gained by the offender/polluter. Furthermore, if the conviction is made under the Act, it may leads to sending of the copy of order of conviction to the relevant chamber of commerce and industry, imprisonment up to 2 years and finally closure of the factory. Further, confiscation of factory equipment material, documents or relevant objects involved in the offence can also be made.

Appeal can be filed in the Environmental Tribunal against the decision of the Federal Environmental Agency or Provincial Environmental Agency. Moreover appeal against the decision of the Environmental Tribunal can be filed in the High Court. On the other hand, against the decision of the Environmental Magistrate, appeal can be filed in the Session Court.

2.5.1 MAIN FUNCTIONS OF ACT, 1997

The Environmental Protection Act 1997 has two main functions including creation of different institutions and regulating their activities so that the pollution can be controlled and natural environment can also be preserved.

The Act is enforced through the administrative measures, judicial sanctions and effective involvement of the civic society.

2.5.2. ENVIRONMENTAL MAGISTRATES

Trial for less serious offences including section -14; handling of hazardous substances, section 15; motor vehicle pollution, non compliance with the order of Pakistan Environmental Council and provision of this act can be issued/made by the Environmental Magistrates.

2.5.3 INSTITUTIONS CREATED BY THE ACT.

The most effective institutions created by the Environmental Protection Act including Pakistan Environmental Protection Council (PEPC) and Pakistan Environmental Protection Agency (Federal EPA).

3.5.4 INTRODUCTION TO PAKISTAN ENVIRONMENTAL PROTECTION COUNCIL

The Environmental Protection Council is coordinating, supervising the enforcement and approving the comprehensive national policies. Moreover the Council is ensuring active implementation of National Environmental Quality Standards and providing guidelines for integration of the principals and concerns of sustainable development into national plans and policies. The Council is responsible to consider the National Environmental Report and give instructions/directions thereon.

2.5.5. INTRODUCTION TO PAKISTAN ENVIRONMENTAL PROTECTION AGENCY

The Pakistan Environmental Protection Agency is the central implementing agency in the Environmental Protection Act, 1997, which is headed by the Director General and supported by the subordinate staff.

The agency has the power to administrate & to implement the provisions of the Act, to prepare revise & establish the National Environmental Quality Standards. It also

establishes standards for quality of ambient air, water and land leading towards establishing system for prevention and control of pollution including surveys, monitoring and inspection etc. The agency is to estimate the cost of cleanup and rehabilitation and to certify laboratories as approved/sanctioned one for conducting tests and analysis. It also provides advice and assistance in environmental matters. The agency is promoting public education and awareness of Environmental issues and also encouraging the formation of NGOs & the Community & Village Organizations. The agency is responsible to take all necessary measures for pollution control and promotion of the sustainable development.

2.5.6 INTRODUCTION TO PROVINCIAL ENVIRONMENTAL PROTECTION AGENCIES

The Environmental Protection Act, 1997 has introduced the provincial environmental agencies in each province which is headed by the Director General at provincial level.

The functions of the provincial environmental protection agencies are the same as being exercised the powers and functions by the Federal EPA. Some powers to protect the natural environment in the province have also been delegated by Provincial Governments.

2.5.7 PROVINCIAL SUSTAINABLE DEVELOPMENT FUND

The Provincial Sustainable Development Fund is established in each province. The Sources of income including grants or loans from federal government or provincial government; aids & assistance, grants, advances, donations etc from foreign governments, national & international agencies and NGOs and contribution from private organizations etc. These donors will provide financial assistance to environmental projects. Moreover, further prime object of the Pakistan Environmental Protection Act is the proper management of the fund, which is being managed by a board.

2.5.8 NATIONAL ENVIRONMENTAL QUALITY STANDARDS

The National Environmental Quality Standards have been established by the Federal Agency, which has set the limits for emissions. The characteristics of these Standards include detailed, specific, related to sector activity and levying taxes for operating outside NEQS.

2.5.9 PROHIBITION OF CERTAIN DISCHARGES OR EMISSIONS

The Act provides that there will be no discharge in excess of National Environmental Quality Standards and no excess emission in excess of limits laid down by the federal agency. If there is contravention of discharges or emissions, then levying for the subject contravention to restore the natural environment will become imperative.

2.5.10 ACTIVITIES REGULATED BY THE ACT.

The activities regulated by the Pakistan Environmental Protection Act, 1997 are to focus on two main areas i.e. Pollution control and abatement. Here stress on assessing environmental impacts and Discharge or emissions in excess of NEQS is also be focused. Moreover, motor vehicle emission in excess of NEQS is prohibited. Further, the Act provides for the prohibition on import of hazardous waste and handling of hazardous substances.

2.5.11 HANDLING OF HAZARDOUS SUBSTANCES

Handling of hazardous substances to be regulated through licenses, which are required to Generate, Collect, Consign, Transport, Treat, Dispose of, Store, Handling and Import of these dangerous substances.

2.5.12 REGULATION OF MOTOR VEHICLES

Here no vehicle can exceed the National Environmental Quality Standards. Federal agency can prescribe the fitting of pollution control devices or fuel or undergo maintenance and these vehicles are not allowed to operate until there is compliance with these directions.

2.5.13 ASSESSING ENVIRONMENTAL IMPACTS

Pakistan Environmental Protection Act, 1997 provide for the pre-construction or operation of a project in prescribed category where an initial environmental examination and Environmental Impact Assessment (EIA) required for those projects, which are likely to cause an adverse environmental effect.

2.5.14 ENVIRONMENTAL PROTECTION ORDER

In case of contravention of the Act the federal agency can order for the stopping and control of offending actions, installation or alteration of the equipments, taking measures for removal of pollutants and restoration of the environment. The federal agency may take action for non compliance with a strict order. The federal agency may recover costs of taking action as well from the polluters.

2.5.15 ENFORCEMENT MECHANISM

The Pakistan Environmental Protection Act, 1997 provide the enforcement mechanism indicating the administrative measures, pollution charge, environmental protection order, administrative penalty and judicial measures through the court of law. Moreover, three levels of penalty, civil enforcement, Public can seek assistance and to approach directly to the Pakistan Environmental Protection Council, and also to approach the Environmental Protection Agency. People can participate in EIA review and can lodge a formal notice with the Environmental Protection Agency about an infringement.

2.5.16 ROLE OF ENVIRONMENTAL TRIBUNALS

Environmental Tribunals have very vital role for conducting trial of the more serious offences, issuance of the arrest warrants and also acts as an appellant body. Environmental Magistrates jurisdiction is to conduct the trial of less serious offences.

2.5.17 THREE LEVELS OF PENALTY

Level 1 Section 17(2))	Environmental Magistrate	Section 14: handling of hazardous substances. Section 15: motor vehicle pollution. Non compliance with order of PEPC or EPA	Up to Rs. 100,000. Additional daily fine of up to Rs 1,000 for every day the contravention continues
Level 2 Section 17 (1)	Environmental Tribunal (Section 21)	Section 11: pollution in excess of NEQS. Section 12: IEE & EIA. Section 13: Import of hazardous waste. Section 16: non compliance with and Environmental Protection Order	Up to one million rupees. Additional daily fine of up to Rs 100,000 for every day the contravention continues. Additional fine commensurate with the amount of monetary values gained by the offender
Level 3 Section 17(5)	Environmental Magistrate/ Environmental Tribunal (by reference to the relevant level 1 of Level 2 offences)	Subsequent conviction under PEPA	In addition to specific penalties relating to the offence: Copy of order of conviction to the relevant chamber of commerce and industry. Imprisonment of up to 2 years Closure of factory. Confiscation of factory, equipment, materials, documents, or other objects involved in the offence. Restoration. Compensation to any person for loss or injury to person of persons

2.5.18 APPEAL

The appeals can be filed in the Federal Environmental Agency or Provincial Environmental Agency. Appeals to the environmental tribunal can also be made against the decision of the environmental Agency. Against the tribunal decision, appeal can be filed in the high court. Furthermore, against decision of the Environmental Magistrate, appeal can be filed in the Court of Sessions.

2.6 Jurisdiction of Various Courts of Law

The Supreme Court

This is Pakistan's highest court⁸ and when it makes a decision, that decision is applicable throughout Pakistan. Normally, no one can begin a case in the Supreme Court. It mainly hears cases on appeal from other courts but the kind of cases like matters of public interest involving fundamental rights are different and can be heard directly by the Supreme Court under Article 184(3) of the Constitution of Pakistan.

The High Courts

High Courts are the next level of courts below the Supreme Court of Pakistan. There is a High Court for each province and for Azad Jammu & Kashmir as well. When a High court makes a decision that decision will be binding on all the lower courts of that province. High court also works as appellant court for decisions by the lower courts. However, fundamental rights cases can be heard by the High Court under Article 199(a)© of the Constitution of Islamic Republic of Pakistan.

Environmental Tribunal

Environmental Tribunals are provided for the Pakistan Environmental Protection Act, 1997 and have been constituted. Environmental Tribunals deal⁹ with the cases including:

⁸ ICUN, You Can Make a Difference: Environmental Public Interest Cases in Pakistan, 1st Edition, 1998, p.24.

⁹ Ibid., p.27

Pollution (other than motor vehicles).¹⁰ Discharging or emitting pollution in excess of the National Environmental Quality Standards or standards set relating to the quality of ambient air, water and land;

Commencing a project without an approved Environmental Impact Assessment (EIA) Initial Environmental Examination (IEE).¹¹ These are required for such categories of projects as may be prescribed by the rules and regulations to the Act;

Prohibition of import of hazardous waste.¹² This prohibition extends into Pakistan's territorial waters, exclusive economic zone and historic waters; and

Compliance with an Environmental Protection Order.¹³ These orders may be issued by the federal or provincial EPA in order to prevent, stop or remedy a breach of the Act.

Environmental Magistrates will deal with the following cases:

Handling of hazardous substances (including generation, storing, transportation and disposal) outside the law.¹⁴ This refers to any domestic law as well as any relevant international convention.¹⁵

Pollution from motor vehicles.¹⁶ Discharging or emitting pollution in excess of the National Environmental Quality Standards or standards set relating to the quality of ambient air, water and land; Any rule, regulation, condition of license, order or direction issued under the Act. These may be by the Pakistan Environmental Protection Council, the federal or provincial Environmental Protection Agencies.

¹⁰ Section 11, Pakistan Environmental Protection Act, 1997.

¹¹ Section 12, Ibid.

¹² Section 13, Ibid.

¹³ Section 16 Ibid.

¹⁴ Section 14, Pakistan Environmental Protection, 1997.

¹⁵ In particular the Convention on the Control of Trans-boundary Movements of Hazardous Waste and Their Disposal, Basel, 1989 (Known as the Basel Convention).

¹⁶ Section 15, Pakistan Environmental Protection Act, 1997.

The Lower Courts

Beneath the High Courts in each province is a system of lower courts both for resolving disputes between the people and for criminal matters.

If any case falls under the purview of the Pakistan Environmental Protection Act, 1997, the Environmental Tribunals have been established and Environmental Magistrates have been appointed. First of all, approach to relevant courts as they have exclusive jurisdiction in connection with the environmental cases.

If any case falls outside the jurisdiction, then the petitioner will have to consider using the constitutional provisions for attaining relief. There are two provisions that can help. First, if the problem is where environment is becoming polluted even though there is compliance¹⁷ with the National Environmental Quality Standards (NEQS), health is suffering or basic amenities are not being supplied. Then in legal terms, this would be called an issue where the fundamental rights are being affected.

The second problem is when the government has done or is doing something that it ought not to, or is not doing something which it ought to.¹⁸ It may be directly involved in the environmental problem, or indirectly, by not enforcing the law on someone else. Here the action to make the government do the job that the law demands.

Firstly, the case may be taken up with the Environmental Tribunals or the Environmental Magistrates, to look into the matter whether the particular case falls within the purview of the Act. If a case does come under the Act, it is pre-requisite to give notice to the Federal or relevant Environmental Protection Agency about the issue/problem.

If the concerned EPA has not taken any action then the petitioner can bring the matter to the Environmental Tribunal and before that he needs to give notice to the federal or

¹⁷ ICUN. You Can Make a Difference: Environmental Public Interest Cases in Pakistan, 1st Edition, 1998, p.26.

¹⁸ Ibid., p.26.

relevant provincial Environmental Protection Agency about the matter to show the breaches of the Act and to say that the petitioner intends to make a complaint to the Environmental Tribunal. After 30 days¹⁹ have passed, now the petitioner can make a complaint to the Environmental Tribunal.²⁰

In case of subjects specified for an Environmental Magistrate, the petitioner can make a complaint directly to the Environmental Magistrate and do not need as first to give notice to an Environmental Protection Agency.²¹

Finally, in order to file a complaint with either the Environmental Tribunal or an Environmental Magistrate, the petitioner needs to qualify as an “aggrieved person”.²² Aggrieved Person has to prove a nature of the connection between the case and the applicant? This information is needed by the High Court that the petitioner is an aggrieved person? An “aggrieved person” is the subject of many court decisions. It is still the subject of debate amongst lawyers and in the courts, but it is clear that the courts are inclined to interpret it widely in the cases of public interest litigation. For example, all cases of the Kirthar National Park, Haleji Lake and Houbara Bustard were heard by the High Court and in each case Mr. Tanveer Arif, the President of SCOPE commenced the case with help of others. The status of SCOPE as a conservation organization was accepted as sufficient for bringing the cases.

In the Quetta High rise building case the right of the Isa family to bring the case was challenged and the court confirmed the earlier court decisions²³ that an “aggrieved person” does not necessarily mean a person having a strict legal right. Even a person who is deprived of a benefit or privilege by an illegal act or omission can be considered an aggrieved person.

¹⁹ ICUN. You Can Make a Difference: Environmental Public Interest Cases in Pakistan, 1st Edition, 1998, p.27.

²⁰ Section 21(3)(b), Pakistan Environmental Protection Act, 1997.

²¹ Section 24(3), Ibid.

²² This issue is called “standing” or “locus standi” in legal terms.

²³ 1992 PLD Karachi, 54..

The Supreme Court has also interpreted “aggrieved person” widely. If found that people living some distance away from the construction of high rise buildings can bring a case where such a case has characteristics of public interest litigation and the people bringing the case are doing this job free of charge.²⁴

There is one further right provided under the Pakistan Environmental Protection Act. If the petitioner is aggrieved by an order or direction of an Environmental Protection Agency he can appeal to the Environmental Tribunal to reconsider the issue.

The Supreme Court of Pakistan has indicated that rights to a clean atmosphere and unpolluted environment (as well as proper healthcare, shelter and food) are protected under the Constitution as fundamental rights.²⁵ Although the Constitution is not so specific, the court has interpreted the provisions, dealing with the right to life²⁶ and dignity of man²⁷ in a very broad manner.

When the fundamental rights are breached the petitioner has a right to bring the case having a legal cause of action. In the KAWWS case²⁸, the community was affected by contaminated water resulting from neglect of the water and sewerage systems by the civic agencies. For this type of case, one may approach either the Supreme Court²⁹ or High Court.³⁰

If petitioner goes to the Supreme Court, he has to show that his case is of public importance, and the person acting in good faith can commence the case. There is no need for the petitioner to be personally hurt or affected by the circumstances of the case.³¹

²⁴ 1995 SCMR, 362.

²⁵ *Shelhla Zia vs. WAPDA*, 1994 PLD SC 693.

²⁶ Article 9. No person shall be deprived of life or liberty save in accordance with the law.

²⁷ Article 14(1). The dignity of man... shall be inviolable.

²⁸ *Karachi Administrative Women’s Welfare Society H.R. Case No.9-K/1992*

²⁹ Under Article 184(3) of the Constitution.

³⁰ Under Article 199(1)(c) of the Constitution.

³¹ *Ms Benazir Bhutto vs. Federation of Pakistan & Others*, PLD 1998 SC 416.

If the petitioner wants to go to High Court, he should first try to get any remedy, which may be adequate and be available in the relevant law provided to getting relief/compensation in such a case. There must be some connection between the petitioner and the case i.e. in legal term an aggrieved person.

2.7 Critical Application of Environmental Laws

The Pakistan Environmental Protection Act 1997 has been duly functional³². The requisite rules and regulations have been enacted including, National Environmental Quality Standards (Self-monitoring and Reporting by Industries) Rules, 2000; Environmental Samples Rules, 2001; Provincial Sustainable Development Fund Board (Procedure) Rules, 2001; Pollution Charge for Industry (Calculation and Collection) Rules 2001; National Environmental Quality Standards (Environmental Laboratories Certification) Regulations 2000; Pakistan Environmental Protection Agency (Review of Capital IEE/EIA) Regulations 2000; Provincial Sustainable Development Fund (Utilization) Rules 2002; Composition of Offences and Payment of Administrative Penalty Rules 2002 and Hazardous Substances Rules, 2002.

The Federal Government has established two Environmental Tribunals one each in Karachi and Lahore. The Karachi Tribunal has jurisdiction over the provinces of Sindh and Balochistan while the Lahore Tribunal covers the provinces of the Punjab and the NWFP. The High Courts have designated senior civil judges as Environmental Magistrates to take all contraventions punishable in respect of handling of hazardous substances and pollution caused by motor vehicles.

³² Source Justice Sh. Riaz Ahmad Former Chief Justice of Pakistan, "*Legal and Institutional Framework for the Protection of Environment in Pakistan.*" http://www.unep.org/dpdl/symposium/Documents/Country_papers/PAKISTAN.doc(last visited on 1.10.2006).

Environmental Laboratory Certificate Regulation 2000 has been notified whereby a network of ethnically sound laboratories is being established through out the country. The certified laboratories will be authorized to test environmental samples and assist public and private sector to get their levels of emissions tested.

Pakistan Environmental Protection Act, 1997, promulgated on 6th December, 1997 with expectations of having strong documentation, Rules, Regulations made there-under and above all supportive for establishment of different institutions for enforcement of Environmental Laws in Pakistan. To review the Act for its effectiveness for implementation of NEQS and institutional set up, in line with the critical analysis, it may be categorized into following components:-

- a. Definition of the Environmental Terminology
- b. Establishment of Pakistan Environmental Protection Council(PEPC) and its structure
- c. Federal and Provincial Environmental Protection Agencies in line with their powers and functions.
- d. Institutional set up of Environmental Agencies
- e. Rules and Regulations formation under the Act, 1997
- f. Act, 1997 related to Brown, Grey and Green Areas.

2.7.1 Definition of the Environmental Terminology

This Act is presently the most important doctrine for Environmental problems, issues and remedial measures in national as well as international panorama, which has introduced an effective tool for environmental protection in Pakistan and ratification at internationally signed protocols. Whereas definition of certain international terminology create ambiguity, misconception or misunderstanding while making its detailed study. For examples it extends its jurisdiction up to the territorial zones whereas territorial zones and their limits are more

clearly defines in Maritime Security Agency's functions and powers instead of this Act. Similarly definition of environment extended upto Socio-Economic arena including Sustainable Development/Sustainability, which has not been clearly defined. Definition of hazardous waste has been given so broaden horizons that it seems beyond the powers and functions of the implementing bodies including Pakistan Environmental Protection Agency. Powers of Environmental Magistrates in the judiciary has not been clearly defined although a number of notifications issued to designate the civil magistrates as environmental magistrates but similarly other Sections are silent on their functions and powers.

Furthermore, the Act, 1997 has missed many definitions including Public Nuisance, Maritime Pollution, Odor and Vibrations etc.

2.7.2 Functions & Powers of Pakistan Environmental Protection Council (PEPC)

Another prioritize component and basic infrastructure provider for Environment is Pakistan Environmental Protection Council with all its powers to approve, adopt, and exercise the adoption of environment friendly policies, programs and strategies in the very country. Under the Act, Prime Minister of Pakistan has been declared as Chairman/Chairperson of the Council. The irony of the fate is that since notification of the Prime Minister as Chairman/Chairperson of PEPC, only three meetings have been headed by the Prime Minister/Chief Executive whereas rest were whether chaired by the spouse of the Prime Minister or nominated Minister. So, ultimate results of success of these meetings for achieving any remarkable progress remains insignificant. Even after 23 years of Pakistan Environmental Protection Ordinance and 9 years of the Act, 1997, effective National Environmental Policy has not been finalized. Beside the question of chairmanship of the Council, its composition has already become an issue of debate owing to the selection criteria. Although institutions have been identified by the Ministry under the Act but so far only once the composition has been revised. Recently notified PEPC has been a hot talk in Civil Society due to poor consultation and one sided decision. All Chief Secretaries of the

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Provinces, Chief Ministers are the members of the Council. To conduct meeting as per spirit of the Act, caused the major hurdles owing to unstable political scenario in the country.

Although PEPC has been evolved as a Supreme Body of the environment in Pakistan and strongly empowered by the Act to make policy decision but establishment of a Secretariat to keep its regular set up and monitoring for effectiveness has totally been ignored in the Act. The Act is absolutely silent about office-bearers and functioning of the PEPC Secretariat as the powers and functions as well as the establishment of any such set up is neglected.

2.7.3 Functions & Powers of Environmental Protection Agencies

Under Section 5 and Section 8, Federal and Provincial Environmental Protection Agencies have been established. Although all functions and powers under Section 6 and 7 have been sanctioned to Federal Environmental Protection Agency, yet some powers have been delegated to Provincial Agencies through Provincial Governments. The dilemma is that the Federal Agency has administrative powers for implementation of the Act, 1997, whereas the implementing agency does not have its own formulation rules and regulations. Now National Environmental Policy has been prepared this year which assign main functions to the Agency. There is a long list of powers and functions of the Federal Agency right from formulation to implementation of policies and programs whereas its structure and strengthened resources have totally been neglected. Judiciously, this Agency issues Environmental Protection Order (EPO) under Section 16. The Federal Agency is legally not well equipped, yet on issuance of Environmental Protection Order (EPO) not even a single case has been filed against any polluter. Here procedure for filing a case against the polluter may not be transparent.

National Environmental Quality Standards (NEQS) are tools of Pak-EPA but not a single laboratory is certified to carry out legally acceptable analysis. NEQS are not comprehensive and are monitoring only parameters in the selected fields.

Public awareness is another function of the Pak EPA under this Act but no media Section or a suitable department is established in the Agency to monitor the regular campaigns on the subject.

2.7.4 Institutional set up of Environmental Agencies

Implementation of the constitution/Act remains ineffective without strong institutional set up whereas so far at Federal as well as Provincial levels Environmental Protection Agencies are not strengthened by sufficient resources and with essential infrastructure. Hence these Agencies are all the more lacking behind in their functions and powers. Similarly no advisory committee has been notified by Pak EPA for important decision making. Environmental Tribunals have not yet been properly functioning and only two Environmental Tribunals are working on adhoc basis in two Provinces i.e. Punjab and Sindh. Rules and Regulations notified under the Act contain many deficiencies in their texts and many defects in their procedural codes.

2.7.5 Act, 1997 related with Brown, Grey and Green Areas.

Procedure for penalizing polluter needs more explanation/elaboration for more effective implementation of the Act. Moreover, Standard Operating Procedures (SOPS) need more clarification and effective mechanism for factual implementation. Conflicting laws with reference to the Motor Vehicles Act and other related laws need explicit explanation. Public Health needs more attention in the Act. Here Hazardous Public Health Products need to be banned by the Government under effective explanation by the Act. Legal Problems in Trans-boundary Civil Liability Disputes need more explanation by this Act. "Apart from the fundamental litigation problems resulting from facts such as establishing causation,

identifying the polluter, and proving the damage, there are legal problems usually involved in the trans-boundary environmental dispute. Legal problems are: jurisdiction, choice of law and execution of judgments.”³³ More effective implementation of the provisions of the Cr.PC and PPC in support of the provisions of the Environmental Protection Act 1997 is the need of the hours. Review of all Rules, Regulations, Laws and By-laws under the Act from time to time is essential. It is also suitable if the Emergency Powers are authorized to the Pakistan Environmental Protection Agency as well as the Provincial EPAs “for the protection, conservation, rehabilitation, and improvement of the environment, for prevention and control of pollution, and promotion of sustainable development”³⁴. Environmental Protection Force needs to be created to control the most obnoxious problem of pollution in Pakistan. Effective Environmental Protection Orders need to be issued and implemented under the Act with iron hand of Environmental Protection Force. Moreover, defined procedure for launching of FIR against the polluter, defined jurisdiction of the courts as well as the environmental tribunals and strong institutional enforcement is need of the hours.

2.8 Conclusion

In spite of all above observations, Pakistan Environmental Protection Act, 1997 provides not only for the establishment of the Federal and Provincial Agencies but also for a framework to the implementation of National Conservation Strategy; establishment of Provincial Sustainable Development Funds; protection and conservation of species, wildlife, habitats and bio-diversity; conservation of renewable and non-renewable resources; establishment of standards for the quality of the ambient air, water and land; establishment of Environmental Tribunals and appointment of Environmental Magistrates; Environmental Impact Assessment (EIA); Initial Environmental Examination (IEE) and promotion of public education and awareness of environmental issues through mass media. Under this law, in addition to official environmental agencies, any person or organization can request for

³³Muhammad Munir, *The Polluter Pays Principle in International Environmental Policy and Law: Economic and Legal Analysis*, Islamabad Institute of Legal Studies, 2003, pp. 101-102.

³⁴ Section 2 (x) of Pakistan Environment Protection Act, 1997 – Extraordinary published by Authority in the Gazette of Pakistan.

inquiries and investigation into environmental issues and/or award of compensation for losses/damages sustained by him from a polluter. The Act empowers the Federal Government to make rules for implementing important international environmental agreements, to which Pakistan is a party. Before the Act was passed, the cases of environmental problems could be brought as constitutional cases under Article 199(1)(a) & (c)³⁵ to the High Court and under Article of 184(3)³⁶ to the Supreme Court of Pakistan but now we first have to try any other adequate remedy available in the law and the Pakistan Environmental Protection Act, 1997 is now main law. However, the constitutional powers of the higher judiciary regarding public interest litigation, the principle of locus standi (standing) and public importance can be used by the honorable judges, as and when so required. The Supreme Court of Pakistan has interpreted the term life very widely and it has covered many environmental problems as the matter of public importance. In matter of fundamental rights, standing need to be addressed through the expression of “aggrieved person” for public interest cases and a High Court can take action for remedies of prohibition; mandamus or certiorari. Mandamus³⁷ is a discretionary writ. A writ of certiorari is a remedy that, in contrast to the writ of prohibition, issued after an impugned order is made and seeks to nullify that order.

³⁵ Article 199(1) Subject to the Constitution, a High Court may, if it is satisfied that no other adequate remedy is provided by law, - (a) on the application of any aggrieved party, make an order – (i) directing a person performing, within the territorial jurisdiction of the Court, functions in connection with the affairs of the Federation, a Province or a local authority, to refrain from doing anything he is not permitted by law to do, or to do anything he is required by law to do; or (ii) declaring that any act done or proceeding taken within the territorial jurisdiction of the Court by a person performing functions in connection with the affairs of the Federation, a Province or a local authority has been done or taken without lawful authority and is of no legal effect; or (c) on the application of any aggrieved person, make an order giving such directions to any person or authority, including any Government exercising any power or performing any function in, or in relation to, any territory within the jurisdiction of that Court as may be appropriate for the enforcement of any of the Fundamental Rights conferred by Chapter 1 Part II.

³⁶ Article 184(3) without prejudice to the provisions of Article 199, the Supreme Court shall, if it considers that a question of public importance with reference to the enforcement of any of the Fundamental Rights conferred by Chapter 1 of Part II is involved, have the power to make an order of the nature mentioned in the said Article.

³⁷ The Lahore Central Co-Operative Bank Ltd. vs. Pir Saifullah Shah, 1959 PLD SC 210.

CHAPTER 3

ENFORCEMENT OF ENVIRONMENTAL LAWS IN DIFFERENT SECTORS

The present Environment scenario provides an overarching framework for addressing the environmental issues facing Pakistan, particularly pollution of fresh water bodies and coastal waters, air pollution, lack of proper waste management, deforestation, loss of biodiversity, desertification, natural disasters and climate change. It also gives directions for addressing the cross sectoral issues as well as the underlying causes of environmental degradation and meeting international obligations.

While recognizing the goals and objectives of the Environmental National Conservation Strategy, Environmental Action Plan and other existing environment related national policies, strategies and action plans, provides broad guidelines to the Federal Government, Provincial Governments, Federally Administrated Territories and Local Governments for addressing environmental concerns and ensuring effective management of their environmental resources. The Provincial, AJK, Northern Areas and Local, Governments, however, may devise their own strategies, plans and programs in pursuit of this Policy.

The National Environment Policy¹ aims to protect, conserve and restore Pakistan's environment in order to improve the quality of life of the citizens through sustainable development.

The objectives of the Policy are:

- (a) Conservation, restoration and efficient management of environmental resources.

¹ <http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 2, 2006).

- (b) Integration of environmental considerations in policy making and planning processes.
- (c) Capacity building of government agencies and other stakeholders at all levels for better environmental management.
- (d) Meeting international obligations effectively in line with the national aspirations.
- (e) Creation of a demand for environment through mass awareness and community mobilization.

3.1. Water Supply and Management²

To provide sustainable access to safe water supply and effectively manage and conserve the country's water resources, the government may:

- (a) Develop legal and policy framework for promotion of safe drinking water in Pakistan.
- (b) Increase coverage of water supply and water treatment facilities.
- (c) Establish a water quality monitoring and surveillance system.
- (d) Make installation of water treatment plants as an integral component of all drinking water supply schemes.
- (e) Promote low-cost water treatment technologies at the community and household levels.
- (f) Promote appropriate technologies for rain water harvesting in rural as well as urban areas.
- (g) Encourage artificial recharge of groundwater in arid and semi arid areas.
- (h) Promote metering of water consumption to discourage the indiscriminate use of water for industrial and municipal purposes.
- (i) Enact Water Conservation Act and relevant standards to foster water conservation.

² <http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 2, 2006).

- (j) Promote integrated watershed management.
- (k) Monitor sustained freshwater flows into the marine eco-systems.
- (l) Establish standards for classification of surface water bodies.
- (m) Launch phased programs for clean up and gradual up-gradation of the quality of water bodies.

3.2. Air Quality and Noise³

In order to prevent and reduce air pollution and noise, the government may:

- a) Establish and enforce standards for ambient and indoor air quality.
- b) Enact the National Clean Air Act.
- c) Ensure effective enforcement of the National Environmental Quality Standards and Self Monitoring Rules.
- d) Ensure reduction and control of harmful emissions through regulatory programs.
- e) Regulate vehicular emissions.
- f) Establish standards for vehicles at the manufacturing stage.
- g) Update and enforce fuel specifications.
- h) Make use of catalytic converters in new and in-use vehicles mandatory.
- i) Phase out sulphur from diesel and furnace oil.
- j) Promote cleaner production technologies.
- k) Phase out two stroke vehicles.
- l) Encourage cost effective inter-city mass transit systems in major cities.

³<http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 2, 2006).

- m) Promote non-motorized means of travel such as cycling and walking through provision of adequate walkways and cycle lanes in cities.
- n) Establish and enforce standards for ambient noise.
- o) Establish emission standards to control noise at source.

3.3. Waste Management ⁴

Pollution caused by liquid and solid waste in the country would be prevented and reduced. For this purpose, the government may:

- a) Strictly enforce the National Environmental Quality Standards and Self Monitoring and Reporting System.
- b) Introduce discharge licensing system for industry.
- c) Make installation of wastewater treatment plants an integral part of all sewerage schemes.
- d) Devise and implement the National Sanitation Policy.
- e) Devise and implement master plans for treatment of municipal and industrial wastewater in urban and rural areas.
- f) Establish cleaner production centers and promote cleaner production techniques and practices
- g) Encourage reduction, recycling and reuse of municipal and industrial solid and liquid wastes.
- h) Develop and enforce rules and regulations for proper management of municipal, industrial, hazardous and hospital wastes.
- i) Develop and implement strategies for integrated management of municipal, industrial, hazardous and hospital waste at national, provincial and local levels.
- j) Develop and enforce regulations to reduce the risk of

⁴ <http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 3, 2006).

contamination from underground storage tanks.

- k) Devise and implement guidelines for sustainable management of mining and oil exploration interventions as well as for rehabilitation of expired mines/exploration sites.
- l) Launch National Oil Spill Contingency Plan.
- m) Adopt measures for mitigation of pollution caused by oil spills. n) Establish a Marine Pollution Control Commission.
- o) Frame Pakistan Oil Pollution Act.
- p) Develop environmental risk assessment guidelines for existing industries as well as new development interventions.
- q) Develop national emergency response and accidents preventions plans to prevent, and mitigate the effects of, accidents involving pollution of environment.
- r) Provide financial and other incentives (reduction/elimination of tariffs, low interest loans, appreciation certificates and awards) for technology up gradation, adoption of cleaner technology, implementation of pollution control measures and compliance with environmental standards.

3.4. Forestry⁵

To ensure sustainable management of natural forests of Pakistan and increased tree cover for "safeguarding economic growth and food security in the country, the government may:

- a) Implement the National Forest Policy.
- b) Carry out intensive institutional and legal reforms both at the federal and provincial levels to promote good forest governance.
- c) Promote social, farm forestry and irrigated plantations.

⁵ <http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 3, 2006).

- d) Develop and sustainably manage the riverine forests along with irrigated plantation and tree plantation on farm-lands.
- e) Develop and implement a strategy and an action plan for protection and rehabilitation of mangrove forests with the participation of local communities.
- f) Preserve relict and unique forests eco-systems.
- g) Encourage conservation and restoration of critically threatened eco-systems.
- h) Provide alternative sources of energy, like piped natural gas, Liquefied petroleum gas (LPG), solar energy and micro-hydel power stations, to the local inhabitants to reduce the pressure on natural forests, and to substitute firewood in the upland ecosystems.
- i) Strengthen the existing forestry research and training institutions with adequate infrastructure and technical manpower development;
- j) Promote sustainable management of rangelands and pastures through preparation and implementation of integrated range management plans.

3.5. Biodiversity and Protected Areas⁶

The government would promote the conservation and sustainable use of Pakistan's biodiversity and effective management of protected areas, and the equitable sharing of benefits arising thereof for the well-being of the nation. In order to achieve this, the government may:

- a) Ensure effective implementation of the Biodiversity Action Plan.
- b) Revise and update the Biodiversity Action Plan in line with developments taking place at the national and international levels.
- c) Create new national parks and protected areas.
- d) Develop and implement protected areas system plan for in-situ conservation of biodiversity with community involvement.

⁶ <http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 3, 2006).

- e) Encourage involvement of local communities in conservation and sustainable use of biodiversity through provision of incentives and responsibilities.
- f) Prepare a national strategy and action plan for combating spread of invasive species.
- g) Enforce biosafety rules and guidelines and adopt necessary biosafety related legal framework.
- h) Establish a National Institute of Biodiversity and Ecosystem Sciences at the Federal level with the objective of enhancing training and research capabilities in the fields of biodiversity conservation and ecosystem management.
- i) Promote ex-situ conservation of biodiversity through establishment of botanical gardens, gene banks, zoos and captive breeding of animals and plants.
- j) Develop National Zoological Gardens Act.
- k) Devise guidelines for accreditation and registration of private wild animal captive breeding centers.
- l) Prepare and implement integrated coastal zone management plans for protection of marine life.
- m) Develop and implement a comprehensive National Wetlands Policy.
- n) Develop policy and regulatory framework for conservation, cultivation and marketing of medicinal/economic plants.
- o) Create protected areas for conservation of marine eco-systems.
- p) Ensure that any mining activity within and in the vicinity of national parks does not compromise the objectives of protected areas.

- q) Harvest fisheries on a sustainable yield basis.
- r) Protect fish habitats against both encroachment and pollution. s) Use full potential of inland fisheries to promote aquaculture.
- t) Improve quality management for fish catches for export and domestic utilization.
- u) Develop and implement area conservation strategies for urban centers and towns of historical and cultural significance.
- v) Promote eco-tourism concept and practices.

3.6 Climate Change and Ozone Depletion

Pakistan signed the Montreal Protocol in January 1989 and ratified it in December 1992. Vienna Convention was also ratified in December, 1992, London Amendment was signed in August 1992 and ratified in December 1994, whereas the Copenhagen amendment was signed in June 1994 and ratified in February 1995. To meet its obligation under the Montreal Protocol, Pakistan has established an Ozone Cell within the Ministry of Environment. The Cell acts as the focal point for coordinating all activities of the Montreal Protocol in Pakistan including coordination with the ozone secretariat, implementation agencies, enterprises, industry associations, other institutions, UNEP, other countries, NGOs and media.

The Ministry of Environment assumes sole responsibility for implementation of the provisions of the Montreal Protocol. Keeping in view Pakistan's commitments to the international community, a project entitled "Institutional Strengthening for the Implementation of the Montreal Protocol for the phase-out of Ozone Depleting Substances" is being implemented by the Ministry. The Multilateral Fund of the Montreal Protocol funds this project. Ozone Cell became operational in January, 1996. At present, the cell is effectively functioning and organizing its activities with financial assistance from the Institutional Strengthening Project.

The use of Ozone Depleting Substances (ODS) in Pakistan is mainly in deep-freezers, refrigerators, car air-conditioners, foam, dry-cleaning, and fire extinguishers and as solvents etc. The average ODS consumption in Pakistan was 2464 (from 1995 to 1998), which comes to about 0.018 kg per capita. As Pakistan per capita consumption of ODS is less than 0.3 kg, Pakistan falls under the category of Article 5(I) Parties. Pakistan is required to phase out certain ODS such as chlorofluorocarbons as given in Group I, Annex-A of the Protocol by the year 2010 (50% by the year 2005 and 85% by the year 2007).⁷

In order to effectively address challenges posed by climate change and to protect the ozone layer⁸, the government may:

- a) Devise and implement the National Climate Change Policy and Action Plan.
- b) Establish National Clean Development Mechanism (CDM) Authority.
- c) Develop and implement policy and operational framework for effective management of CDM process.
- d) Promote the use of ozone friendly technologies.
- e) Phase out the use of ozone depleting substances in line with the provisions of the Montreal Protocol.

3.7 Agriculture and Livestock.⁹

To achieve sustainable agricultural and livestock development, the government may:

- a) Ensure protection and preservation of prime agricultural land from conversion for other uses through introducing land use planning and zoning.

⁷ Dr. M.Khurshid, Ph.D., Environmental Initiatives: Global and National Perspective, 1st Edition, 2004, pp. 90-91.

⁸ <http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 3, 2006).

⁹ <http://www.environment.gov.pk/nep/policy.pdf> (Last visited on August 3, 2006).

- b) Promote organic farming.
- c) Prevent soil degradation and restore and improve degraded lands.
- d) Promote integrated pest management and discourage indiscriminate use of agrochemicals.
- e) Develop strategies and programs to tackle desertification in line with the National Action Plan to Combat Desertification and Drought.
- f) Establish National Desertification Control Fund.
- g) Encourage ecologically compatible cropping systems.
- h) Enhance existing livestock production through development of new technologies, scientific methods of farming and improved management interventions.
- i) Promote recycling of agricultural products associated with livestock production and use of livestock sector as an outlet for recycling of appropriate urban wastes.
- j) Encourage highly productive breeds of livestock.
- k) Introduce adequate animal waste management system in peri-urban dairy colonies.

3.8. Energy Efficiency and Renewable¹⁰

The government would promote energy" efficiency and renewable sources of energy in order to achieve self reliance in energy supplies and as a means to sustainable development. To this end, the government may:

- a) Devise and implement National Energy Conservation Policy.
- b) Formulate and enact energy conservation legislation and audit standards.

¹⁰ Ibid.

- c) Make the Building Energy Code as part of the Building Code of Pakistan.
- d) Strengthen financial mechanisms, institutions, and associated policies and regulations to provide innovative lending especially in the demand side efficiency improvement.
- e) Give preferential status and tax incentives to energy efficient domestic products and imports.
- f) Develop and implement a plan for conversion of public transport to CNG.
- g) Establish energy resource and information centers in provinces
- h) Institute the National Energy Conservation Award.
- i) Promote renewable forms of energy (wind, solar, bio-gas etc.) at all levels.
- j) Encourage use of waste resources for energy production.

3.9 Conclusion

It is the need of the hours that after issuance of the Environmental Policy, the Ministry of Environment need to develop an "Action Plan" for its implementation. All relevant Ministries, Departments and Agencies should also devise plans and programs to implement "the policy provisions relating to their respective sector/sub-sector. Similarly, the Provincial Governments, Federally Administrated Territories and local governments may also devise their own strategies, plans and programs for implementation of the effective Environmental plan.

To ensure effective coordination, implementation and oversee the progress in this regard, a "National Environment Policy Implementation Committee" needs to be established at the Federal level.

Here "National Environment Policy Implementation Committee" may meet biannually or quarterly. The Committee may report the status of implementation of the Policy to Pakistan Environmental Protection Council on regular basis.

An "Environment Policy Directorate" should be established in the Ministry of Environment to serve as the Secretariat to the Committee. All relevant Federal Ministries as well as Provincial Governments' may also create special cells to coordinate implementation of the Environmental Policy. Furthermore, Provincial, District and Tehsil Governments may also constitute "Policy Implementation Committees" in order to ensure coordinated implementation of the Policy through effective participation of all stakeholders, including corporate and civil society organizations.

CHAPTER 4

REVIEW OF ENVIRONMENTAL CASE LAWS IN PAKISTAN

Laws of Nature should be respected in the interest of the human race. It is very hard to go against them. Doing so will only result in the subsequent devastation of this earth and its inhabitants. The literal meaning of environment is life around us in which we all exist. The word environment caught world attention after various protest and demonstrations by environmentalists during the early 70s¹.

Issue like deforestation, industrialization and pollution in the urban cities of Pakistan are constantly increasing and are affecting the quality of life significantly. Increasing drudgeries regarding environmental issues have forced governing bodies and jurists to take some pragmatic action in the form of environmental laws. The legislature, executive and judiciary of Pakistan have yet not adequately and effectively realized this hard fact. It is also aggravating that the Courts of law are reluctant to take a stand on this hard-core issue of environmental protection and preservation.

The era from 1983 to 1997 appears to be the period of heightened environmental awareness² in Pakistan. The very first Environmental Protection Ordinance 1983 was promulgated in this period, which laid the foundation stone of a new environmental legal system for Pakistan. A campaign started which worked hard for the enactment of Environmental Protection Act, 1997. This Act is not the last step but the best prevailing and available remedy for environment control in Pakistan. The purpose is to analyze implementation and enforcement mechanism contained in the Pakistan Environmental

¹ 2005 CLD 125

² Ibid.

Protection, 1997, public interest litigation, and judicial activism. Specific emphasis on case law and the interpretation of environmental issues by the Pakistani Courts is the hall mark.

The Government of Pakistan has to be environmental friendly in accordance with its international commitments under various conventions and treaties as signed and ratified. Section 12 of the Act³ is a mandatory provision, which deals with filing of Environmental Impact Assessment with the Government Agency before commencement of a project. Under Section 17 of the said Act⁴, whoever contravenes or fails to comply with provisions of this Act is punishable with a fine of one million rupees. With continued violation, an additional fine of one hundred thousand rupees per day would be imposed. The Environmental Tribunal or Environmental Magistrate can also under Section 17(5) of the Act extend the punishment to two years imprisonment and order the closure or confiscation of the factory, machinery and equipment.

The head of the institution shall be held responsible⁵ for offences committed by corporations, Government agencies, local authorities or local council under Section 19 of the Act. Environmental Tribunals and Environmental Magistrates are two judicial mechanisms to enforce the Act. The Federal Government under Section 20 of the Act⁶ has established two Environmental Tribunals, on each in Lahore and Karachi. The Lahore Tribunal covers its jurisdiction over Punjab and NWFP Province and Karachi Tribunal covers its jurisdiction over Sindh and Balochistan Province. It is expected that remaining two Environmental Tribunals i.e. in Peshawar and Quetta shall soon start their judicial business in NWFP and Baluchistan, respectively. The Tribunal is comprised of one Chairperson, two members (one member Judicial and one member technical) and

³ Pakistan Environmental Protection Act, 1997 – Extraordinary published by Authority in the Gazette of Pakistan.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

one Registrar beside the other clerical staff. Under Section 20(3) of the Act for every sitting of the Environmental Tribunal, the presence of the Chairperson and not less than one Member shall be necessary. The Lahore Tribunal came into existence in 2001 but operational in 2002 due to unavailability of Chairperson or Member, just after 5 years of the enactment of the Act. Few cases are pending before this Tribunal. Karachi Tribunal is yet to be constituted. Tribunal may only hear complaints if made in writing by an Environmental Protection Agency(EPA), or the local aggrieved person (complainant) who has given at least 30 days notice⁷ to inform EPA of the offense and of his intention to make a complaint to the Tribunal. Appeal⁸ from Tribunal lies before the High Court. The tribunal lacks suo moto powers.⁹

4.1 Constitutional Rights, Mining Operations, Water Pollution

GENERAL SECRETARY, WEST PAKISTAN SALT MINERS LABOUR UNION (CBA) KHEWRA, JHELUM Vs. THE DIRECTOR, INDUSTRIES AND MINERAL DEVELOPMENT, PUNJAB LAHORE ¹⁰

1996 SCMR 2061

The case came up for final hearing before a Divisional Bench (DB) comprising of Mr. Justice Muhammad Rafiq Tarar and Mr. Justice Saleem Akhtar on 12th April, 1994. A Petition was filed in the Supreme Court under Article 184 (3) of the Constitution against the pollution of the water supply source to the residents and mine workers of Khewra. The spring Mitha Pattan was the only major source of drinking water in the area. Accordingly, water catchments area was reserved and grant of mining leases in the area was prohibited prior to 1911. Notwithstanding the prohibition, the authorities concerned had granted mining leases in the catchments area. The Petitioners alleged that as a result, poisonous waste water discharged from the mines polluted the reservoir

⁷ Ibid.

⁸ 2005 CLD 132.

⁹ Ibid.

¹⁰ 1996 SCMR, 2061.

creating a health hazard, and that the allotment and grant of leases for mining in the catchments area was illegal and mala-fides, and prayed for cancellation of licenses.

The claim of the Petitioners, though framed in general terms, seeks enforcement of the right of the residents to clean and unpolluted water.

The Court allowed¹¹ the petition stating that persons exposed to such danger are entitled to claim that their fundamental right to life guaranteed to them by the Constitution has been violated and that there is a case for enforcement of fundamental rights by giving directions or passing orders to restrain the parties and authorities from committing such violation or to perform their duties.

Quoting Article 184(3) of the Constitution, the Court observed that "It is well settled that in human rights cases/public interest litigation under Article 184(3), the procedural trappings and restrictions, precondition of being an aggrieved person and other similar technical objections cannot bar the jurisdiction of the Court. This Court has vast power under Article 184(3) to investigate into questions of fact as well, independently, by recording evidence or appointing commissions or any other reasonable and legal manner to ascertain the correct position. Article 184(3) provides that this Court has power to make Order of the nature mentioned in Article 199. The fact that the Order or direction should be in the nature mentioned in Article 199 enlarges the scope of granting relief and the relief so granted by this Court can be molded according to the facts and circumstances of each case."

Accordingly, the Court proceeded to deal with the facts relevant to the question whether the mining activity could pollute the water supply and made an Order¹² directing that PCC should shift within four months from the location of the mouth of mine 27A to

¹¹ Ibid.

¹² Ibid.

a safe distance from the stream and small reservoir. The Court also appointed a Commission with powers of inspection, recording evidence etc. to monitor the implementation of the Orders. Additionally all the mines operating adjacent to the catchments area were to take measures to the satisfaction of the Commission which will prevent pollution of the reservoir, stream and catchments area.

The authorities concerned were also ordered¹³ not to grant new licenses in the catchments area or to renew old ones, without the prior approval of Court.

4.2 Dumping of Nuclear and Industrial Waste

IN RE: HUMAN RIGHTS CASE (ENVIRONMENT POLLUTION IN BALOCHISTAN)

HUMAN RIGHTS CASE NO: 31-K/92(Q)¹⁴

A memorable case worthy of admiration from all the friends of humanity and world minded people is a matter in which the Supreme Court of Pakistan has taken suo moto action of the news item "N-Waste to be dumped in Balochistan". The news item was published in "Dawn", a daily newspaper in its issue dated 3 July 1992. In the report, concern was expressed that certain businessmen were making attempts to purchase coastal areas of Balochistan and convert it into dumping grounds for waste material.

The Honorable Justice, Mr. Justice Saleem Akhter took notice of the news item and issued an Order requiring Chief Secretary of Balochistan to provide the Court with full information on the allocation or the receipt of applications for allocation of coastal land in Balochistan or any area within the territorial waters of Pakistan.

The reports revealed that land had been allotted in addition to the Pakistan Navy and Maritime Agency for defence purposes, for purposes such as ship breaking and

¹³ 1996 SCMR 2061.

¹⁴ PLD 1994, SC 102.

agriculture. The Balochistan Development Authority should submit¹⁵ to the Assistance Registrar, Supreme Court, Karachi a list of persons to whom land on the coastal area of Balochistan have been allotted giving their names and full addresses along with copies of the letters of allotment, lease or license which may have been issued in their favor.

The Government of Balochistan and the Balochistan Development Authority redirected that if any application for allotment of coastal land is pending or in future any party applies for allotment of such land, then full particulars of such applicant shall be supplied to the Assistant Registrar, Supreme Court of Pakistan, and Karachi before making any allotment to any such party.

The Government functionaries, particularly the Authorities which are charged with the duty to allot the land in coastal areas should insert a condition in the allotment letter/license/lease that the allottee/tenant shall not use the land for dumping, treating, burying or destroying by any device, waste of any nature including industrial or nuclear waste in any form. The Balochistan Development Authority should also obtain similar undertaking from all those to whom allotments have been made for ship breaking, agriculture, or any other purpose.

4.3 Land Use Planning, Precautionary Principle

MS. SHEHLA ZIA AND OTHERS VS WAPDA

HUMAN RIGHTS CASE NO: 15-K OF 1992 SUPREME COURT¹⁶

The case was heard on 12th February, 1994 by the full bench, comprising on the then Chief Justice Mr. Justice Nasim Hasan Shah, Mr. Justice Saleem Akhter and Mr. Justice Manzoor Hussain Sial. Supreme Court on receipt of the letter from resident of Street N.35, F-6/1, Islamabad, declared that Article 184 of the constitution could be invoked in

¹⁵ Ibid.

¹⁶ 1994 PLD 693.

the circumstances of the case and notices were issued. The brief facts of the case are that the Respondent authority was constructing a grid station in a residential area. The Petitioners who were residents in the vicinity alleged that the electromagnetic field created by the high voltage transmission lines at the grid station would pose a serious health hazard to them and raised the following issues before the Supreme Court.

- (i) Whether any government agency has a right to endanger the life of citizens by its actions.
- (ii) Whether Zoning Laws vest rights in citizens which cannot be withdrawn or altered without the citizen's consent.

As regards the first issue, the Respondent's position was that the concern over health hazards was totally unfounded. The parties produced a vast body of scientific evidence in support of their respective positions.

On the second issue, the Respondents stated that the site had been earmarked as an incidental space which was previously left unutilized along the bank of the river Nallah and was not designated as an open space or green area. It was further stated that the proposed site, was at a level 6 - 10 feet lower than the area where the houses are located, and that the grid station site was at least 40 feet away from the residential area.

The word 'life' has not been defined¹⁷ in the Constitution but it does not mean nor can it be restricted only to the vegetative or animal life or mere existence from conception to death. A wide meaning should be given to the word 'life' to enable a man not only to sustain life, but also to enjoy it.

Where life of citizens is degraded, the quality of life is adversely affected and health hazards are created affecting a large number of people, the Supreme Court in exercise of its jurisdiction under Art. 184(3) of the Constitution of Pakistan may grant

¹⁷ Ibid.

relief to the extent of stopping such activities which create pollution and environmental degradation.

At present, scientific evidence regarding the possibility of adverse biological effects from exposure to power-frequency fields as well as the possibility of reducing or eliminating such effects, is inconclusive. The remaining question is how the legal system, including both the judiciary and the various regulatory agencies, should respond to this scientific uncertainty. In such a situation, the precautionary principle should be applied. To stick to a particular plan on the basis of old studies or inconclusive research cannot be said to be a policy of prudence and precaution.

One cannot ignore that energy is essential for present-day life, industry, commerce and day-to-day affairs. The more energy that is produced and distributed, the more progress and economic development becomes possible. Therefore, a method should be devised to strike a balance between economic progress and prosperity and to minimize possible hazards. In fact a policy of sustainable development should be adopted.

The Court also held that constitutional rights are higher than rights conferred by other laws i.e. municipal law, common law. Therefore a conscientious citizen, aware of the rights vested under the Constitution and alive to the possibility of danger, could invoke Article 184 on behalf of a large number of citizens who cannot make such representations due to poverty, ignorance or any such disability.

The Court refrained¹⁸ from making any order, in view of the inconclusive nature of the evidence placed on record. However, with the consent of both parties the Court appointed NESPAK, as Commissioner, inter alia, to examine and study the scheme

¹⁸ 1994 PLD 693.

employed by WAPDA and report whether there is any likelihood of any hazard or adverse effect on the health of the residents of the locality.

4.4 ABDUL LATIF VERSUS ADDITIONAL SESSION JUDGE SAHIWAL¹⁹ (Writ Petition No.6468 of 2000)

CLC 2001, 1139

The Honorable Justice Dr. Munir Ahmad Mughal heard the case on 29th January, 2001. This was a case of shifting of a factory for abatement of nuisance. Executive Magistrate in exercise of powers under Section 133, Criminal Procedure Code, 1898 by his order, directed that leather factory owned by petitioner be shifted and that order was upheld in revision by Additional Sessions Judge holding that factory was causing nuisance to the inhabitants of the locality. In writ petition Lahore High Court declared the orders passed by the Executive Magistrate and Additional Sessions Judge, Sahiwal without jurisdiction, without lawful authority and of no legal effect. While commenting upon the superiority of Pakistan Environmental Protection Act, 1997 as a special law over other general laws, the Lahore High Court.

This Act²⁰ is a complete Code for; inter alia, prevention/elimination of any pollution amounting to public nuisance as visualized by Section 133, Cr.P.C. This Act being special statute overrides the provisions of general statute i.e. Code of Criminal Procedure in respect of the matters covered by it. Section 133, Cr.PC by implication stands repealed and the impugned orders therefore could not be legally passed by the learned respondents Nos.1 and 2 and the same are liable to be declared as without lawful authority.

¹⁹ 2001 CLC 1139, Lhr.

²⁰ Pakistan Environmental Protection Act, 1997 – Extraordinary published by Authority in the Gazette of Pakistan.

4.5 M/S. ABDUL REHMAN ENGINEERING WORKS VERSUS ENVIRONMENTAL PROTECTION AGENCY, LAHORE²¹
(Appeal No.2/2002 , Environmental Protection Tribunal, Lahore)

The relevant facts in brief are that Muhammad Safdar etc residents at Street No.2/3 Bilal Park Daroghwa, Lahore lodged a complaint against M/s Abdul Rehman Engineering Works before the Directorate General Environmental Protection Agency, Lahore wherein it was alleged that one Abdul Rehman was intending to construct a workshop on his residential plot and was going to install the machine therewith which would cause a pollution. A notice was issued to the industrial unit complained against and finally on 3.11.1999 an Environmental Protection Order was passed under Section 16 read with Section 12 of the Pakistan Environmental Protection Act, 1997 against it whereby the owner of the said unit was directed to shift his unit to some other suitable place outside the Municipal limits within a period of 60 days.

Feeling aggrieved the concerned industrial unit, the appellant came up in appeal. On the other hand, Environmental Protection Agency, instituted a complaint under Section 21 of the Pakistan Environmental Protection Act, 1997, against the appellant. During the tendency of the aforementioned two matters Muhammad Safdar and Malik Ahmed Sher, two of the original complainants moved an application under order 1 rule 10 read with Section 151 CPC for being impleaded as a party in the appeal.

Learned Counsel for the appellant contended that the impugned order dated 3.11.1999 was without jurisdiction in so far as the Agency had no power under the Pakistan Environmental Protection Act 1997, to order the shifting of the industrial unit in question from one place to another under Section 16 of the said Act. It is an admitted fact that proceedings against the appellant were initiated on the sole ground that he (the owner) had not filed with the Agency an initial Environmental

²¹ Appeal No.2/2002 , Environmental Protection Tribunal, Lahore.

Examination/Environmental Impact Assessment under Section 12 of the Act and thus in exercise of its powers under Section 16 it had passes the impugned order²².

Section 16 reads as follows:-

“Environmental Protection Order

1. Where the Federal Agency or a Provincial Agency is satisfied that the discharge or emission of any effluent, waste air pollutant or noise, or the disposal of waste, or the handling of hazardous substances, or any other act or omission is likely to occur, or is occurring or has occurred in violation of the provisions of this Act, rules or regulations or of the conditions of a license, and is likely to cause, or is causing or had caused an adverse environmental effect, the Federal Agency or responsible for such discharge, emission disposal, handling, act or omission an opportunity of being heard, by order direct such person to take such measures that the Federal Agency or Provincial Agency may consider necessary within such period as may be specified in the order.
2. Where the person, to whom directions under sub-section (1) are given does not comply therewith, the Federal Agency or Provincial Agency may in addition to the proceeding initiated against him under this Act or the rules and regulations, itself take or cause to be taken such measures specified in the order as it may deems necessary and may recover the costs of taking such measures from such person as arrears of land revenue.”

Perusal of the foregoing provision clearly shows that the Agency was not invested with the powers to order the shifting of an errant industrial unit from one place another. The Assistant Director (Legal) representing the Agency candidly conceded that the Agency had no power to take such an order.

Learned Counsel for the applicants in C.M.No.2 of 2000 unsuccessfully argued that such an order could be made but later on gave in. We, therefore, have no hesitation in holding that Agency did not have any power to order the shifting of the concerned industrial unit from one place to another under Section 16 of the Pakistan Environmental Protection Act, 1997 and thus the impugned order was without jurisdiction null and void.

²² Appeal No.2/2002 , Environmental Protection Tribunal, Lahore.

As a result the appeal is accepted on this short ground and the impugned order is set aside. Since the complaint lodged by the Agency against the appellant is based on the impugned order, the same automatically fails and it is dismissed in limine. C.M.NO.2, which has become infructuous is also disposed off.

Learned Counsel for the applicants in C.M. NO.2 of 2001 maintained that the concerned industrial unit was causing pollution and the department should be asked to take action against it. If any pollutant is being caused by the said industrial unit and the same is in the knowledge of the applicants they are advised to approach the Agency with a formal complaint and it is hoped that the Agency shall take appropriate action under the law²³.

4.6 MRS. ANJUM IRFAN VERSUS LAHORE DEVELOPMENT AUTHORITY (Lahore Air Pollution Case)²⁴

P L D 2002 Lahore 555

The Honorable Justice Ch. Ijaz Ahmad, decided the case on 14th June, 2002. The petitioner contends that according to the study carried out by the Housing and Physical Environment, Planning Department, Government of Punjab, 98% rickshaws(three wheeler) and 77% mini buses emit smoke which is beyond permissible limits and round the clock increase pollution in the air, more than 212 million gallons water is being drained out to River Ravi and canal which is untreated and causing immense pollution; quantum of noise pollution can be gauged from the fact that normal level in which human conversation takes place is 60 decibel and the maximum level to be endured by human beings is 90 decibel. The Government departments are not discharging their statutory duties in accordance with law. High Court provided suggestions for formulating the policy and relevant rules and law to help the elimination of pollution

²³ Appeal No.2/2002 , Environmental Protection Tribunal, Lahore.

²⁴ 2002 PLD 555 Lhr.

Before parting with this judgment, effective suggestions have been given to the respondents for formulating the policy and relevant rules and law including the newly established industries is advised/compelled by the respondents to install devices exhaustive and its success depends on the implementations and enforcement machinery provided under the provisions of Pakistan Environmental Protection Act, 1997. Further, Public transport should be effective so that people may prefer to travel by the public transport instead of private vehicle/car. Furthermore, efforts should be made for utilization of solar energy which is in abundance in our country. Hence, electric rail cars system should be introduced even in urban areas and also for long distances. Time schedule must be observed. Much less pollution results when people do not use their own vehicles/cars but travel on trains and airplanes which is known as Mass transportation. One bus that carries at last forty people does not produce much more pollution than a vehicle/car with one person. Electric trains can be even cleaner, since trains also carry many more people than private small vehicles. So, trees plantation should be patronized by the Government. Moreover, Media should play its role to educate people of Pakistan to think and work for the nation and sacrifice its personal interest on the well known maxim that national interest is supreme qua individual.

To implement the law of the land without fear, favor, nepotism and without any discrimination by all concerned. At the time of granting permission for installation of new industry or license or local permit of new vehicle, there must be coordination between all the functionaries under all the laws so that all the requirements under the law should be completed with at initial stages. There must be one window operation so that people should not suffer on account of inaction of public functionaries. There should be quarterly one meeting of all the public, functionaries, of all the concerned departments for the purpose of review of ground realities so, that future steps be taken on the basis of prevailing circumstances and also suggest qua amendment in rules, regulations and law to the competent authority/body. The annual report should be published for information of the people and copy of the same be sent to Deputy Registrar (Judl.) of the Court.

respiratory problems for people exposed to petroleum carbon exposure. Moreover, whole-scale destruction of fish threatening the country's fisheries industry which exports Rs.8 billion seafood, has an annual catch of 650,000 tones of fish and involves the livelihood of about 300,000 people.

Further extensive damage to the rich mangrove ecosystem including destruction of millions of mangrove seedlings and soiling of Clifton beach, the main recreational site for millions of city dwellers, from all social strata of society, with further threat to area of port Qasim and the forty (40) kilometer Karachi coast line.

Long-term environmental damage to the entire above unknown but oil toxicity is known to have the detrimental effects: carcinogenic processes in sea animals and reproductive and genetic damage. Further damage to the respiratory organs and clogging of the filtering mechanism of fish, imbalance in the cycles of plant life even when fish are not en killed, the degradation process may consume the large quantities of dissolved Oxygen, which is vital to life at sea and the coastal arena for eco-system.

It is prayed that the Supreme Court should consider directing the transfer of the Karachi High Court case to itself (Al-Jehad Trust vs. Federation of Pakistan and others, PLD 1996 S.C. 324 (at page 370)). This will, among others, avoid multiplicity of litigation/possible different results as the subject-matter in both the matters is more or less the same. The relief sought before Karachi High Court can be granted by the Supreme Court in Public Interest Litigation. Lessons from the Tasman Spirit Disaster²⁷ and the Way Forward. Turning a Tragedy into an Opportunity. A prudent and wise nation will not wilt after a tragedy but will use the feedback to strengthen itself in all affected areas.

²⁷ Constitutional Petition 45/2003.

The problem of pollution is more dangerous as compared to destruction by Hydrogen Bomb. It is proper and high time to implement the law in letter and spirit without discrimination as the life of human being is more precious. In fact, every one is not saved from the attack of pollution, in this view of the matter each and every citizen, public functionary, authority and body must discharge its responsibility to reduce this problem at any rate at any cost. Let us try to speak truth to save the country from attack of all types of pollution so that the food chain can be maintained.

In view of what has been discussed above the respondents have been directed²⁵ to implement the provisions of Pakistan Environment Protection, Act, 1997 in letter and spirit and frame necessary rules and regulations and issue necessary notifications under the provisions of the aforesaid Act preferably within six months. Let a copy of this judgment be sent to ' respondents who are directed to implement the provisions of aforesaid Act in letter and spirit preferably within six months. They are directed to submit report to Deputy Registrar (Judl.) of this Court within the stipulated period.

4.7 DR. AMJAD H. BOKHARI VS. FEDERATION OF PAKISTAN (Constitutional Petition 45/2003)

Before the Supreme Court of Pakistan, Islamabad

Karachi Oil Spill: The Magnitude of the Disaster²⁶

Grounding and structural collapse of the MV Tasman Spirit in Karachi port on 13 August 2003 resulted in the greatest marine environmental disaster in the history of Pakistan Out of a total cargo of 67,535 tons, about 26,000 tones of light crude oil flooded the coastline.

The immediate “environmental bill” of the catastrophe includes; widespread marine pollution resulting in the destruction of phytoplankton the so called “grass of the sea”- which is responsible for one third of the world’s oxygen. Air pollution leading to

²⁵ 2002 PLD 555 Lhr.

²⁶ Constitutional Petition 45/2003.

The Submissions have not addressed the issue of liability of the ship-owner/insurance company/others as these parties are not included in the Petition before the Supreme Court. Ordinarily, claims and damages are left to be determined in civil suits. But *M.C. Mehta vs. Union of India*, AIR 1987 SC 1086, points to the exceptional circumstances in which the Supreme Court can award compensation.

If we make a fact analysis of the cases where compensation has been awarded by this Court, we will find that in all the cases, the fact of infringement was patent and incontrovertible, the violation was gross and its magnitude was such and it would have been gravely unjust to the person whose fundamental right was violated, to require him to go to the civil Court for claiming compensation. We believe that the present case meets the tests specified in the *M.C. Mehta* case. The case is still pending in the court of law.

4.8 SHEHZAD MUJAHID VS. ADDITIONAL SESSION JUDGE & OTHERS (Writ Petition No.3001 of 2004)

2005 CLD 1718

Before the Lahore High Court, Lahore

The Honorable Justice Muhammad Jehangir Arshad, decided the case on 1st June, 2005²⁸. The petitioner through the Constitutional petition seeks annulment of order dated 25.8.2004 passed by learned Additional Sessions Judge, Bahawalnagar dismissing revision petition filed by the petitioner against the order dated 17.6.2004 passed by learned Special Judicial Magistrate, Bahawalnagar whereby on a complaint filed by respondents under Section 133, Cr.P.C. the learned Special Magistrate directed the S.H.O., Police Station, City Bahawalnagar to seal the premises detailed in the said complaint being source of nuisance for the residents of the locality.

²⁸ 2005 CLD 1718.

Petitioner being not a party in the proceedings before the Magistrate, he was not an aggrieved person and the Constitutional petition filed by him was not competent. Judicial Magistrate had no jurisdiction to entertain the complaint and pass the impugned order after enforcement of Pakistan Environment Protection Ordinance, 1997, whereby only the Senior Civil Judge-cum-Judicial Magistrate had been notified as Environmental Magistrate by the High Court in terms of Ss.17 and 24 of the said Ordinance. Order passed by the Judicial Magistrate directing the property to be sealed was ab initio void and being coram non iudice was annulled. Consequently the order passed by the Sessions Court in exercise of its revisional jurisdiction also fell on the ground having been based on an unlawful order. However, Justice Muhammad Jehangir Arshad declared that the High court could not sit an idle spectator over the situation created by the petitioner which had caused mental and physical inconvenience, annoyance and discomfort by way of nuisance in the vicinity by installing shoes manufacturing factory in the residential area. Such act of the petitioner or his father could not be approved by throwing out the complaint of the respondents on the excuse of want of jurisdiction by the Judicial Magistrate. Complaint filed by the respondents, therefore, would be deemed to be pending before the Senior Civil Judge-cum-Judicial Magistrate, who would decide the same afresh on merits within a specified period after hearing both the parties.

4.9 SHAHEEN WELFARE SOCIETY (REGD THROUGH GENERAL SECRETARY VS. ENVIRONMENTAL PROTECTION AGENCY, PUNJAB, LAHORE THROUGH DIRECTOR GENERAL & OTHERS.

2005 CLD 1267

Before the Environmental Tribunal Punjab, Lahore

Syed Zamir Hussain, Chairperson and Mansoor Akbar Kokab, Member, Legal, Environmental Tribunal Punjab, Lahore, have decided the case on 1st June, 2005²⁹. Here, private complainant had alleged that six Industrial Unit in the area had been

²⁹ 2005 CLD, 1267.

playing havoc because of pollution by way of emission and discharge of waste water into a nearby "Nala Deg", that resultantly the said 'Nala Deg', because of dangerous Chemicals, had not only lost its natural marine life, like fish etc. but also had carried toxic obnoxious effect to such a great extent, that the underneath water table, had become unusable for drinking water for the local inhabitants and same had been converted into injurious brownish mephitic i.e. liquid; that said Industries had polluted the air, which allegedly discharged obnoxious gases hovering in the near vicinity, where the local inhabitants had dwelling houses and that large scale spread of health problems and diseases like sore eyes, lingering fever, choking suffocation, cough, body pain, rash over the skin and diarrhea had been complained of. Applications of respondents bore reference of specific provisions of S.265-K Criminal Procedure Code, 1898 and O.I.Rr.1 & 3 Civil Procedure code, 1908, so as to pose a serious question for the Environmental Tribunal could assume, while entertaining a complaint or a case falling within the purview of provisions of Environmental Protection Act, 1997.

The Honorable Chairperson and the Member, Legal have declared that Environmental Tribunal being an administrative Tribunal having remarkable distinctions, and not being a Court or Special Court, did bear inherent relaxations in respect of joining of common factors as amounting to causes of action/charges but certainly not to negate the substantial principles of natural justice in coining its own procedure for criminal jurisdiction or civil jurisdiction. Number of respondents could be arranged in a single complaint only where the activities, carried by them were homogeneous and a replica to each other such relaxation by the Tribunal was further limited, for practical purposes, where the violation of ambient standards was more concerned than the source of violation of NEQS. Additional restrictions upon said relaxation was the requirement of cause or the purposes of the Pakistan Environmental Protection Act, 1997 with respect to sustainable development of a particular industry or project rather than to penalize a single unit for violation of any offence as mentioned in S.17 of the Act. Present complaints, on account of misjoinder of respondents/alleged offender, were not worth to be proceeded

upon in its present form. Environmental Tribunal while accepting the applications of respondents returned the complaint with permission to file the same against each of the respondent separately³⁰.

4.10 Active Role of Judiciary

The judiciary of Pakistan³¹ is alive to the situation and has extended a helping hand to the State in achieving the goals of the environmental law. The superior judiciary and in particular, the Supreme Court of Pakistan, has played a positive and constructive role in preventing the degradation of the environment and preserving a sustainable ecological balance of nature. As discussed, several judgments have been rendered in cases relating to the prohibition of environmental degradation and maintaining a clean and pure environment. The Supreme Court of Pakistan also resorted to the exercise of extraordinary jurisdiction under Article 184(3) of the Constitution by entertaining petitions pertaining to maintaining clean environment, this being an issue of great public importance.

4.11 Conclusion

The Indian judiciary has played an important role to control the menace of pollution and to protect the ecological balance of nature. There are a lot of environmentally friendly statutes and some very good enactments are available in the books of statute and environmental litigation has become quite popular in India. In the case of Mr.M.C. Mehta and Others vs. The Union of India and Others, a writ petition has been brought by way of public interest litigation raised some seminal questions concerning the true scope and ambit of Article 21 and 32 of the Constitution of India, the

³⁰ Ibid.

³¹ Justice Sh. Riaz Ahmad Former Chief Justice of Pakistan, "*Legal and Institutional Framework for the Protection of Environment in Pakistan.*" http://www.unep.org/dpdl/symposium/Documents/Country_papers/PAKISTAN.doc(last visited on 1.10.2006).

principles and norms for determining the liability of large enterprises engaged in manufacture and sale of hazardous products, the basis on which damages in case of such liability should be qualified and whether such large enterprises should be allowed to continue in thickly populated areas and if they are permitted so to function, what measures must be taken for the purpose of reducing to a minimum the hazard to the workmen and community living in the neighbourhood. These questions which have been raised by petitioner are questions of the greatest importance, particularly since following upon the leakage of Methyl Iso Cyanide (MIC) gas from the Union Carbide Plant in Bhopal. All these questions arise in the present case since on 4th and 6th December, 1985, there was admittedly leakage of Oleum Gas from one of the Units of Shriram Foods and Fertiliser Industries as a result whereof several persons who adversely affected and according to the petitioner and Delhi Bar Association, one Advocate practising in the Tees Hazari Court died due to the incident. Now, the case took a new turn, and the Court held that “we would like to express our deep sense of appreciation for the bold initiative taken by the petitioner in bringing this public interest litigation before the court. We would, therefore as a token of our appreciation of the work done by the petitioner direct that a sum of Rs.10, 000/- be paid by Shriram to the petitioner by way of costs.”³² It was the first time in the history of public interest litigation that the cost has been imposed as a reward and as a token of appreciation by the court. In his case the Supreme Court of India granted the permission to Shriram Foods and Fertilizer Industries to reopen its plant, subject to the conditions set out by the apex court. Another case of the superior judiciary of India is important in a way just because, its aim was to protect the wildlife. In the *Taj Rasadan Vs. The Union of India and Others*³³ a stay order was made by Mr. Justice S.C. Agrawal directing the Union and State Government not to allow the Saudi Arabian Prince to continue his game hunting of Indian Bustard, because the preservation

³² M.C.Mehta and Others vs. The Union of India and Others. Writ Petition No.12379 of 1985 and Shriram Foods and Fertilizer Industries and Others vs. Union of India and Others. Civil Petition No.26 of 1986.

³³ Civil Writ Petition No.1/79.

of wildlife is a matter of great ecological importance. The petition became infructuous because of the fact that the Saudi Prince wind up his hunting expedition.

It is obvious that the Supreme Court of Pakistan has always sought to enforce the laws and regulations pertaining to the protection of the environment. In reaching its conclusion, the Court has relied not only on the law and Constitution of Pakistan, which are binding on the Court, but has also invoked international conventions, declarations and protocols. In doing so, the Court favoured the international conventions for the enforcement of internationally recognized standards of environmental protection. The issue of protection of environment is of vital importance not only to the people of Pakistan but the people of the world. This issue transcends national boundaries and geographical barriers. There is a growing consensus among the nations, and the people of Pakistan agree with this consensus, that there is a definite need to consolidate and strengthen the environment protection legislation. The judiciary of Pakistan is alive to its responsibility and has played and will continue to play its due role in preventing all forms of environmental nuisance, pollution, degradation and ecological disaster so as to protect and safeguard the ecological balance of nature in our one and only planet, earth.

CHAPTAER 5

RECOMMENDATIONS FOR IMPROVEMENT OF ENVIRONMENTAL SITUATION IN PAKISTAN

There are numerous environmental problems in Pakistan, which require immediate attention, and specific target oriented action plans to have achievable and visible outcome within the shortest possible time frame. It is therefore more rational and appropriate that only the major areas, as outlined below are touched upon.

5.1 WATER QUALITY CONCERNS¹

The summary of the present conditions in Pakistan regarding water quality concerns is as follows:-

5.1.1 Summary of the Present Condition in Pakistan:

It is not a fiction but a fact that our country is fraught with a multitude of water related problems pertaining both to the groundwater and the surface water in the rivers, lakes, canals, and other bodies. The groundwater in a large area of the country is predominately brackish laden with heavy loads of substances. At the same time, both surface water and the groundwater are under serious threats of pollution and contamination due to unchecked discharge of the industrial effluents and pouring of the untreated municipal sewage water along the trajectory of the rivers and water channels from the cities and town situated along their path. Resultantly, the pollutant's load, including the agricultural chemicals is increased manifold at the tail end of the water channels. Aquatic life is being adversely affected by the pollution of the surface water reservoirs thereby. Throwing of the raw sewage water is due to the non-availability of any facility for the treatment of the

¹The Writer presented the Article "*Proposals for Improvement of the Country's Environmental Conditions*", for the Training Course "Environmental Management and Pollution Control in South West Asia", at HIP, Hiroshima, Japan on 3rd December, 2003.

municipal sewage before its discharge into the rivers and other proximal water bodies. Similar situation prevails in respect of the industrial liquid discharges, which are poured into the water channels because majority of the industrial units have no industrial wastewater treatment plants. Water pollution due discharge of industrial wastewater/effluents directly into the nearby fresh water bodies or indirectly through the wastewater drainage channels is on the increase. The problem does not stop here but the sewage of pollutants (organic/inorganic) from the surface waters into the groundwater is posing serious environmental threat for the end consumers. Increasing problems of water logging and salinity due to poor and unscientific irrigation practices is also affecting the water as well as soil quality significantly. Concomitant the above, the agricultural runoff containing harmful chemicals (primary and secondary chemicals emanating from chemicals fertilizers, pesticides etc.) is affecting the water quality. Not only is this but the excessive extraction of the groundwater to meet with the needs of the growing populations rapidly lowering the water table in urban areas of the country. Then mixing of the seeped sewage water into the water supply pipelines for domestic and commercial consumption also degrades the water quality to an alarming extent and may predispose outbreak of epidemics.

5.1.2 Issues & Problems:

The issues and the problems currently faced by the country in respect of the water quality and quantity are multidimensional. However, some of the serious issues and problems are summarized here under:-

- a. Lack of wastewater treatment facility for the residential sewage before its discharge into water bodies.
- b. Lack of expertise/technical personnel and equipment to survey and for consistent monitoring of the water quality
- c. Non-availability of industrial effluent treatment facilities either at source or later on.
- d. Unsatisfactory enforcement of relevant laws concerning water quality

- e. Lack of political will and awareness of masses in forestalling water quality impairment by the industries and other pollution sources
- f. Non-availability of drainage channels for excess irrigation water drainage
- g. Unscrupulous use of agricultural chemicals and resultant pollution of surface Waters
- h. Increasing problem of water logging and salinity
- i. Increasing pollution of the water bodies and end recipient of the water flow
- j. Improper enforcement of the Environmental Quality Standards for industrial and municipal waste discharges.

5.1.3 Proposals for Improvement:

Since the country is facing a lot many problems concerning the water quality and protection of the water bodies' environment, there is immediate need of an action plan to combat with the situation on war footings. Some of the proposals that I intend to suggest would be as under:

Firstly, it would be proposed preparation of a comprehensive database depicting the water resources and quality situation in the country. This would involve extensive taking of the samples from different water bodies and analyzing them for various kinds of the pollutants. The ameliorating measures will, in turn, depend on the results of the data so obtained. It would be meaningless to formulate any proposals without having a true and exact picture of the water situation in the country.

Secondly, a well-linked monitoring system should be established and placed for continuous monitoring of the water quality and associated concerns. For this purpose, monitoring sub-units must be setup the feasible points of entry of the wastewater into the rivers both for the industrial discharges as well as municipal wastewater.

Thirdly, end-pipe wastewater treatment facilities should be installed both for the industrial units as well as municipal sewages. There should also be intermediary midline sewage treatment stations for the large cities ahead of the final discharge facility.

Fourthly, mandatory provision of the treatment facilities according to the NEQS should be made a compulsory part of the setting up new industrial units, and construction of new residential colonies. This may entail formulation of a new piece of legislation or amendment in the existing law.

5.1.4 Purpose of the Proposals:

The purpose of the proposals for improvement in water quality can be summarized as per following:-

- a. To have a reliable database concerning water profile in the country so that practical and rational policies and action plans could be formulated and the progress on the water sector environmental restoration may be evaluated in quantifiable terms. The database would also serve as the basic document for the preparation of short-to long-term strategies concerning preservation of the water milieu.
- b. The proposal concerning establishment of a well linked in-situ monitoring system would help to monitor variations in the water quality parameters as well as serve as an indicator of the improvement in the water environment resulting from the action plans. The monitoring system will help to prevent further degradation of the water resources both qualitatively and quantitatively. The Japanese Monitoring Model can be adapted for this purpose.
- c. The purpose of the other two proposals is to ensure discharge only of the treated wastewater into the drainage channels and then into the water bodies. This measure will help improve the deteriorating water quality in the water bodies.

5.1.5 Expected Outcome:

The expected outcome for the proposal for improvement in water quality can be discussed as followings:-

- a. Availability of a true and depictive picture of the country's water profile for various purposes
- b. Formulation of short-, medium-, and long-term policies base on the realistic statistics and their quantification in time scale of improvement
- c. Better and efficient watershed management programs.
- d. Improvement in the water quality due to treatment facilities in the industrial units and the municipal sewage system.

5.1.6 Implementation System:

The implementation system for the first two proposals would entail cooperation from the various public sector organizations and the local government authorities such as Irrigation Department, City Government, Water & Sanitation Agency, etc) in conjunction with the industrial sector (for the industrial wastewater). Universities and research institutions should be involved in carrying out surveys and for collection of samples and data. Pakistan Environmental Protection Agency and Environment Department, however will be executing agency and the funds will be provided through the annual budget of the Agency/ Department in consultation with the Finance Division/Department.

5.1.7 Points to be considered for Implementation:

Identification of the parameters in respect of which data is to be gathered Training of the staff involved into the methods of survey, data collection, compilation, tabulation and analyses. Consultative and trust building meetings with the public sector agencies and the private sector authorities for devising modalities of implementation of the proposals Development of a computer base software for storage, rearranging, tabulating and analyzing the data. Students and researchers from the universities and educational institutions should be involved in the exercise.

5.2 AIR QUALITY PRESERVATION²

The summary of the present conditions in Pakistan regarding air quality preservation may be elaborated as follows:-

5.2.1 Summary of the Present Condition in Pakistan:

- a. Air pollution, especially in the urban areas, is on the increase due to industrial stack emissions, vehicular exhausts, and to a lesser extent by the burning of coal/wood/kerosene for domestic purposes
- a. Pollution levels with regard to certain parameters in the cities exceed the WHO standards especially in respect of the particulate matter (PM10)
- b. Reasonable degree of air pollution is caused by dust pollution, as well as construction and demolition activities
- c. Odor nuisance due to various industrial processes in the industrial pockets
- d. Un-safe disposal/open dumping of waste in the vicinity of the cities is affecting air quality badly.
- e. Increasing haziness and reduction in atmospheric visibility due to increase dust and particulate pollution especially in the urban areas.
- f. Increasing population and resultant increase in the number of the vehicles plying in the cities is posing serious problems of increasing pollution levels.
- g. Improper and untimely turning/servicing of the vehicles is adding to air pollution
- h. A great deal of air pollution is caused by the very old model vehicle, as well as a large number of two strokes engine vehicles.

² The Writer presented the Article "*Proposals for Improvement of the Country's Environmental Conditions*", for the Training Course "Environmental Management and Pollution Control in South West Asia", at HIP, Hiroshima, Japan on 3rd December, 2003.

5.2.2 Issues and Problems:

The issues and problems for air quality preservation can be explained as per following lines:-

- a. Un-satisfactory enforcement/implementation of the gaseous emissions standards (NEQS) for the industrial units
- b. Non-availability of stack gas treatment facilities at the industrial units.
- c. Non-availability of emission standards for the incineration facilities
- d. Lack of emission standards for vehicular exhaust
- e. Lack of vehicular and industrial fuels quality standards with approved levels of additives.
- f. High level of fugitive dust in the country
- g. Poor capacity of the monitoring and surveillance agencies
- h. Lack of efficient public transport system and resultant dependence on individual vehicles instead
- i. High number of very old model vehicles with unsatisfactory engine conditions
- j. Presence of a large number of 2 stroke engine vehicles
- k. Adulteration of petroleum and resultant effect
- l. Higher levels of smoke, hydrocarbon, and noise levels from the auto rickshaws
- m. Presence of a reasonable number of diesel engine vehicles without any treatment facility for the exhaust gas
- n. Open burning of the solid waste causing serious air pollution problems
- o. Degradation of air quality due to setting up of industrial units in and around the cities, i.e., improper town planning
- p. Lack of sufficient vegetation cover, trees, green plants to prevent dust pollution

5.2.3 Proposals for Improvement:

The proposals for improvement in air quality preservation are as follows:-

- a. Preparation of a comprehensive database air quality situation in the country. This would involve extensive survey, sampling from different locations in the urban and rural areas, highways, and other selected points. Testing of the samples and preparation of a computerized database after analyzing them for various kinds of the pollutants will follow this. The ameliorating measures will, in turn, depend on the results of the data so obtained. It would be meaningless to formulate any proposals without having a true and exact picture of the air quality situation in the country.
- b. Setting up an appropriate level continuous monitoring system at the major industrial and urban locations for the determination of the level of the essential parameters on regular basis
- c. Formulation of short-& long-term policies aiming at reduction of the air pollutants levels within the shortest possible time.
- d. Installation of de-Sox a de-Ox equipments by the industrial units that are producing these gases as a byproduct of their chemical processes
- e. Vehicular air pollution may be controlled by mandatory fitting of treatment equipment in the diesel vehicles, phasing of the old model vehicles, and eradication of the two stroke engine vehicles
- f. Promotion of CNG as an alternate vehicular fuel replacing diesel and petrol
- g. Preparation of a reliable database air quality profile of the country would help formulation of practical and rational policies and action plans for the air environment restoration. The progress could be measured in quantifiable terms. The database would also serve as the basic document for the preparation of short-to long-term strategies concerning air quality problems
- h. Establishment of a well-linked in-situ monitoring system would help to monitor variations in the designated air quality parameters as well as serve as an indicator of the improvement in the air quality resulting from the action plans. The monitoring system will help to prevent further degradation of the air environment both qualitatively and quantitatively. The Japanese Monitoring Model can be adapted for this purpose.
- i. To ensure improvement in the air quality on permanent basis. All these proposals would help to reduce the existing ambient pollutant load especially in the urban areas.

Implementation of the proposals would curb at-the-source production of primary pollutants emitted from the industrial stacks and the vehicular exhausts

- j. Availability of a true and depictive picture of the country's air profile for various purposes including formulation of short-, medium-, and long-term policies based on the realistic statistics and their quantification in time scale of improvement
- k. Implementation of the proposals would help reduce the air pollution load in the ambient air, especially so in the urban areas as a result of installation of the treatment facilities and control of the vehicular exhaust pollution

5.2.4 Implementation System:

The following implementation system for improvement in the air quality should be kept in mind:-

- a. The implementation system for the proposal concerning preparation of a database would entail cooperation from the various public sector organizations and the local government authorities (such as Irrigation Department, City Government, Metrology Department, etc) in conjunction with the industrial sector. Universities and research institutions should be involved in carrying out surveys and for collection of samples and data. Pak EPA however, will be executing agency and the funds will be provided through the annual budget of the Department in consultation with the Finance Division.
- b. The other two proposals regarding installation of the air pollution control in the factories, and control of vehicular exhausts would entail promulgation of the necessary enactments spanning out the time frame and necessary details for control of pollution from these sources. Pak EPA would be the implementing and prosecuting body against the violations.

5.2.5 Points to be considered for Implementation:

The following essential points to be considered for the implementation programme:-

- a. Identification of the essential (primary) and the occasional (secondary) parameters in respect of which data is to be gathered
- b. Training of the staff involved into the methods of survey, data collection, compilation, tabulation and analyses
- c. Development of cheap indigenous technology for effective control of the pollution

- d. Capacity building of the Environment Protection Agency with regard to equipment, funding, and human resources
- e. Development of a computer based software for storage, rearranging, tabulating and analyzing the data
- f. Students and researchers from the universities and educational institutions should be involved in the exercise

5.3 SOLID WASTE MANAGEMENT³

The summary of the present solid waste management conditions in Pakistan is as under:-

5.3.1 Summary of the Present Condition in the Country:

- a. Generation and production of the industrial and municipal waste is on the increase especially in the urban areas
- b. Composition of the urban waste has changed tremendously over the years
- c. No planned systems of waste segregation and classification
- d. Waste is thrown on the roadsides, open spaces with impunity
- e. Medical waste is mixed with the municipal waste. No independent system for hospital waste management
- f. Due to deficient resources, the agencies responsible for waste collection and disposal are unable to lift the waste completely
- g. Non availability of land filling, composting, incineration and recycling facilities
- h. Non availability of MSW incineration facilities
- i. Lack of public education and perception about the waste disposal and management is a matter of concern.

³ The Writer presented the Article "*Proposals for Improvement of the Country's Environmental Conditions*", for the Training Course "Environmental Management and Pollution Control in South West Asia", at HIP, Hiroshima, Japan on 3rd December, 2003.

5.3.2 Issues & Problems:

The issues and problems regarding solid waste management are as follows:-

- a. Lack of short term and long term planning for waste management. In case of long term, the plans are either not implemented, then the implementation is not as per timeframe
- b. The municipal authorities lack in essential resources and finances for proper and efficient waste collection and disposal
- c. Virtually no sorting of waste for removal of re-usable, recyclable, organic and inorganic waste or to reduce end waste load
- d. Hazardous and medical waste is being disposed of together with general waste leading to serious environmental problems
- e. Socio-cultural values of the society are an impediment in the waste management. People hardly participate in any waste management efforts. Lack of public education and awareness is also a cause of the poor responses from the people
- f. People are not willing to pay for the waste management and disposal services
- g. Changing lifestyles, increase in the income, and lot many other socio-cultural factors are responsible for increased waste generation
- h. Customer convenience and market competition is reasonable for much of the packing waste generation
- i. Population increase and migration to urban cities also adds to pay load of the wastes

5.3.3 Proposals for Improvement:

The waste management system in most parts of the country is not satisfactory. The situation warrants a complete reexamination and revamping of the system to establish it on cost-efficient basis. In this regard, following proposals are floated:

- a. Capacity building of the agencies responsible for the waste management equipping them with necessary material, equipment, and manpower resources for efficient waste management right from collection till disposal

- b. In order to reduce the generation of the waste, and to encourage reuse as well as recycling, public attitudinal change is required. Thus there is need of introducing and launching mass awareness and education programs to motivate the people for adoption of environment friendly practices with regard to generation, disposal, segregation, recycling of the waste
- c. In order to reduce the end load and to recovery resources from the waste, indigenous technologies should be developed
- d. Promulgation of laws & regulations binding the industries for compulsory recycling of a percentage of their products
- e. Promotion of purchase of recycled goods in the governmental sector by making amendment in the purchase rules. This will also motivate the general public towards purchase of recycled goods
- f. Provision of subsidies and relief in taxation etc where required for promoting sale of the recycled goods
- g. Adoption of a full range of technologies & methods for public education and awareness towards the growing menace of improper waste management focusing on efforts of reduction in the generation, at source sorting, & development of a recycling conscious society
- h. Encouragement of private sector in the waste management
- i. In order to reduce generation and promote recycling, waste tax may be imposed in varying scale according to the quantum of generation by the households, commercial enterprises, and the industrial units

5.3.4 Purpose of the Proposals:

The purpose of the proposal is to enhance the efficiency and efficacy of the MSW collection and management system. The existing system is fraught with lot many lacunae, wasteful overlaps, and mismanagement of resources. The entire system of waste management perhaps requires a thorough overhaul and recasting from generation to disposal. The proposals are intended to introduce a new culture and system of waste management. The proposals will also help in the recovery of resources from the waste stream and will promote recycling industry. The most important part of the proposals is to alter the public perception towards waste as being a material of worth for the purpose of recovery of resources. Once

the citizens become sensitized to the importance of the proper waste management, then they can act in an institutional manner and can even perform the role of watchdog over the performance of the waste management agency. Introduction of the system of waste tax will create feeling of ownership in the masses and a sense of sharing in the waste management of their area.

5.3.5 Expected Outcome:

The expected outcome of the system of solid waste management is as under:-

- a. An efficient and cost effective waste management system
- b. Recovery of resources from the waste and their usage as raw materials
- c. Generation of economic activity through promotion of reuse and recycling
- d. Increased cleanliness and better hygiene of the area
- e. Inculcation of sense of ownership and belonging in the citizens and resultant improvement in the waste management system on account of public participation

5.3.6 Implementation System:

155. The Local/District Government, and the municipal agencies concerned with waste management are the executing bodies for the collection and disposal of the waste. The new system of waste management will be implemented and given effect to them. However, Pak EPA will provide a coordination and technical support center role. NGOs will be encouraged by the Agency to actively participate in promotion of awareness of the people and for development of educational and promotional material. The municipal authorities and the government will provide necessary seed money for implementation. Some portion of the cost will be met with from the waste tax.

5.3.7 Points to be considered for Implementation:

In order to make the waste management system a success the NGOs should be actively involved in the process by encouraging and educating the people. Secondly, in order to fetch maximum public participation, mandatory tripartite review meetings having representation of the waste management agency, the Environment Department, and the public/NGOs should be held as a monitoring tool. Maximum emphasis should be on the development of new ways and means for recycling of the waste rather than its land filling.

5.4 OTHER ENVIRONMENTAL MEASURES (Chemicals, Noises & Vibrations etc.)⁴

The summary of the present conditions regarding environmental measures regarding chemicals, noises and vibrations are as follows:-

5.4.1 Summary of the Present Condition in the Country:

- a. Increasing trend of using organic and inorganic agricultural pesticides, fertilizers is contributing towards water and soil pollution
- b. Increased usage of chemicals, detergents, etc for domestic purposes resulting in environmental pollution of the water bodies
- c. Use of empty chemical containers, bags etc for storage of edibles, foodstuff etc.
- d. Noise pollution from the traffic, industrial operations, and indiscriminate use of amplifiers is quite significant
- e. Aerodromes having been surrounded by increasing residential constructions are a constant source of noise and vibrations to the residents

⁴ The Writer presented the Article "*Proposals for Improvement of the Country's Environmental Conditions*", for the Training Course "Environmental Management and Pollution Control in South West Asia", at HIP, Hiroshima, Japan on 3rd December, 2003.

5.4.2 Issues & Problems

The issues and problems for environmental measures are as follows:-

- a. Poor enforcement of the regulatory laws pertaining to trade in chemicals
- b. Poor implementation and enforcement of laws pertaining to noise pollution control
- c. Noise level standards of the country are on the upper side of the dB scale

5.4.3 Proposals of Improvement:

The proposals for improvement for chemicals, noise and vibrations are as under:-

- a. Decreased usage of the agricultural chemicals as a part of the conscious national policy
- b. Adoption of the origin-to-grave inventory system with regard to the known hazardous chemicals to prevent their entry into the environment
- c. Finding of the alternative of the agrochemicals through research & development and promotion of environment friendly alternate chemicals
- d. Formulation of the NEQS for the noise & vibration where missing & review of the existing standards to bring them in conformity to the actual requirements. Across the board implementation for these standards through special campaigns

5.4.4 Purpose of the Proposals:

The purpose of the proposals regarding environmental measures is as under:-

- a. The proposals are aimed at reduction and control of the primary and secondary pollutants from the use of the chemicals, pesticides, and fertilizers etc, which are used for agricultural as well as other purposes
- b. The implementation of an inventory system would help to trace the path of the chemicals using mass balance technique. This will help their introduction into the environment and will prevent environmental pollution from them
- c. The proposal concerning vibrations and noise pollution is likely to bring about reduction in the noises and vibration pollution levels

5.4.5 Expected Outcome:

The expected outcome after taking necessary measures is as follows:-

- a. Decreased changes of environmental pollution from the use of the agrochemicals and therefore decreased probability of soil degradation and water contamination
- b. Reduction in the noise and vibration levels both at source and ambient

5.4.6 Implementation System:

A special enactment or law and set of rules will be essential to give effect to the proposal regarding maintenance of inventory system for the chemicals. Cooperation of the local district government and the business/industrial community will be the most crucial factor in making the implementation a success venture. Noise and vibration standards can be enforced by the Pak EPA with the help of the police and local government authorities where so warranted.

5.4.7 Points to be considered for Implementation:

Education, appraisal and cooperation of all stakeholders must be solicited for making the implementation effective and acceptable to them.

5.5 ENVORNNETAL MANAGEMNT (EIA/IEE, ISO 14001 etc.)⁵

The summary of the present conditions in Pakistan regarding environmental management is as follows:-

5.5.1 Summary of the Present Condition in Pakistan:

- a. General lack of environmental management in almost every sector of life/area of activities. This is perhaps due to very late recognition of the importance of

⁵ The Writer presented the Article "*Proposals for Improvement of the Country's Environmental Conditions*", for the Training Course "Environmental Management and Pollution Control in South West Asia", at HIP, Hiroshima, Japan on 3rd December, 2003.

environmental management and recognition of environmental issues at the public sector level.

- b. Dearth of trained manpower for the environmental management, risk assessment, impact analysis and forecasting of the effects
- c. Poor environmental management practices by the industrial and commercial community due to certain apprehensions, non-confidence into the mechanisms of EIA, and lack of knowledge about the impact assessment

5.5.2 Issues & Problems:

The issues and problems regarding environmental management may be seen as under:-

- a. Most of the industries or public sector projects had completed construction and were in operation much prior to promulgation of the laws and regulations for EIA
- b. General lack of knowledge and unfound apprehension amongst the entrepreneurs about EIA and its effects on their business
- c. Lack of uniformity of procedures, non availability of the EIA guidelines, and lack of technical methodology for carrying out EIA
- d. Deficiency of trained persons for carrying out IEE/EIA on scientific footing
- e. Non recognition of the environmental management practices by the government/industry, perhaps due to poor force of sanctions behind them

5.5.3 Proposals for Improvement:

The proposals for improvement for environmental management may be elaborated as under:-

- a. Training of the personnel engaged in the EIA into the newer methodologies and techniques for conducting the impact & assessment including capacity building of the Pak EPA/Environment Department for effective review of EIA
- b. Strict monitoring of the projects on the basis of the calculated assessment 7 impacts and framing guidelines of EIA for projects for different nature. No construction project or industrial unit should be allowed to be setup without proper and approved EIA

- c. Encouragement of the industries, businesses, and other concerned to seek ISO certification and awareness as well as confidence building in the entrepreneurs about IEE/EIA
- d. Framing guidelines of EIA for projects of different nature.

5.5.4 Purpose of Proposals:

The purpose of the above proposal is to place a proper and effective system of environmental management in-situ and careful evaluation of the mega projects with respect to their potential impacts on the environment. The proposals are also intended to bring about perceptual change in the outlook of the entrepreneurs and to build up their confidence in the system of EIA as a friendly activity instead of being a hostile one.

5.5.5 Expected Outcome:

Better environmental management control system through the modus of public as well as stakeholder participation. The system would help diagnosis of the potential adverse environmental impacts before undertaking any major activity along with suggesting remedial measures to have minimal net adverse effect on the environment. On the basis of the result of EIA, appropriate remedial measures could be taken during the implementation and operation stage of the mega project thereby avoiding any damage to the environment.

5.5.6 Implementation System:

Existing implementation system would suffice to cater for the needs of the proposed improvements proposals. However, the Pak EPA/the Environment Department will have to focus on the aspect of confidence building in the entrepreneurs about the EIA and to remove their doubts about the EIA. Involvement and cooperation of the Chambers of Commerce and Industry would play a vital role in this regard.

5.5.7 Points to be considered for Implementation:

Education and training of the staff entrusted with the duties of EIA/IEE would be an essential requirement for effective enforcement of the proposal and for improvement of the situation. A stakeholder friendly system will have to be developed from, where they may seek frequent help and guidance and may find answers to their questions. The Pak EPA/EPD should rather act like a facilitator than a traditional implementer of the law so as to encourage promotion of EIA in the entrepreneurs.

5.6 ENVIRONMENTAL EDUCATION⁶

The summary of the present conditions regarding environmental education is as follows:-

5.6.1 Summary of the Present Condition in the Country:

- a. General literacy rate is on the lower side (45% approx) only
- b. Non-inclusion of environmental education in the syllabi/courses of reading at the elementary, secondary, undergraduate, and postgraduate levels.
- c. Unsatisfactory level of awareness about environment issues/problems, understanding the environmental importance, and responding vehemently to adverse effects on their environment
- d. Inconsistent and disjointed awareness level raising campaigns by the government with little on ground impact.

5.6.2 Issues & Problems:

The issues and problems regarding environmental education may be explained as under:-

- a. Lack of political will and commitment of the public sector towards apprising the people about environmental issues
- b. Non formulation of courses of reading, syllabi, textbooks etc on environmental education

⁶ The Writer presented the Article "*Proposals for Improvement of the Country's Environmental Conditions*", for the Training Course "Environmental Management and Pollution Control in South West Asia", at HIP, Hiroshima, Japan on 3rd December, 2003.

- c. Non-availability of training institutions imparting environmental education/technology
- d. Lack of research and monitoring institutions for research and development as well invention of new technologies
- e. Lack of expertise and trained persons in the field of environment education
- f. Lack of commitment on the part electronic and print media for raising awareness level of the people

5.6.3 Proposals for Improvement:

The proposals for improvement for environmental education in Pakistan may be seen as followings:-

- a. This area needs the maximum attention, as this would prove the foundation of the success of the environmental protection programs in the present as well as in the future.
- b. Development of the tailor made and target oriented syllabi & curricula for the various grades of education according their comprehension level. Preparation and promotion of environmental literature in the form of short stories, comics, pictorial messages, signboards and pamphlets etc
- c. Setting up of environmental clubs in the schools, and educational institutions at all levels to inculcate sense of participation in the children and thereby indirectly motivating and modifying the behavior of their parents. This may entail inclusion of environmental topics concerning day-to-day life in reading material/textbooks at elementary and secondary level.
- d. Setting up of NGO's & environmental clubs/volunteers' associations for apprising the people of the importance of environmental protection
- e. Usage of all modes of communication and mass media for the education of the people. Urging the mass media to play it role, which is perhaps the most vital role in this cause?

5.6.4 Purpose of Proposal:

The purpose of proposals is to ensure consistent rise in the environmental awareness and change in the attitudinal outlook of the masses towards environment through constant

persuasions. This essentially means apprising the people of the importance of the ecosystem for a harmonious living with the nature by resource conservation. Investing on the children and younger population would payback twofold. Firstly, this approach will make them more responsible and concerned towards the environmental importance, and secondly, this will help a lot by indirectly modifying the environmental outlook and perception of their parents and the elders.

5.6.5 Expected Outcome:

The expected outcome regarding environmental education may be glanced through as per followings:-

- a. Raising of the level of understanding of environmental importance in different sections of the society especially the younger ones
- b. The attitudinal change in the outlook towards environment, in turn, provides the nexus for other environmental protection programs. Being aware of their rights and responsibilities, the citizens can then raise a forceful voice urging the public sector to take all necessary steps for the environmental preservation and restoration of the environmental damage caused already
- c. Increased involvement and participation of the NGOs in environmental issues and thereby enhancing the public participation towards environmental protection and conservations

5.6.6 Implementation System:

Setting up of a separate and exclusive environmental education wing/cell in the Pak EPA/Environment Department. This wing will also act as the focal point for the activities of the NGOs operating in the field of environment.

5.6.7 Points to be considered for implementation:

The following points to be considered for implementation of the above proposals:-

- a. Development of appropriate curricula, Syllabi, and courses of readings for all levels and sections of the society by the Text Book Boards, the publishers, mass media, and others concerned.

- b. Active cooperation of the Ministry of Environment, M/o Education, Education Departments, District Governments and the private schools management boards in the setting up of the environment clubs in the schools and promotion of environmental education therein.

5.7 ENVIRONMENTAL LEGISLATION⁷

The summary of the present conditions in Pakistan regarding environmental legislation is as under:-

5.7.1 Summary of the Present Condition in the Country:

- a. Pakistan Environmental Protection Act was promulgated in 1997 as the single substantive, procedural and punitive enactment concerning environmental preservation, upgrading, rehabilitation, and all other important aspects of environment sector in the country.
- b. Some rules have been framed under the Act and some other are under the process of making
- c. Implementation status of the rules and regulations is either very sluggish or almost non-existence, due to which there is a little impact on environmental protection and conservation. After the best, implementation of the provisions of the Act can be described as being unsatisfactory till the present

5.7.2 Issues and Problems

The issues and problems regarding environmental legislation may be gone through as followings:-

- a. PEP Act is little comprehensive and exhaustive piece of legislation on the subject of environment. Many areas lack clear-cut delegation of powers, responsibilities and other matters
- b. Process of rule making is very slow thereby producing very little practical impact

⁷ The Writer presented the Article "*Proposals for Improvement of the Country's Environmental Conditions*", for the Training Course "Environmental Management and Pollution Control in South West Asia", at HIP, Hiroshima, Japan on 3rd December, 2003.

- c. Implementation and enforcement of the environmental laws is unsatisfactory due to various factors including lack of commitment, lack of judicial surveillance, and political will of the government and the people

5.7.3 Proposals for Improvement:

The proposals for improvement regarding environmental education may be seen as under:-

- a. Periodic review and revision of the environmental legislations to bring them in conformity with the changing requirements of the time. Involvement of stakeholder in the process of reviewing the environmental legislation so as to make it more practicable and enforceable
- b. Achieving the desired environmental preservation through gradually stricter legislation with the passage of time
- c. Delegation and decentralization of essential financial and administrative powers to effect enforcement

5.7.4 Purpose of Proposals:

The purpose of the proposals is to actualize the environmental protection and preservation through the instrument of effective and relevant legislations so as to curb the environmentally adverse practices and modify the societal thinking, trends, behavior, and outlook of all sections of the society towards environmental issues.

5.7.5 Expected Outcome:

The expected outcome of the proposals for improvement of environmental legislation may be seen as per followings:-

- a. The outcome is expected to flow out of implementation of the proposals is the increased public understanding of the importance of environment and thus modification of the public attitude, behavior, and way of perceiving the environmental issues in a more coherent and responsible manner in their daily lives and pursuits
- b. Effective control over the sources of pollution, such as industrial units, business & commercial concerns, and public sector corporations/state enterprises engaged in various industrial and commercial activities in the country.

5.7.6 Implementation System:

Existing implementation system comprising the Federal & Provincial Environmental Protection Agencies, combined with specially setup Environmental tribunals (Court) would suffice.

5.7.7 Points to be considered for Implementation:

The legislations proposed should take off gradually and must be compatible with the ground realities and the capacity of the target sections of the society from whom action/obedience is expected or required. There should be almost no scope of discretionary powers and misuse of the authority by the public officials. The laws should be simple easily and understandable. While framing any legislation, it may be thrown open to public for

discussion so as to have a large public participation and consensus before actual approval by the parliament for the promulgation.

In a nutshell, we have to keep in minds the above suggestions and proposals for an effective environment management plan to protect the future of our next generations and preservation of the natural environment.

CONCLUSION

Are Environmental Laws effective in Pakistan to implement a comprehensive environmental management plan to save the natural environmental phenomenon? The pros and cons of this question can be examined in environmental historical perspective of Pakistan. Complementing the efforts directed upon environmental preservation, the Government has taken a number of steps to integrate the environment and economic development in policy, planning and development. There have been notable achievements in institutional development, including the development of the Environmental Protection Act, 1997, establishment of key institutions, and innovative measures such as the environmental tribunals, and the conservation strategy program with their associated district conservation strategies at grass root level.

The steps towards institutionalizing environmental concerns as cross cutting themes within all planning and decision making processes have led to making it mandatory for all plans, programs and projects to conduct initial environmental evaluations and environmental impact assessment (EIA). Although significant results have been achieved in promoting an EIA conscious process of development, much still needs to be done. The question of adequate capacities within public as well as private sectors remains a critical area of concern. Similarly, there is a general hesitation for facilitating public consultation although recognized as an important aspect of EIAs. This hesitation partly stems from the lack of experience of both public and private sector proponents in social analysis of developmental plans and projects. In addition, follow up on the recommendations and results of the public consultation has been another area of concern for the masses at large as well as the EPAs. Further mainstreaming of EIA into policy framework and operational mechanisms of project approval processes is still a major gap. Specific policy steps are required for instance through making EIA an integral part of feasibility report. EIA requirements have usually high costs

associated to these exercises, which reflects through lack of commitment from proponents.

The Pakistan Environmental Protection Agency and its provincial counterparts have been the primary actors in ensuring adherence of public and private sector to National Environmental Quality Standards (NEQS). Several incentive based steps have been taken in this regard, particularly for pollution control. These include establishing a self-monitoring and reporting system for the industries and other proponents as well as establishing quality monitoring.

Monitoring ensuring that reporting takes place as per the mitigation measures identified through EIA has been less than desirable. In addition, a continuous process of updating EIA guidelines and manuals is yet another gap requiring attention. Keeping pace with the international knowledge and practice development, awareness and expertise on strategic environmental assessment as well as building socio-economic analysis as an integral aspect of environment and development in Pakistan pose other challenges.

It is well known that the challenges, Pakistan is facing in environment, development, and the international arena is formidable. It is also acknowledged that some of these are new challenges but most of them are inherent in nature. There are sectoral gaps - capacity and knowledge - that limit the rate of success of initiatives for pollution control and environmental protection and management. A brief narration to conclude the discussions on gaps and areas of improvement is presented below:

Air

As a signatory to Male Declaration on Control and Preparation of Air Pollution and its transboundary effects on South Asia, Pakistan depicted its serious commitment to improving ambient air quality. As a first step, Pak-EPA conducted a baseline study and developed national action plan. The base line study provided status of air pollution levels, current

provisions for monitoring, emission sources and estimates, ongoing research programs and national response to air pollution. The national action plan focused on filling of existing knowledge and information gaps for improving air quality as well as establishing monitoring networks in 5 cities, emissions inventory, assessing impacts of air pollution and air pollution reporting mechanisms.

Although making headway in addressing ambient air quality in the country, Pakistan is struggling with ineffective air quality management systems. Some of the primary reasons being limited understanding on Air Quality Management Systems (AQMS) by planners and implementers, which consequently result in lack of necessary linkage amongst various players such as EPAs, local governments, traffic police, academia, industries / chambers, industries, and health professionals etc. Adding to this burden is the fact that at present there is no continuous monitoring station present in country and most of the data reported is obtained from mobile monitoring units or spontaneous onsite sampling with laboratories based results. This lack of infrastructure has contributed severely to an incomplete analysis of air pollution.

Contributing to the institutional gaps of air pollution control, an absence of incentives based monitoring and reporting system lets high emission levels prevail. The need to explore privatization policies to encourage private capital for power generation, new refineries and gas project has been suggested time and again but without concrete follow up. Traditionally, industrial protection, provided through trade restrictions (tariffs, quotas), industrial licensing and other administrative controls on investment, provided the protectionist slack for using inefficient, high emission generating technologies. However, this trend is changing now creating a hope for solid action.

Similarly, the lack of resources restricts compliance with other measures/regulations such as the Motor Vehicle Ordinance (1965) and the Motor Vehicles Act (1969), aimed to control vehicles emissions. The average vehicle in Pakistan, which is over 15 years old,

emits 20 times more hydrocarbons, 25 times more carbon monoxide and 3.6 times more nitrous oxides than the average vehicle in other developed countries. Similarly, lack of information on the status of self-monitoring and reporting initiative impedes an assessment of success of failure of this approach.¹

Water

Pakistan is faced with severe water shortages and water quality issues. The productivity of fresh water is being reduced due to losses in the movement of the water from the canal heads to the croplands and due to pollution from industrial and agricultural chemicals and human and chemical wastes. In the backdrop of these challenges, the gaps are enormous surrounding policy, capacity, technology² and stakeholder participation aspects.²

The orientation of the water management institutions and experts is largely toward harnessing the resource in the service of economic growth, and not towards its conservation or quality. This a primary reason that the more recent social and environmental concerns relating to water access, quality and ecosystem degradation continue under a mega-project mindset oriented towards large dams, irrigation and drainage projects.

The unavailability of accurate water availability data has been a key gap identified for water sector reforms. This lack of information is partly responsible for heightened resistance to water infrastructure development projects, including construction of the mega dams most notable among them being the Kalabagh Dam, the Thal Canal, the Ghazi Barotha Project, the Chashma Right Bank Canal and the Chotiari Reservoir. The water availability problems are intertwined with a host of ecological and social issues. It is therefore

¹ <http://www.iucn.org/places/pakistan/pdf/IUCNP%20Strategic%20Framework.pdf>
<http://www.iucn.org/places/pakistan/info.htm#m>(last visit on 1.10.2006)

² Ibid.

imperative to address the socio-ecological aspects of water sector development planning in order to bridge the communication gap between decision makers, planners/implementers, and the beneficiaries.

The planning and implementation of irrigation and related activities has followed a fairly random pattern. The practice has been to proceed sub-sectorally rather than coordination and integration. Clearly, this has created gaps in terms of synergies between activities as well as partners in the realm of irrigation, drainage, groundwater development, and on-farm water management. Clear strategies for stakeholder participation as well as responding to gender issues in water management have been sporadic and less than successful. However, with the increasing awareness levels the trend is changing towards 'development for all by all'.

Land

Given the number of constraints on the resource and research base, progress in areas directly related to desertification in Pakistan has been modest. A sound understanding of the causes of land degradation exists in Pakistan, but although various technologies and methodologies have been developed to deal with its major causes, their widespread dissemination remains limited.³

Recent policy reforms have recognized the importance of community involvement and participation in resource conservation initiatives. An understanding of the wide-ranging underlying causes of desertification also exists at the policy level. Social and economic policies, such as the flat rate tax on groundwater extraction and the promotion of monocultural agrarian regimes, are being re-examined, and proposals for policy reforms are being extended. For the effective retardation of desertification, successful implementation of

³ Ibid.

these policy reforms remains to be seen. In addition, there is a need to diversify focus of programs and project to extend beyond only industrial and urban pollution problems.

Strengthening human resource and institutional development is an area requiring particular attention through provisions for strengthening agricultural universities and other government departments engaged specifically in activities related to the management and development of dry land areas.

Informed decision-making can only be possible through departmental integration and improved communication. The need to create working synergies between the provincial and national Desertification Control Units and other relevant departments to enhance information transfer and exchange is the need of the hour.

The range of technologies transferred for addressing desertification varies from expensive to cost-effective and from traditional to locally-adapted imported types. Although relevant technologies are available and ready for use with various government departments, their distribution and integration into the local system is a major obstacle. To overcome this, there is a need to strengthen institutional integration and cooperation and educate the local communities in deployment and use.

Projects arresting and reversing trends in desertification have been implemented in various regions of the country, but these efforts have largely been of an individual nature, with little coordination between local communities, NGOs and government line departments. Communities, NGOs, local research institutes, and provincial line departments have a valuable stock of knowledge accumulated from experience that needs to be integrated into and utilized while designing policies for reversing the current trend in desertification. Similarly, rural women are extensively involved in activities such as sowing, planting, harvesting, livestock management, and the collection of fuel wood. As such, they play an important role in natural resource management, and desertification, when it occurs, affects

them adversely. Although the potential for involving women in conservation initiatives has already been demonstrated, the need to set up an institutional framework in order to harness that potential has yet to be addressed.

Forests

Forestry sector in Pakistan has been amongst the very few areas of environmental protection that need more and focused attention. Despite the commitment of government as well as private sector and civil society, a halt and recovery of the country's forest resource is yet to come about. There are several dimensions to this continuing degradation. At policy level, the planning and decision making has been relatively strong however lack of monitoring and keeping a continuous check have compromised successful implementation of plans, programs and project.⁴

Nevertheless, creating institutions that hold the mandate to building human resources as well as knowledge and information base - such as Pakistan Forest Institute (PFI) - has directly addressed the capacity building needs in this sector. Similarly, at the policy and legislation level, there exist several gaps. For instance, the existing laws and regulations governing the use of forest resources provide penalties for contravention but no incentives for compliance. This partially because up till 1996, the legislation governing the forestry sector was meant to police the forests and communities were perceived as a threat to forest resources, which contributed to illegal logging and over harvesting of forest resources.

While reforestation is the major focus of many projects and plantation, success is mostly judged on the basis of number of saplings planted in a particular year, with no consideration given to the post-plantation survival rate. Ultimately, community based forestry projects lack post-project sustainability. Participatory and integrated approaches to forest management tend to be unsustainable in the absence of an enabling institutional environment

⁴ Ibid.

Biodiversity

Following the Convention on Biodiversity (CBD)'s ratification by the national cabinet in 1994, Pakistan automatically assumed the globally shared responsibility of employing constructive measures towards the protection and preservation of habitats, species, and genes. Since then, Pakistan's commitment to the cause of protecting the diversity of its natural environment has been reflected in the amplified importance that it has allocated to both environmental and wildlife preservation issues. In following up on the government's commitment, the Biodiversity Action Plan (BAP, 1999) was Pakistan's first attempt to meet the planning requirements of the Convention.⁵

For a program where the overall success rate depends on capacity and multi-sectoral commitment, biodiversity conservation remains an end for which the means are not readily available in a resource deficient country such as Pakistan. Nevertheless, some notable progress has been achieved over the last few years - including a comprehensive response to Article 6 of the CBD; formulation of the BAP based on multidisciplinary approach; publication of a Protected Areas System Review and Action Plan in 2000; introduction trophy hunting practices across several biologically sensitive areas; initiation of projects such as Maintaining Biodiversity in Pakistan with Rural Community Development, and Mountain Areas Conservancy Project; introduction of the GEF Small Grants Program to support civil society initiatives; and stipulation of mandatory IEE and EIA as part of all development programs and project.

However, the achievements cannot fully surpass the challenges hence additional interventions, in terms of those areas of concern that harbor greater importance for the long-term sustainability of biodiversity initiatives in Pakistan, would require further planning and action.

⁵ Ibid.

While concern for biodiversity in policy matters has definitely improved over the past decade, challenges persist. The biggest of these relate to the relative newness and the previously mentioned multi-sectoral nature of the biodiversity issue. Moreover, since most of the existing provincial laws were enacted well before the advent of either the NCS or the BAP, they do little to help Pakistan meet its obligations under treaties to which it is a signatory.

The conservation and management of wildlife are, for the most part, provincial responsibilities in Pakistan, to be handled by the relevant forestry, fishery, and wildlife departments of the area. As in most cases in the country, these institutions face lack of funding and a dearth of resources in terms of both trained staff and equipment. Consequently, the real problem lies not in the capacity constraint per se, but in the proper allocation of existing human resources.

Pakistan's ability to organize available resources in order to execute knowledgeable decisions regarding its biodiversity conservation initiatives is severely limited. This process of coordination and dissemination of research findings, and their ultimate utilization in the execution of future initiatives, relates directly to the absence of the institutional capacities. Despite the presence of established institutions—such as the Zoological Survey Department, the Pakistan Forests Institute, and the Pakistan Museum of Natural History, there still exists no complete and authenticated compilation of Pakistan's endemic species of mammals, birds or reptiles. The non-existence of proper channels for sharing and disseminating information restricts the utilization of valuable information by federal and provincial wildlife authorities.

It has been noted that women are more sensitive to understanding the importance of biodiversity conservation, and because their daily activities of firewood collection and livestock grazing are directly linked with the state of their surroundings, it becomes all the more important to invest in their environmental awareness. Consolidating random project

based activities into fully integrated gender strategies, whereby women and men can equally be involved in the preservation of their surroundings, remains a gap.

Marine Resources

Over fishing and polluted waters are the primary issues contributing to the reduction of productivity of the marine and inshore fisheries. The precarious condition of mangroves in coastal zone and the even more precarious status of certain aquatic wildlife, such as the Indus freshwater dolphin, are but a few glaring indicators of a rapid degradation rate.⁶

Against this persisting scenario, Pakistan has been able to take a few notable steps to address impeding pressures. Amongst these the formulation of Coastal Environmental Management Plan stands out as the key commitment for action.

Similarly, to several other sectors, the persisting knowledge and information gaps in marine and coastal management areas are the significant hindering factors for the government. There is a lack of ample research on several technical areas for instance chemical accumulation and its impact on marine environment. Similarly, the analysis of direct pressures created through growing urbanization and land reclamation from mangrove forest areas has not been noticed by the government and civil society as anything requiring immediate attention.

The growing recognition of limited scientific data as well as data on marine fisheries has found a place in current policies and planning processes. At the same time there is heightened awareness of lack of human resource development, illegal and harmful practices in fishing, and absence of micro-finance facility. These areas have been included in the

⁶ Ibid.

present 5-year plan however; their implementation is yet to be fully organized and hence undertaken.

Waste Management

In absence of standards for clean up of contaminated sites and limits for disposal of waste on land, those industries which are causing contamination of land and water bodies through inappropriate waste disposal are not legally bound to clean the site unless ordered by judicial intervention to do so. This has created a large gap in actual adherence to waste management practices even though their recognition exists.⁷

Similarly, due to the lack a reliable waste inventory, there is very little practice at present for using tools such as EIA for hazardous waste management. Although attempts have been made at various governmental levels in some selected pockets of the country to identify and quantify municipal waste and biomedical waste, there are no state/nation-wide waste inventories available to evaluate any impact. This also directly contributes to the difficulty faced by environmental protection institutions namely EPAs, to prepare appropriate waste management plans.

Apart from some dedicated facilities at large chemical industries, Pakistan lacks the sort of infrastructure that is required for proper treatment and disposal of hazardous waste largely due to the inability of regulatory authorities to achieve strict enforcement of rules. Most of the waste whether municipal or biomedical, is at present dumped in open low lying areas with no provisions for liners, collection and treatment system or gas collection system. In absence of segregation of waste at source, waste treatment alternatives such as recycling, waste-to-energy projects and or composting become uneconomical to operate. Most infectious biomedical waste segregated at the source of generation gets disposed at municipal

⁷ Ibid.

waste dumpsites in absence of the dedicated waste disposal facilities for biomedical waste generators.

Energy and Renewable

The energy transmission losses are extremely high in Pakistan despite the fact that she cannot afford the high cost of her imported oil. Similarly, energy use continues to be inefficient and commercial fuels are not accessible to rural households and the poor.

Against this backdrop of issues and stresses the energy planners and policy makers have achieved a considerable headway in addressing cleaner energy needs of the country. However, the process of exploring potential for cleaner energy sources is still at very initial stages largely due to high costs associated to the technology transfer and experimentation. The most pertinent gap need addressing is incentive based clean energy programming in the country. The potential for public-private partnership is a key area identified but not fully explored. Similarly, developing an inter-sectoral framework for energy conservation, renewable resources and research and development is still to be materialized. Without an integrated approach to energy sector planning and development, stakeholders such as transporters, industrialists, etc. have not come forward to show their commitment and support.

There exists tremendous potential for exploring wind, solar, hydel and nuclear energy sources in Pakistan however, lack of supportive infrastructure as well as institutional gaps have been the key hurdles to date in moving forward in this direction.⁸

Climate Variation

There is growing recognition that climate change is likely to reduce biodiversity, and the goods and services that ecosystem supply to Pakistan by several means such as increasing

⁸ Ibid.

desertification in arid and semi-arid areas; increasing seawater intrusion of the Indus delta with a consequent; reduction in mangrove cover, and a loss of sandy beaches; increasing the threat of retreat of glaciers and an upwards shift in ecological zones in the die-back of forests; and reduction in agricultural production and fisheries.⁹

However, despite a growing recognition of existing and potential impacts of climate change, the topic is still viewed as a specific and narrow environmental concern to be dealt with by specialists, and not as a wider national development priority that cuts across many economic and policy sectors. Therefore, the acceptance or understanding of climate change imperatives remains limited as part of policy making, leading to a suboptimal and sporadic implementation of planned actions.

Pakistan is faced with the challenge of slow pace of developing where national capacity to assess, devise, and implement related technical and environmental activities. The development of national capacity on the whole remained uneven, with key institutions, especially in administration, academia, and the private sector, largely uninitiated in terms of technical knowledge, relevant activities, and awareness of possible benefits and opportunities. The growing base of professional expertise in the field is scattered, and the risk of such intellectual capacity dispersing gradually remained high in the absence of an overall national program of action to sustain uninterrupted capacity building.

There exists a tremendous scope in Pakistan for the transfer of suitable technical and technological expertise in the areas of climate change and impact assessment, evaluation of Green Houses Gases (GHG) emissions, assessment of mitigation options, and adaptation of host of relevant mitigating technologies. To date, such a transfer has been sporadic and limited to very few applications, but keeping in view the size of the country and her

⁹ Ibid.

development forecasts, the possibilities of a much larger assimilation of technical know-how with widespread replication potential is enormous.

The sum and substance of the matter is that Pakistan is not better off than other developing countries, in terms of its environmental laws. Though Pakistan has drafted her new laws with more strict provisions and enforcement, yet we have to make the present environmental laws more effective and productive and always stress on the implementation side of the law. It is the need of the hours that we have to delegate full powers to provincial Environmental Protection Agencies as declared by the Pakistan Environmental Protection Act, 1997, establish more environmental courts with more extensive jurisdiction, form effective rules and regulations for procedures compliance, provide perfect training in technical, legal and operational fields to the concerned staff, enjoin various Government Agencies for environmental protection preservation and to coordinate the activities; synchronize, and harmonize the rules and regulations in order to implement a comprehensive environmental management plan to save the natural environment for the future generations.

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H. APPENDICES

- I. **The World Environmental Days' Themes.**
- II. **Lists of Banned or Severely Restricted Chemicals.**
- III. **Environment Supporting Organizations.**
- IV. **Pakistan Environmental Protection Act, 1997.**

Annex-I

THE WORLD ENVIRONMENT DAYS AND THEMES

YEARS	THEMES
1974	Only on Earth
1975	Human Settlements
1976	Water: Vital Source for Life
1977	Ozone Layer Environmental Concern: Land Loss and Soil Degradation; Firewood
1978	Development without Destruction
1979	Only one future for our Children – Development without destruction
1980	A new challenge for the new decade: Development without destruction
1981	Ground Water; Toxic Chemicals in Human Food Chain and Environment Economics
1982	Ten Years After Stockholm (Renewal of Environment Concerns)
1983	Managing and Disposing Hazardous Waste: Acid Rain and Energy
1984	Desertification
1985	Youth Population and Environment
1986	A Tree of Peace
1987	Environment and Shelter: More than a Roof
1988	When People put the Environment First, Development will Last
1989	Global Warming; Global Warning
1990	Children and Environment

1991	Climate Change; "A Need for Global Partnership
1992	Only One Earth, Care and Share
1993	Poverty and the Environment – Breaking the Vicious Circle
1994	One Earth One Family
1995	We the People: United for the Global Environment
1996	Our Earth, Our Habitat, Our Home
1997	For Life on Earth
1998	For Life on Earth – Save Our Seas
1999	Our Earth – Our Future Just Save it!
2000	The Environment Millennium: Time To Act
2001	Connect with the World Wide Web of Life
2002	Give Earth a Chance
2003	Water – Two Billion People Are Dying For It!
2004	Wanted! Seas and Oceans – Dead or Alive?
2005	Green Cities – Plan for the Planet
2006	Desert & Desertification (Don't desert Dry Lands)

Annex-II

LIST OF POPS

LISTS OF BANNED OR SEVERELY RESTRICTED CHEMICALS.

S.NO.	NAME OF CHEMICAL
1	ALDRIN
2	CHLORDANE
3	ENDRIN
4	HEPTACHLOR
5	DDT
6	DIELDRIN
7	MIREX
8	TOXAPHENE
9	POLYCHLORINATED BIPHENYLS (PCBS)
10	DIOXINS
11	FURANS
12	HEXA CHLOROBENZENE (HCBS)

ENVIRONMENT SUPPORTING ORGANIZATIONS

Action Aid Pakistan

Asianics Agro-Dev International

Associate In Development (AID)

DFID

ECPAK (Pvt.) Ltd. – Euro consult Pakistan

ECTECH-Environment CONSULTANTS & APEX Environment Laboratory

FINCON

Friends Of Environment

Frontier Associated Consultants

Hagler Bailly Pakistan

Halcrow Pakistan (Pvt.) Limited

Hospital Waste Management Program

International Water Association

Khyber Consulting Engineers International

LEAD Pakistan

Mercy Corps Pakistan

Metro Consulting Group

MM Pakistan (Pvt) Ltd.

National Development Consultants

National Environmental Consulting (Pvt) Limited

NUST Consulting

Pakistan Environmental Planning and Architectural Consultants Ltd.

Plan Pakistan

UNDP

Quality Concerns

Quality International Consultants

R2V Services

Raasta Development Consultants
Regional Institute of Management

Renewable Force
Resource Monitoring and Development Group
SEBCON (Pvt.) Ltd
SGS Pakistan (Pvt.) Limited
Technology and Resource Development (Techred) Pvt. Ltd
UNIDO – National Cleaner Production Center
UNICEF
Water Aid
Water and Sanitation Program-South Asia
WHO/Ministry of Health

Pakistan Environmental Protection Act, 1997

The Gazette of Pakistan
EXTRAORDINARY
PUBLISHED BY AUTHORITY

ISLAMABAD, SATURDAY,, DECEMBER 6,1997

PART I

Acts, Ordinances, President's Orders and Regulations

SENATE SECRETARIAT

Islamabad, the 6th December, 1997

No. F. 9(46)/97-Legis.- The following Acts of Majlis-e-Shoora (Parliament) received the assent of the Acting President on 3rd December, 1997 are hereby published for general information :-

Act No. XXXIV OF 1997

An Act to provide for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution, and promotion of sustainable development;

WHEREAS it is expedient to provide for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution, promotion of sustainable development, and for matters connected therewith and incidental thereto;

1. Short title, extent and commencement.---

- (1) This Act, shall be called the Pakistan Environmental Protection Act, 1997
- (2) It extends to the whole of Pakistan.
- (3) It shall come into force at once.

2. Definitions.—In this Act, unless there is anything repugnant in the subject or context,—

(i) "adverse environmental effect" means impairment of, or damage to, the environment and includes—

- (a) impairment of, or damage to, human health and safety or to biodiversity or property;
- (b) pollution; and
- (c) any adverse environmental effect as may be specified in the regulations;

(ii) "agricultural waste" means waste from farm and agricultural activities including poultry, cattle farming, animal husbandry residues from the use of fertilizers, pesticides and other farm . chemicals;

(iii) "air pollutant" means any substance that causes pollution of air and includes soot, smoke, dust particles, odor, light, electro-magnetic, radiation, heat, fumes, combustion exhaust, exhaust gases, noxious gases, hazardous substances and radioactive substances;

(iv) "biodiversity" or "biological diversity" means the variability among living organisms from all sources, including inter alia terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part, including diversity within species, between species and of ecosystems;

(v) "Council" means the Pakistan Environmental Protection Council established under section 3;

(vi) "discharge" includes spilling, leaking, pumping, depositing, seeping, releasing, flowing out, pouring, emitting, emptying or dumping;

(vii) "ecosystem" means a dynamic complex of plant, animal and micro-organism communities and their non- living environment interacting as a functional unit;

(viii) "effluent" means any material in solid, liquid or gaseous form or combination thereof being discharged from industrial activity or any other source and includes a slurry, suspension or vapour;

(ix) "emission standards" means the permissible standards established by the Federal Agency or a Provincial Agency for emission of air pollutants and noise and for discharge of effluent and waste;

(x) "environment" means—

- (a) air, water and land;
- (b) all layers of the atmosphere;
- (c) all organic and inorganic matter and living organisms;
- (d) the ecosystem and ecological relationships;
- (e) buildings, structures, roads, facilities and works;
- (f) all social and economic conditions affecting community life; and
- (g) the inter-relationships between any of the factors specified in sub-clauses (a) to (f);

(xi) "environmental impact assessment" means an environmental study comprising collection of data, prediction of qualitative and quantitative impacts, comparison of alternatives, evaluation of preventive, mitigatory and compensatory measures, formulation of environmental management and training plans and monitoring

arrangements, and framing of recommendations and such other components as may be prescribed;

(xii) "Environmental Magistrate" means the Magistrate of the First Class appointed under Section 24 ;

(xiii) "Environmental Tribunal" means the Environmental Tribunal constituted under section 20 ;

(xiv) "Exclusive Economic Zone" shall have the same meaning as in the Territorial Waters and Maritime Zones Act, 1976 (LXXXII of 1976);

(xv) "factory" means any premises in which industrial activity is being undertaken;

(xvi) "Federal Agency" means the Pakistan Environmental Protection Agency established under section 5, or any Government Agency, local council or local authority exercising the powers and functions of the Federal Agency;

(xvii) "Government Agency" includes—

(a) a division, department, attached department, bureau, section, commission, board, office or unit of the Federal Government or a Provincial Government;

(b) a developmental or a local authority, company or corporation established or controlled by the Federal Government or Provincial Government; and

(c) a Provincial Environmental Protection Agency. ; and (d) any other body defined and listed in the Rules of Business of the Federal Government or a Provincial Government.

(xviii) "hazardous substance" means—

(a) a substance or mixture of substances, other than a pesticide as defined in the Agricultural Pesticides Ordinance, 1971 (II of 1971), which, by reason of its chemical activity or toxic, explosive, flammable, corrosive, radioactive or other characteristics, causes, or is likely to cause, directly or in combination with other matters an adverse environmental effect; and

(b) any substance which may be prescribed as a hazardous substance;

(xix) "hazardous waste" means waste which is or which contains a hazardous substance or which may be prescribed as hazardous waste and includes hospital waste and nuclear waste;

(xx) "historic waters" means such limits of the waters adjacent to the land territory of Pakistan as may be specified by notification under section 7 of the Territorial Waters and Maritime Zones Act, 1976 (LXXXII of 1976);

(xxi) "hospital waste" includes waste medical supplies and materials of all kinds, and waste blood, tissue, organs and other parts of the human and animal bodies, from hospitals, clinics and laboratories;

(xxii) "industrial activity" means any operation or process for manufacturing, making, formulating, synthesizing, altering, repairing, ornamenting, finishing, packing or otherwise treating any article or substance with a view to its use, sale, transport, delivery or disposal, or for mining, for oil and gas exploration and development, or for pumping water or sewage, or for generating, transforming or transmitting power or for any other industrial or commercial purpose;

(xxiii) "industrial waste" means waste resulting from an industrial activity;

(xxiv) "initial environmental examination" means a preliminary environmental review of the reasonably foreseeable qualitative and quantitative impacts on the environment of a proposed project to determine whether it is likely to cause an adverse environmental effect for requiring preparation of an environmental impact assessment;

(xxv) "local authority" means any agency set up or designated by the Federal Government or a Provincial Government, by notification in the official Gazette, to be a local authority for the purposes of this Ordinance;

(xxvi) "local council" means a local council constituted or established under a law relating to local government;

(xxvii) "motor vehicle" means any mechanically propelled vehicle adapted for use upon land whether its power of propulsion is transmitted thereto from an external or internal source, and includes a chassis to which a body has not been attached, and a trailer, but does not include a vehicle running upon fixed rails;

(xxviii) "municipal waste" includes sewage, refuse, garbage, waste from abattoirs, sludge and human excreta and the like;

(xxix) "National Environmental Quality Standards" means standards established by the Federal Agency under clause (e) of sub-section (1) of section 6 and approved by the Council under clause (c) of sub-section (1) of section 4;

(xxx) "noise" means the intensity, duration and character of sounds from all sources, and includes vibration;

(xxxi) "nuclear waste" means waste from any nuclear reactor or nuclear plant or other nuclear energy system, whether or not such waste is radioactive;

(xxxii) "person" means any natural person or legal entity and includes an individual, firm, association, partnership, society, group, company, corporation, co-operative society,

Government Agency, non-governmental organization, community-based organization, village organization, local council or local authority and, in the case of a vessel, the master or other person having for the time being the charge or control of the vessel;

(xxxiii) "pollution" means the contamination of air, land or water by the discharge or emission of effluent or wastes or air pollutants or noise or other matter which either directly or indirectly or in combination with other discharges or substances alters unfavorably the chemical, physical, biological, radiational, thermal or radiological or aesthetic properties of the air, land or water or which may, or is likely to make the air, land or water unclean, noxious or impure or injurious, disagreeable or detrimental to the health, safety, welfare or property of persons or harmful to biodiversity;

(xxxiv) "prescribed" means prescribed by rules made under this Act;

(xxxv) "project" means any activity, plan, scheme, proposal or undertaking involving any change in the environment and includes—

(a) construction or use of buildings or other works;

(b) construction or use of roads or other transport systems;

(c) construction or operation of factories or other installations;

(d) mineral prospecting, mining, quarrying, stone-crushing, drilling and the like;

(e) any change of land use or water use; and

(f) alteration, expansion, repair, decommissioning or abandonment of existing buildings or other works, roads or other transport systems, factories or other installations;

(xxxvi) "proponent" means the person who proposes or intends to undertake a project;

(xxxvii) "Provincial Agency" means a Provincial Environmental Protection Agency established under section 8;

(xxxviii) "regulations" means regulations made under this Act;

(xix) "rules" means rules made under this Act;

(xl) "sewage" means liquid or semi-solid wastes and sludge from sanitary conveniences, kitchens, laundries, washing and similar activities and from any sewerage system or sewage disposal works;

(xli) "standards" means qualitative and quantitative standards for discharge of effluent and wastes and for emission of air pollutants and noise either for general applicability or for a particular area, or from a particular production process, or for a particular product,

and includes the National Environmental Quality Standards, emission standards and other standards established under this Act and the rules and regulations;

(xlii) "sustainable development" means development that meets the needs of the present generation without compromising the ability of future generations to meet their needs;

(xliii) "territorial waters" shall have the same meaning as in the Territorial Waters and Maritime Zones Act, 1976 (LXXXII of 1976);

(xliv) "vessel" includes anything made for the conveyance by water of human beings or of goods; and

(xlv) "waste" means any substance or object which has been, is being or is intended to be, discarded or disposed of, and includes liquid waste, solid waste, waste gases, suspended waste, industrial waste, agricultural waste, nuclear waste, municipal waste, hospital waste, used polyethylene bags and residues from the incineration of all types of waste.

3. Establishment of the Pakistan Environmental Protection Council.

(1) The Federal Government shall establish a Council to be known as the Pakistan Environmental Protection Council consisting of—

- (i) Prime Minister or such other person as the Prime Minister may nominate in this behalf. Chairperson
- (ii) Minister in charge of the Ministry or Division dealing with the subject of environment. Vice Chairperson
- (iii) Chief Ministers of the Provinces. Members
- (iv) Ministers In charge of the subject of environment in the Provinces. Members
- (v) Such other persons not exceeding thirty- five as the federal Government may appoint, of which at least twenty shall be non-officials including five representatives of the Chambers of Commerce and Industry and industrial associations and one or more representatives of the Chambers of Agriculture, the medical and legal professions, trade unions, and non-governmental organizations concerned with the environment and development, and scientists, technical experts and educationists
- (vi) Secretary to the Government of Pakistan, in-charge of the Ministry or Division dealing with the subject of environment. Member/ Secretary

(2) The Members of the Council, other than ex-officio members, shall be appointed in accordance with the prescribed procedure and shall hold office for a term of two years.

(3) The Council shall frame its own rules of procedure.

(4) The Council shall hold meetings, as and when necessary, but not less than two meetings shall be held in a year.

(5) The Council may constitute committees of its members and entrust them with such functions as it may deem fit, and the recommendations of the committees shall be submitted to the Council for approval.

(6) The Council, or any of its committees, may invite any technical expert or representative of any government agency or non-governmental organization or other person possessing specialized knowledge of any subject for assistance in performance of its functions.

4. Functions and powers of the Council.-(1) The Council shall

- (a) coordinate and supervise enforcement of the provisions of this Act; and
- (b) approve comprehensive national environmental policies and ensure their implementation within the framework of a national conservation strategy as may be approved by the Federal Government from time to time;
- (c) approve the National Environmental Quality Standards;
- (d) provide guidelines for the protection and conservation of species, habitats, and biodiversity in general, and for the conservation of renewable and non-renewable resources.
- (e) co-ordinate integration of the principles and concerns of sustainable development into national development plans and policies;
- (f) consider the National Environment Report and give appropriate directions thereon;

(2) The Council may, either itself or on the request of any person or organization, direct the Federal Agency or any Government Agency to prepare, submit, promote or to implement projects for the protection, conservation, rehabilitation and improvement of the environment the prevention and control of pollution, and the sustainable development of resources or to undertake research in any aspect of environment.

5. Establishment of Pakistan Environmental Protection Agency.

- (1) The Federal Government shall, by notification in the official Gazette, establish the Pakistan Environmental Protection Agency to exercise the powers and perform the functions assigned to it under this Act and the rules and regulations made there-under.
- (2) The Federal Agency shall be headed by a Director-General who shall be appointed by the Federal Government on such terms and conditions as it may determine.
- (3) The Federal Agency shall have such administrative, technical and legal staff, as the Federal Government may specify, to be appointed in accordance with such procedure as may be prescribed.
- (4) The powers and functions of the Federal Agency shall be exercised and performed by the Director-General.
- (5) The Director-General may, by general or special order, delegate any of the powers and functions to staff appointed under sub-section (3).
- (6) For assisting the Federal Agency in the discharge of its functions the Federal Government shall establish Advisory Committees for various sectors and appoint as members thereof eminent representatives of the relevant sector, educational institutions, research institutes and non- governmental organizations.

6. Functions of the Federal Agency.-(1) The Federal Agency shall

- (a) administer and implement this Act and the rules and regulations made;
- (b) prepare, in co-ordination with the appropriate Government Agency and in Consultation with the concerned sectoral Advisory Committees, national environmental policies for approval by the Council;
- (c) take all necessary measures for the implementation of the national environmental policies approved by the Council;
- (d) prepare and publish an annual National Environment Report on the state of the environment;
- (e) prepare, establish and revise the National Environmental Quality Standards with approval of the Council:
Provided that before seeking approval of the Council, the Federal Agency shall publish the proposed National Environmental Quality Standards for public opinion in accordance with the prescribed procedure; and
- (f) ensure enforcement of the National Environmental Quality Standards;

- (g) establish standards for the quality of the ambient air, water and land, by notification in the official Gazette in consultation with the Provincial Agency concerned:
Provided that—
 - (i) different standards for discharge or emission from different sources and for different areas and conditions may be specified;
 - (ii) where standards are less stringent than the National Environmental Quality Standards prior approval of the Council shall be obtained;
 - (iii) certain areas, with the approval of the Council, may exclude from carrying out specific activities, projects from the application of such standards;
- (h) co-ordinate environmental policies and programs nationally and internationally;
- (i) establish systems and procedures for surveys, surveillance, monitoring, measurement, examination, investigation, research, inspection and audit to prevent and control pollution, and to estimate the costs of cleaning up pollution and rehabilitating the environment in various sectors;
- (j) take measures to promote research and the development of science and technology which may contribute to the prevention of pollution, protection of the environment, and sustainable development;
- (k) certify one or more laboratories as approved laboratories for conducting tests and analysis and one or more research institutes as environmental research institutes for conducting research and investigation for the purposes of this Act.
- (l) identify the needs for and initiate legislation in various sectors of the environment;
- (m) render advice and assistance in environmental matters including such information and data available with it as may be required for carrying out the purposes of this Act:
Provided that the disclosure of such information shall be subject to the restrictions contained in the proviso to sub-section (3) of section 12;
- (n) assist the local councils, local authorities, Government Agencies and other persons to implement schemes for the proper disposal of wastes so as to ensure compliance with the standards established by it;
- (o) provide information and guidance to the public on environmental matters;
- (p) recommend environmental courses, topics, literature and books for incorporation in the curricula and syllabi of educational institutions;

- (q) promote public education and awareness of environmental issues through mass media and other means including seminars and workshops;
- (r) specify safeguards for the prevention of accidents and disasters which may cause pollution, collaborate with the concerned person in the preparation of contingency plans for control of such accidents and disasters, and co-ordinate implementation of such plans;
- (s) encourage the formation and working of non-governmental organizations, community organizations and village organizations to prevent and control pollution and promote sustainable development;
- (t) take or cause to be taken all necessary measures for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution and promotion of sustainable development; and
- (u) perform any function which the Council may assign to it.

(2) The Federal Agency may

- (a) undertake inquiries or investigation into environmental issues, either of its own accord or upon complaint from any person or organization;
- (b) request any person to furnish any information or data relevant to its functions;
- (c) initiate with the approval of the Federal Government, requests for foreign assistance in support of the purposes of this Act and enter into arrangements with foreign agencies or organizations for the exchange of material or information and participate in international seminars or meetings;
- (d) recommend to the Federal Government the adoption of financial and fiscal programmes, schemes or measures for achieving environmental objectives and goals and the purposes of this Act, including—
 - (i) incentives, prizes awards, subsidies, tax exemptions, rebates and depreciation allowances; and
 - (ii) taxes, duties, ceases and other levies;
- (e) establish and maintain laboratories to help in the performance of its functions under this Act and to conduct research in various aspects of the environment and provide or arrange necessary assistance for establishment of similar laboratories in the private sector; and

- (f) provide or arrange, in accordance with such procedure as may be prescribed, financial assistance for projects designed to facilitate the discharge of its functions.

7. Powers of the Federal Agency.-Subject to the provisions of this Act, the Federal Agency may

- (a) lease, purchase, acquire, own, hold, improve, use or otherwise deal in and with any property both moveable and immovable;
- (b) sell, convey, mortgage, pledge, exchange or otherwise dispose of its property and assets;
- (c) fix and realize fees, rates and charges for rendering any service or providing any facility, information or data under this Act or the rules and regulations;
- (d) enter into contracts, execute instruments, incur liabilities and do all acts or things necessary for proper management and conduct of its business;
- (e) appoint with the approval of the Federal Government and in accordance with such procedures as may be prescribed, such advisers, experts and consultants as it considers necessary for the efficient performance of its functions on such terms and conditions as it may deem fit;
- (f) summon and enforce the attendance of any person and require him to supply any information or document needed for the conduct of any enquiry or investigation into any environmental issue;
- (g) enter and inspect and under the authority of a search warrant issued by the Environmental Court or Environmental Magistrate, search at any reasonable time, any land, building, premises, vehicle or vessel or other place where or in which there are reasonable grounds to believe that an offence under this Act has been, or is being, committed;
- (h) take samples of any materials, products, articles or substances or of the effluent, wastes or air pollutants being discharged or emitted or of air, water or land in the vicinity of the discharge or emission;
- (i) arrange for test and analysis of the samples at a certified laboratory;
- (j) confiscate any article used in the commission of the offence where the offender is not known or cannot be found within a reasonable time:
Provided that the power under clauses (f), (h), (I) and (j) shall be exercised in accordance with the provisions of the Code of Criminal Procedure, 1898 (Act V of 1898). or the rules made under this Act and under the direction of the Environmental Court or Environmental Magistrate; and

- (k) establish a National Environmental Co-ordination Committee comprising the Director-General as its chairman and the Director Generals of the Provincial Environmental Protection Agencies and such other persons as the Federal Government may appoint as its members to exercise such powers and perform such functions as may be delegated or assigned to it by the Federal Government for carrying out the purposes of this Act and for ensuring inter provincial co-ordination in environmental policies.

8. Establishment, powers and functions of the Provincial Environmental Protection Agencies.

- (1) Every Provincial Government shall, by notification in the official Gazette, establish an Environmental Protection Agency, to exercise such powers and perform such functions as may be delegated to it by the Provincial Government under sub-section (2) of section 26.
- (2) The Provincial Agency shall be headed by a Director-General who shall be appointed by the Provincial Government on such terms and conditions as it may determine.
- (3) The Provincial Agency shall have such administrative, technical and legal staff as the Provincial Government may specify, to be appointed in accordance with such procedure as may be prescribed.
- (4) The powers and functions of the Provincial Agency shall be exercised and performed by the Director-General.
- (5) The Director General may, by general or special order, delegate any of the powers and functions to staff appointed under sub-section (3).
- (6) For assistance of the Provincial Agency in the discharge of its functions, the Provincial Government shall establish Sect oral Advisory Committees for various sectors and appoint members from amongst eminent representatives of the relevant sector, educational institutions, research institutes and non- governmental organizations.

9. Establishment of the Provincial Sustainable Development Funds.

- (1) There shall be established in each Province a Sustainable Development Fund.
- (2) The Provincial Sustainable Development Fund shall be derived from the following sources, namely:—
- (a) grants made or loans advanced by the Federal Government or the Provincial Governments;

- (b) aid and assistance, grants, advances, donations and other non-obligatory funds received from foreign governments, national or international agencies, and nongovernmental organizations; and
 - (c) contributions from private organizations and other persons.
- (3) The Provincial Sustainable Development Fund shall be utilized in accordance with such procedure as may be prescribed for—
- (a) providing financial assistance to the projects designed for the protection, conservation, rehabilitation and improvement of the environment, the prevention and control of pollution, the sustainable development of resources and for research in any aspect of environment; and
 - (b) any other purpose which in the opinion of the Board shall help achieve environmental objectives and the purposes of this Act.

10. Management of the Provincial Sustainable Development Fund—

- (1) The Provincial Sustainable Development Fund shall be managed by a Board known as the Provincial Sustainable Development Fund Board consisting of—
- (i) Chairman, Planning and Development Board/Add. - Chairperson, Chief Secretary Planning and Development Department.
 - (ii) such officers of the Provincial Governments, not - Members exceeding six, as the Provincial Government may appoint including Secretaries in-charge of the Finance, Industries and Environment Departments.
 - (iii) such non-official persons not exceeding ten as the - Members Prov-Government may appoint including representatives of the Provincial Chamber of Commerce and Industry, non governmental organizations and major donors.
 - (iv) Director-General of the Provincial Agency - Member/Secretary
- (2) In accordance with such procedure and such criteria as may be prescribed, the Board shall have the power to—
- (a) sanction financial assistance for eligible projects;
 - (b) invest moneys held in the Provincial Sustainable Development Fund in such profit -bearing Government bonds, savings schemes and securities as it may deem suitable; and

- (c) take such measures and exercise such powers as may be necessary for utilization of the Provincial Sustainable Development Fund for the purposes specified in sub-section (3) of section 9.
- (3) The Board shall constitute committees of its members to undertake regular monitoring of projects financed from the Provincial Sustainable Development Fund and to submit progress reports to the Board which shall publish an Annual Report incorporating its annual audited accounts and performance evaluation based on the progress reports.

11. Prohibition of certain discharges or emissions.

- (1) Subject to the provisions of this Act and the rules and regulations no person shall discharge or emit or allow the discharge or emission of any effluent or waste or air pollutant or noise in an amount, concentration or level which is in excess of the National Environmental Quality Standards or, where applicable, the standards established under sub-clause (I) of clause (g) of sub-section (1) of section 6.
- (2) The Federal Government may levy a pollution charge on any person who contravenes or fails to comply with the provisions of sub-section (1), to be calculated at such rate, and collected in accordance with such procedure as may be prescribed.
- (3) Any person who pays the pollution charge levied under sub-section (2) shall not be charged with an offence with respect to that contravention or failure.
- (4) The provisions of sub-section (3) shall not apply to projects which commenced industrial activity on or after the thirtieth day of June, 1994.

12. Initial environmental examination and environmental impact assessment.

- (1) No proponent of a project shall commence construction or operation unless he has filed with the Government Agency designated by Federal Environmental Protection Agency or Provincial Environmental Protection Agencies, as the case may be, or, where the project is likely to cause adverse environmental effects an environmental impact assessment, and has obtained from the Government Agency approval in respect thereof.
- (2) The Government Agency shall subject to standards fixed by the Federal Environmental Protection Agency—
 - (a) review the initial environmental examination and accord its approval, or require submission of an environmental impact assessment by the proponent; or
 - (b) review the environmental impact assessment and accord its approval subject to such conditions as it may deem fit to impose, require that the

environmental impact assessment be re-submitted after such modifications as may be stipulated or reject the project as being contrary to environmental objectives.

- (3) Every review of an environmental impact assessment shall be carried out with public participation and no information will be disclosed during the course of such public participation which relates to—
 - (i) trade, manufacturing or business activities, processes or techniques of a proprietary nature, or financial, commercial, scientific or technical matters which the proponent has requested should remain confidential, unless for reasons to be recorded in writing, the Director General of the Federal Agency is of the opinion that the request for confidentiality is not well-founded or the public interest in the disclosure outweighs the possible prejudice to the competitive position of the project or its proponent; or
 - (ii) international relations, national security or maintenance of law and order, except with the consent of the Federal Government; or
 - (iii) matters covered by legal professional privilege.
 - (4) The Government Agency shall communicate its approval or otherwise within a period of four months from the date the initial environmental examination or environmental impact assessment is filed complete in all respects in accordance with the prescribed procedure, failing which the initial environmental examination or, as the case may be, the environmental impact assessment shall be deemed to have been approved, to the extent to which it does not contravene the provisions of this Act and the rules and regulations.
 - (5) Subject to sub-section (4) the appropriate Government may in a particular case extend the aforementioned period of four months if the nature of the project so warrants.
 - (6) The provisions of sub-sections (1), (2), (3), (4) and (5) shall apply to such categories of projects and in such manner as may be prescribed.
 - (7) The Government Agency shall maintain separate registers for initial environmental examination and environmental impact assessment projects, which shall contain brief particulars of each project and a summary of decisions taken thereon, and which shall be open to inspection by the public at all reasonable hours and the disclosure of information in such registers shall be subject to the restrictions specified in sub-section (3).
- 13. Prohibition of import of hazardous waste.**-No person shall import hazardous waste into Pakistan and its territorial waters, Exclusive economic Zone and historic waters.

- 14. Handling of hazardous substances.**—Subject to the provisions of this Act, no person shall generate, collect, consign, transport, treat, dispose of, store, handle or import any hazardous substance except—
- (a) under a license issued by the Federal Agency and in such manner as may be prescribed; or
 - (b) in accordance with the provisions of any other law for the time being in force, or of any international treaty, convention, protocol, code, standard, agreement or other instrument to which Pakistan is a party.
- 15. Regulation of motor vehicles. ---**
- (1) Subject to the provisions of this Act, and the rules and regulations, no person shall operate a motor vehicle from which air pollutants or noise are being emitted in an amount, concentration or level which is in excess of the National Environmental Quality Standards, or where applicable the standards established under clause (g) of sub-section (I) of section 6.
 - (2) For ensuring compliance with the standards mentioned in sub-section (1), the Federal Agency may direct that any motor vehicle or class of vehicles shall install such pollution control devices or other equipment or use such fuels or undergo such maintenance or testing as may be prescribed.
 - (3) Where a direction has been issued by the Government Agency under subsection (2) in respect of any motor vehicles or class of motor vehicles, no person shall operate any such vehicle till such direction has been complied with.
- 16. Environmental protection order.**
- (1) Where the Federal Agency or a Provincial Agency is satisfied that the discharge or emission of any effluent, waste, air pollutant or noise, or the disposal of waste, or the handling of hazardous substances, or any other act or omission is likely to occur, or is occurring, or has occurred, in violation of the provisions of this Act, rules or regulations or of the conditions of a license, and is likely to cause, or is causing or has caused an adverse environmental effect, the Federal Agency or, as the case may be, the Provincial Agency may, after giving the person responsible for such discharge, emission, disposal, handling, act or omission an opportunity of being heard, by order direct such person to take such measures that the Federal Agency or Provincial Agency may consider necessary within such period as may be specified in the order.
 - (2) In particular and without prejudice to the generality of the foregoing power, such measures may include—

- (a) immediate stoppage, preventing, lessening or controlling the discharge, emission, disposal, handling, act or omission, or to minimize or remedy the adverse environmental effect;
 - (b) installation, replacement or alteration of any equipment or thing to eliminate, control or abate on a permanent or temporary basis, such discharge, emission, disposal, handling, act or omission;
 - (c) action to remove or otherwise dispose of the effluent, waste, air pollutant, noise, or hazardous substances; and
 - (d) action to restore the environment to the condition existing prior to such discharge, disposal, handling, act or omission, or as close to such condition as may be reasonable in the circumstances, to the satisfaction of the Federal Agency or, Provincial Agency.
- (3) Where the person, to whom directions under sub-section (1) are given, does not comply therewith, the Federal Agency or Provincial Agency may, in addition to the proceedings initiated against him under this Act, the rules and regulations, itself take or cause to be taken such measures specified in the order as it may deem necessary and may recover the reasonable costs of taking such measures from such person as arrears of land revenue.

17. Penalties

- (1) Whoever contravenes or fails to comply with the provisions of sections 11, 12, 13 or section 16 or any order issued there-under shall be punishable with fine which may extend to one million rupees, and in the case of a continuing contravention or failure, with an additional fine which may extend to one hundred thousand rupees for every day during which such contravention or failure continues: Provided that if contravention of the provisions of section 11 also constitutes contravention of the provisions of section 15, such contravention shall be punishable under sub-section (2) only.
- (2) Whoever contravenes or fails to comply with the provisions of section 14 or 15 or any rule or regulation or conditions of any license, any order or direction, issued by the Council or the Federal Agency or Provincial Agency, shall be punishable with fine which may extend to one hundred thousand rupees, and in case of continuing contravention or failure with an additional fine which extend to one thousand rupees for every day during which such contravention continues.
- (3) Where an accused has been convicted of an offence under sub-sections (1) and (2), the Environmental Court and Environmental Magistrate, as the case may be, shall, in passing sentence, take into account the extent and duration of the contravention or failure constituting the offence and the attendant circumstances.

- (4) Where an accused has been convicted of an offence under sub-section (1) and the Environmental Court is satisfied that as a result of the commission of the offence monetary benefits have accrued to the offender; the Environmental Court may order the offender to pay, in addition to the fines under sub-section (1), further additional fine commensurate with the amount of the monetary benefits.
- (5) Where a person convicted under sub-sections (1) or sub-section (2) had been previously convicted for any contravention under this Act, the Environmental Court or, as the case may be, Environmental Magistrate may, in addition to the punishment awarded there under—
- (a) endorse a copy of the order of conviction to the concerned trade or industrial association, if any, or the concerned Provincial Chamber of Commerce and Industry or the Federation of Pakistan Chambers of Commerce and Industry;
 - (b) sentence him to imprisonment for a term which may extend to two years;
 - (c) order the closure of the factory;
 - (d) order confiscation of the factory, machinery, and equipment, vehicle, material or substance, record or document or other object used or involved in contravention of the provisions of the Act:
Provided that for a period of three years from the date of commencement of this Act the sentence of imprisonment shall be passed only in respect of persons who have been previously convicted for more than once for any contravention of sections 11, 13, 14 or 16 involving hazardous waste;
 - (e) order such person to restore the environment at his own cost, to the conditions existing prior to such contravention or as close to such conditions as may be reasonable in the circumstances to the satisfaction of the Federal Agency or, as the case may be, Provincial Agency; and
 - (f) order that such sum be paid to any person as compensation for any loss, bodily injury, damage to his health or property suffered by such contravention.
- (6) The Director-General of the Federal Agency or of a Provincial Agency or an officer generally or specially authorized by him in this behalf may, on the application of the accused compound an offence under this Act with the permission of the Environmental Tribunals or Environmental Magistrate in accordance with such procedure as may be prescribed.
- (7) Where the Director-General of the Federal Agency or of a Provincial Agency is of the opinion that a person has contravened any provision of Act he may, subject to the rules, by notice in writing to that person require him to pay to the Federal Agency or, as the case may be, Provincial Agency an administrative penalty in the

amount set out in the notice for each day the contravention continues; and a person who pays an administrative penalty for a contravention shall not be charged under this Act with an offence in respect of such contravention.

- (8) The provisions of sub-sections (6) and (7) shall not apply to a person who has been previously convicted of offence or who has compounded an offence under this Act who has paid an administrative penalty for a contravention of any provision of this Act.

- 18. Offences by bodies corporate.** -Where any contravention of this Act has been committed by a body corporate, and it is proved that such offence has been committed with the consent or connivance of, or is attributed to any negligence on the part of, any director, partner, manager, secretary or other Officer of the body corporate, such director, partner, manager, secretary or other officer of the body corporate, shall be deemed guilty of such contravention along with the body corporate and shall be punished accordingly:

Provided that in the case of a company as defined under the Companies Ordinance, 1984 (XLVII of 1984), only the Chief Executive as defined in the said Ordinance shall be liable under this section.

Explanation. — For the purposes of this section, "body corporate" includes a firm, association of persons and a society registered under the Societies Registration Act, 1860 (XXI of 1860), or under the Co-operative Societies Act, 1925 (VII of 1925).

- 19. Offences by Government Agencies, local authorities or local councils-**Where any contravention of this Act has been committed by any Government Agency, local authority or local council, and it is proved that such contravention has been committed with the consent or connivance of, or is attributable to any negligence on the part of, the Head or any other officer of the Government Agency, local authority or local council, such Head or other officer shall also be deemed guilty of such contravention along with the Government Agency, local authority or local council and shall be liable to be proceeded against and punished accordingly.

20. Environmental Tribunals

- (1) The Federal Government may, by notification in the official gazette, establish as many Environmental Tribunals as it consider necessary and, where it establishes more than one Environmental Tribunals, it shall specify territorial limits within which, or the class of cases in respect of which, each one of them shall exercise jurisdiction under this Act.
- (2) An Environmental Tribunal shall consist of a Chairperson who is, or has been, or is qualified for appointment as, a judge of the High Court to be appointed after consultation with the Chief Justice of the High Court and two members to be

appointed by the Federal Government of which at least one shall be a technical member with suitable professional qualifications and experience; in the environmental field as may be prescribed.

- (3) For every sitting of the Environmental Tribunal, the presence of the Chairperson and not less than one Member shall be necessary.
- (4) A decision of an Environmental Tribunal shall be expressed in terms of the opinion of the majority of its members, including; the Chairperson, or if the case has been decided by the Chairperson and only one of the members and a there is a difference of opinion between them, the; decision of the Environmental Tribunal shall be expressed in terms of the opinion of the Chairperson.
- (5) An environmental Tribunal shall not, merely be reason of a change in its composition, or the absence of any member from any sitting, be bound to recall and rehear any witness who has given evidence, and may act on the evidence already; recorded by, or produced, before it.
- (6) An Environmental Tribunal may hold its sittings at such places within its territorial jurisdiction as the Chairperson may decide.
- (7) No act or proceeding of an Environmental Tribunal shall be invalid by reason only of the existence of a vacancy in, or defect in the constitution, of, the Environmental Tribunal
- (8) The terms and conditions of service of the Chairperson and members of the Environmental Tribunal shall be such as may be prescribed.

21. Jurisdiction and powers of Environmental Tribunals.

- (1) An Environmental Tribunal shall exercise such powers and perform such functions as are, or may be, conferred upon or assigned to it by or under this Act or the rules and regulations made there under.
- (2) All contravention punishable under sub-section (1) of section 17 shall exclusively be triable by an Environmental Tribunal.
- (3) An Environmental Tribunal shall not take cognizance of any offence triable under sub-section (2) except on a complaint in writing by—
 - (a) the Federal Agency or any Government Agency or local council; and
 - (b) any aggrieved person, who has given notice of not less than thirty days to the Federal Agency, or the Provincial Agency concerned, of the alleged contravention and of his intention to make a complaint to the Environment Tribunal.

- (4) In exercise of its criminal jurisdiction, the Environmental Tribunals shall have the same powers as are vested in Court of Session under the Code of Criminal Procedure, 1898 (Act V of 1898).
- (5) In exercise of the appellate jurisdiction under section 22 the Environmental Tribunals shall have the same powers and shall follow the same procedure as an appellate court in the Code of Civil Procedure, 1908 (Act V of 1908).
- (6) In all matters with respect to which no procedure has been provided for in this Act, the Environmental Tribunal shall follow the procedure laid down in the Code of Civil Procedure, 1908 (Act V of 1908).
- (7) An Environmental Tribunal may, on application filed by any officer duly authorized in this behalf by the Director-General of the Federal Agency or of Provincial Agency, issue boilable warrant for the arrest of any person against whom reasonable suspicion exist, of his having been involved in contravention punishable under sub-section (1) of Section 17:

Provided that such warrant shall be applied for, issued, and executed in accordance with the provisions of the Code of Criminal Procedure, 1898 (Act V of 1898): Provided further that if the person arrested executes a bond with sufficient sureties in accordance with the endorsement on the warrant he shall be released from custody, failing which he shall be taken or sent without delay to the officer in-charge of the nearest police station.

- (8) All proceedings before the Environmental Tribunal shall be deemed to be judicial proceedings within the meaning of section 193 and 228 of the Pakistan Penal Code (Act XLV of 1860), and the Environmental Tribunal shall be deemed to be a court for the purpose of section 480 and 482 of the Code of Criminal Procedure, 1898 (Act V of 1898).
- (9) No court other than an Environmental Tribunal shall have or exercise any jurisdiction with respect to any matter to which the jurisdiction of an Environmental Tribunal extends under this Act, the rules and regulations made there under.
- (10) Where the Environmental Tribunal is satisfied that a complaint made to it under sub-section (3) is false and vexatious to the knowledge of the complainant, it may, by an order, direct the complainant to pay to the person complained against such compensatory costs which may extend to one hundred thousand rupees.

22. Appeals to the Environmental Tribunal—

- (1) Any person aggrieved by any order or direction of the Federal Agency or any Provincial Agency under any provision of this Act, and rules or regulations may

prefer an appeal with the Environmental Tribunal within thirty days of the date of communication of the impugned order or direction to such person.

- (2) An appeal to the Environmental Tribunal shall be in such form, contain such Particulars and be accompanied by such fees as may be prescribed.

23. Appeals from orders of the Environmental Tribunal. ---

- (1) Any person aggrieved by any final order or by any sentence of the Environmental Tribunal passed under this Act may, within thirty days of communication of such order or sentence, prefer an appeal to the High Court.
- (2) An appeal under sub-section (1) shall be heard by a Bench of not less than two Judges.

24. Jurisdiction of Environmental Magistrates.—

- (1) Notwithstanding anything contained in the Code of Criminal Procedure, 1898 (Act V of 1898), or any other law for the time being in force, but subject to the provisions of this Act, all contravention punishable under sub-section (2) of section 17 shall exclusively be triable by a judicial Magistrate of the first class as Environmental Magistrate especially empowered in this behalf by the High Court.
- (2) An Environmental Magistrate shall be competent to impose any punishment specified in sub-sections (2) and (4) of section 17.
- (3) An Environmental Magistrate shall not take cognizance of an offence triable under sub-section (1) except on a complaint in writing by—
 - (a) the Federal Agency, Provincial Agency, or Government Agency or a local council; and
 - (b) any aggrieved person.

25. Appeals from orders of Environmental Magistrates.- Any person convicted of any contravention of this Act or the rules or regulations by an Environmental Magistrate may, within thirty days from the date of his conviction, appeal to the Court of Sessions whose decision thereon shall be final.

26. Power to delegate.-

- (1) The Federal Government may, by notification in the official Gazette, delegate any of its or of the Federal Agency's powers and functions under this Act and the rules and regulations to any Provincial Government, any Government Agency, local council or local authority.

- (2) The Provincial Government may, by notification in the official Gazette, delegate any of its or of the Provincial Agency's powers or functions under this Act and the rules and regulations to any Government Agency of such Provincial Government or any local council or local authority in the Province.
- 27. Power to give directions-**In the performance of their functions under this Act-
- (a) the Federal Agency and Provincial Agencies shall be bound by the directions given to them in writing by the Federal Government; and
- (b) a Provincial Agency shall be bound by the directions given to it in writing by the Provincial Government.
- 28. Indemnity.** No suit, prosecution or other legal proceedings shall lie against the Federal or Provincial Governments, the Council, the Federal Agency or Provincial Agencies, the Director-Generals of the Federal Agency and the Provincial Agency, members, officers, employees, experts, advisers, committees or consultants of the Federal or Provincial Agencies or the Environmental Tribunal or Environmental Magistrates or any other person for anything which is in good faith done or intended to be done under this Act or the rules or regulations made there under.
- 29. Dues recoverable as arrears of land revenue.**-Any dues recoverable by the Federal Agency or Provincial Agency under this Act, or the rules or regulations shall be recoverable as arrears of land revenue.
- 30. Act to override other laws.** The provisions of this Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force.
- 31. Power to make rules.-** The Federal Government may, by notification in the official Gazette, make rules for carrying out the purposes of this Act including rules for implementing the provisions of the international environmental Agreements, specified in the Schedule to this Act.
- 32. Power to amend the Schedule.**-The Federal Government may, by notification in the official Gazette, amend the Schedule so as to add any entry thereto or modify or omit any entry therein.
- 33. Power to make regulations--**
- (1) For carrying out the purposes of this Act, the Federal Agency may, by notification in the official Gazette and with the approval of the Federal Government, make regulations not inconsistent with the provisions of this Act or the rules made there-under.

- (2) In particular and without prejudice to the generality of the foregoing power, such regulations may provide for—
- (a) submission of periodical reports, data or information by any Government agency, local authority or local council in respect of environmental matters;
 - (b) preparation of emergency contingency plans for coping with environmental hazards and pollution caused by accidents, natural disasters and calamities;
 - (c) appointment of officers, advisers, experts, consultants and employees;
 - (d) levy of fees, rates and charges in respect of services rendered, actions taken and schemes implemented;
 - (e) monitoring and measurement of discharges and emissions;
 - (f) categorization of projects to which, and the manner in which, section 12 applies;
 - (g) laying down of guidelines for preparation of initial environmental examination and environmental impact assessment and Development of procedures for their filing, review and approval;
 - (h) providing procedures for handling hazardous substances; and
 - (i) installation of devices in, use of fuels by, and maintenance and testing of motor vehicles for control of air and noise pollution.

34. Repeal, savings and succession-

- (1) The Pakistan Environmental Protection Ordinance 1983 (XXXVII of 1983) is hereby repealed.
- (2) Notwithstanding the repeal of the Pakistan Environmental Protection Ordinance, 1983 (XXVII of 1983), any rules or regulations or appointments made, orders passed, notifications issued, powers delegated, contracts entered into, proceedings commenced, rights acquired liabilities incurred, penalties, rates, fees or charges levied, things done or action taken under any provisions of that Ordinance shall, so far as they are not inconsistent with the provisions of this Act be deemed to have been made, passed, issued, delegated, entered into, commenced, acquired, incurred, levied, done or taken under this Act.

- (3) On the establishment of the Federal Agency and Provincial Agencies under this Act, all properties, assets and liabilities pertaining to the Federal Agency and Provincial Agencies established under that Ordinance shall vest in and be the properties, assets and liabilities, as the case may be, of the Federal Agency and Provincial Agency established under this Act.