

Development of Environmental Institutions and Laws in Pakistan

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Abstract

The article deals with environmental institutions and laws in Pakistan. Environment is degrading rapidly due to a variety of reasons. Therefore, we urgently need to develop institutions and enforce laws to overcome the environmental problems. The article gives a historical overview of institutions and laws of environment in Pakistan. It also highlights the changes that have taken place in this regard. At the end concluding remarks and suggestions are discussed in detail, which may help to improve the state of environment in the country.

General Introduction

Institutions related to environment are important for the management of natural and human resources. Unfortunately, it is commonly noted that Pakistan has weak institutions for the management of community resources and common problems. Environment is a common property according to the institutional point of view and the community institutions are managing this property.¹ In our policies and projects we focus on the individual and public sector management of environment, admitting private and state property but ignoring common property. Such an approach has been known for several decades as ‘the tragedy of the

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1 Ranjit Kumar, and Barbara Winifred Murk, *On Common Grounds: Managing Human-Planet Relationship* (New York: John Wiley, 1992), p.23.

commons'.² There are many structural deficiencies of the current system, like corruption and poor work ethic, which need extensive national attitudinal reforms.

Environment is degrading rapidly due to the expansion of urban settlements on to the best agricultural land, pollution of streams and destruction of fisheries by industrial effluents, and the encouragement of narrow agriculture specialists to use chemical pesticides extensively.³ The list could go on and on with passage of time. Thus, we urgently need to develop institutions and enforce laws to overcome the environmental problems.

The important national institutions in Pakistan, which play or can play significant role in safeguarding the environment, can be broadly classified into two categories, (a) the governmental institutions, and (b) the non-governmental institutions. Presently, both government and non-governmental sectors are addressing environmental issues. Internationally, Pakistan is a member of a number of international organizations that have been established to safeguard regional and global environment such as United Nation Environmental Programs (UNEP), South Asia Cooperative Environmental Program (SACEP).⁴ Pakistan is also a signatory to a number of Multilateral Environmental Agreements (MEAs) and has acceded to other non-legally binding instruments such as the Earth Summit held in Rio de Janerio, Brazil in 1992 or Agenda-21 Rio Principles and Johannesburg Plan of Implementation aiming for sustainable development of natural resources.⁵ Among them are included the United Nations Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of wild flora and fauna (CITES), United Nations Convention to Combat Desertification (UNCCD), United Nations Framework Convention on Climate Change (UNFCCC)

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- 2 Michael L. McKinney and Robert M. Schoch, *Environmental Science, Systems and Solutions* (London: Johnes and Bartlett Publishers International, 1998) p.16.
 - 3 Mary K. Theodore and Lewis, Theodore, *Major Environmental Issues Facing the 21st Century* (New Jersey: Prentice Hall, 1996), p.12.
 - 4 Thaddeus C. Trzyna, *World Directory of Environmental Organizations: A Handbook of National and International Organizations and Programs* (California: Institute of Public Affairs, 2001), pp.37-40.
 - 5 Jona Razzaque, *Public Interest Environmental Litigation in India, Pakistan and Bangladesh* (Hague, Netherlands: Kluwer Law International, 2004), p.131.

and Kyoto Protocol, Convention on Migratory Species (CMS), Ramsar Convention on Wetland, Basel Convention on the Control of Trans-boundary Movement of Hazardous Wastes and their disposal, Rotterdam Convention on the Prior Informed Consent for Certain Hazardous Chemicals and Pesticides in International Trade, the Stockholm Convention on Persistent Organic Pollutants (POPs), and the Montreal Protocol on Substances that deplete the ozone layer.⁶

Governmental Institutions

Natural resources are managed at different levels of government in accordance with their placement in the federal and provincial jurisdiction in Pakistan. The provinces have delegated some responsibilities to local bodies and other provincial agencies. Each department and agency patrols its sector boundaries.

Governmental Institutions at Federal Level (Historical Overview)

There has been a dramatic increase in the world's awareness of its worsening environmental problems since the United Nations Conference on the Human Environment held in 1972 in Stockholm, Sweden.⁷ The conference is a major landmark in the efforts of nations to collectively protect their life and support base on the earth. This increased awareness was a result of an improved understanding of the importance of natural resources to sustain and continue development. It declared environmental protection as a common concern of the entire mankind. As a result, environmentalism has become a universal phenomenon, which has led to the birth of thousands of environmental organizations. In Pakistan, the reaction to the world's growing understanding of environmental issues included the establishment of the Environment and Urban Affairs Division (EUAD) in 1974 within the Ministry of Housing and Works.⁸ EUAD has responsibility for

6 Peter H. Sand, *The Effectiveness of International Environmental Agreements* (UK: Cambridge University Press, 1992), p.18.

7 James Gustave Speth and Peter M. Haas, *Global Environmental Governance* (Amazon: Island Press, 2006), pp.56-58.

8 Government of Pakistan, *Fourth Five Year Plan, 1973-1978* (Islamabad: Planning Commission, 1974), p.67.

national environmental policy formulation and for administration of national environmental impact assessment procedures, which it mainly undertook through limited review of federal projects and is reported to Ministry of Environment.

In 1983, Pakistan Environment Protection Council (PEPC) and Pakistan Environment Agency (PEA) were established, while Provincial Protection Agencies (PPA) were planned in 1984 and established in 1987.⁹ Since then many institutional policy and regulatory developments have taken place at the federal and provincial levels. It also includes creation of the Ministry of Environment. The PEPC was created with responsibility for control of pollution and preservation of the living environment. PEPC consists of the President as Chairman but in 1994 an amendment was made in the ordinance to provide for the Prime Minister or his nominee to be the head of the council. The council was reconstituted after enactment of Pakistan Environment Act 1997. PEPC is an apex statutory body. The Chief Executive is the chairperson of the council and the Federal Minister for Environment, local government and rural development as its vice chairperson and governors of all the provinces are its members besides others. The council is represented by trade and industry, leading NGOs, educational institutions, experts, journalist and concerned ministries.¹⁰

A National Conservation Strategy (NCS) was developed in response to the World Conservation Strategy (WCS) launched by International Union for Conservation of Nature and Natural Resources (IUCN) in 1980 and formulated in 1992. The NCS emerged after almost a decade of discussion and analysis, and has served as the defunct environmental policy of Pakistan, which describes the environmental situation existing in Pakistan and recommends actions in order to redress the aggravating

9 Government of Pakistan, *Gazette of Pakistan 1983* (Islamabad: Ministry of Law and Parliamentary Affairs, 1983), p.57.

10 Government of Pakistan, "Environment Policy and Legal Framework," Online [home page on-line]; available from www.environment.gov.pk/.../Environment%20Policy%20and%20Legal%20Framework.pdf; Internet; accessed 12 Nov 2009.

environmental degradation to facilitate sustainable utilization of natural resources.

Government announced National Environmental Quality Standard (NEQS) in August 1993 to be applicable to all new industrial units to adopt more environmental friendly inputs and machinery in the industrial processing.¹¹ NEQS is aimed to specify upper and lower permissible limits for industrial effluent and emissions. It is also applicable to municipal discharge from the sewerage. NEQS has been provided the legal cover through Pakistan Environmental Protection Act, 1997 to control over industrial pollution in the country.

The government has also committed itself to achieve Millennium Development Goals (MDGs) as adopted by the UN member states in the year 2000. Each of the goals has a number of targets which are measured by several indicators. For example the MDG target for "land area to be protected for the conservation of wildlife" is 12 percent by 2015. Pakistan already has 11.3 percent of its area under protection for conservation of wildlife. Thus, it is very likely that this target can be met, to enhance in terms of quality and quantity, by 2015.¹² The MDG target for forest cover is 5.7 percent by 2011 and to 6 percent by the year 2015.¹³

In Feb. 2001, the National Environmental Action Plan (NEAP) was approved to follow the strategy of NCS, which narrows the government's policy focus on the environment to four core programs: clean air, clean water, waste management and ecosystem management. A comprehensive program has been launched to support implementation of NEAP. The United Nations Development Program has been supporting the implementation of this initiative through the NEAP sporting program (NEAP-SP). In 2007 this program entered its second phase.¹⁴ It proposes a wide range of technical, institutional regulatory, social and economic intervention in terms of different projects. These programs may

11 Government of Pakistan, *Eighth Five Year Plan 1993-98* (Islamabad: Planning Commission, 1994), p.121.

12 Government of Pakistan, *Economic Survey of Pakistan 2006-07* (Islamabad: Economic Advisory Wing, 2007), pp.246-47.

13 *Ibid.*

14 *Ibid.*, p.245.

strengthen the institutional and technical capacity of relevant government institutions.

Despite the continued efforts to arrest environmental degradation, the quality of environment in the country continues to deteriorate resulting in pollution, land degradation, deforestation, water depletion and loss of biodiversity. The Mid Term Review (MTR) of NCS, undertaken in 2000, admits that achievements under NCS have been primarily awareness raising and institution building rather than actual improvement of environment and natural resources.¹⁵ It is also noted that NCS influence on linkages to economic and social issues is limited and some key elements of sustainable development such as climate change, sustainable livelihoods, are missing in NCS. But NCS has contributed very significantly to the political economy of conservation and sustainable development in the country.¹⁶ Furthermore, environmental challenges facing Pakistan have been amplified over the years owing to a number of factors including rapid increase in population, increased urbanization and growing poverty.¹⁷ The population of Pakistan has experienced a rapid growth in the past. It was increased from 32.5 million in 1947 to 132.4 million in 1998, 142 million in 2001, and 159.2 million in 2004 and is expected to reach 228.8 million in 2025 and 295.0 million in 2050.¹⁸ This fast population growth has led to environmental degradation of an irrevocable nature.

Environmental degradation is fundamentally linked to poverty in Pakistan. It combined with a rapid increasing population and growing urbanization, is leading to intense pressure on the environment. Urbanization process has affected all parts of the country and all sizes of human settlement in one way or another

15 Arthur J. Hanson and Ministry of Environment, *Pakistan's National Conservation Strategy, Renewing Commitment to Action: Report of the Mid-term Review* (Islamabad: Ministry of Environment, Local Government and Rural Development, 2000), p.15.

16 Barry Dallas Clayton, *Stakeholder Dialogues on Sustainable Development Strategies* (England: International Institute for Environment and Development, 2008), p.96.

17 Government of Pakistan, *Pakistan an official handbook* (Islamabad: Ministry of Information and Broadcasting, 1991), p.225.

18 *The News* (Islamabad), 19 August 2004.

but the intensity of impact are most critical in the large cities. There are indications that several large cities in Pakistan not only face the traditional environmental problems such as lack of sanitation, chronic shortage of services, polluted air and water, disappearing open spaces and recreational areas, traffic congestion but newly emerging problems are adversely taxing the capacity of the surrounding ecosystem to sustain the growing population. One major problem of urbanization in Pakistan is the eating up of cultivated area by concrete structure of ever expanding cities.¹⁹

These factors called for comprehensive national environmental policy to handle the conditions emerged in the past. Therefore, The National Environmental Policy (2005-15) was prepared. The formulation of the policy was one of the major achievements during 2005-06. The policy aims to improve the quality of life of people of Pakistan through conservation, protection and improvement of the country's environment and effective cooperation among government agencies, civil society, private sector and other stakeholders. The country's first ever Environmental Policy addresses the sectoral issues such as (a) water management and conservation, (b) energy efficiency and renewable resources, (c) agriculture and livestock, (d) forestry and plantation, (e) biodiversity and protected areas, (f) climate change, air quality and noise pollution (g) and waste management. The policy also addresses other cross-sectional issues such as (a) population and environment, (b) gender and environment, (c) health and environment, (d) trade and environment, (e) poverty and environment, (f) environment and local government.²⁰

To address the various challenges mentioned above the government is implementing various policies and programs; many of which have come out of the NEAP of the Ministry of Environment. Under the NEAP-SP, Green Industry Program was launched in the year 2006, for the promotion of Self Monitoring and Reporting, to make the industries responsible for systematic

19 Government of Pakistan, *Environmental Profile of Pakistan* (Islamabad: Environment and Urban Affairs Division, n.d.), pp.111-112.

20 Government of Pakistan, *National Environmental Policy of Pakistan 2005* (Islamabad: Ministry of Environment, 2005), p.5.

monitoring and reporting of their environmental performance.²¹ Ministry also created the National Environmental Information Management System (NEIMS) to promote the national capacity for decision making in managing and utilizing environmental information under NEAP-SP.²² The Poverty Reduction Strategy Paper two (PRSP-2) released in early 2009, while PRSP-1 was circulated in 2003 to recognize the linkages between environment and poverty, its targets include; integration of the principles of sustainable development into country policies and programs and reversing the loss of environmental resources.²³ Government of Pakistan has also declared 2009 as the National Year of Environment. It is encouraging to note that Pakistan's overall policy framework takes into account environmental consideration to an extent by setting targets as well as allocating resources for environmental programs.²⁴

Governmental Institutions at Provincial level

Different government agencies and departments have been established to deal with various areas of environmental pollution. These agencies have the power to form expert advisory body, issue permits and license allowing companies or factories to pollute in a limited mandated manner.²⁵ The provincial institutions are concerned primarily with resource augmentation and conservation. The major natural resource management and protection responsibilities for forests, agriculture and water lie at the provincial level, even though these authorities are often overwhelmed by federal projects. The examples of these organizations are Water and Power Development Authority (WAPDA) of Pakistan, Geological Survey of Pakistan (GSP), Pakistan Forest Institute (PFI), Soil Conservation Department, Irrigation Department, Wildlife Department, Industry and Mineral

21 Government of Pakistan, *Economic Survey of Pakistan 2007-08* (Islamabad: Economic Advisory Wing, 2008), p.273.

22 Government of Pakistan, *Economic Survey of Pakistan 2008-09* (Islamabad: Economic Advisory Wing, 2009), pp.243-245.

23 *Ibid.*

24 *Ibid.*, p.244.

25 Razzaque, *Public Interest Environmental Litigation in India, Pakistan and Bangladesh*, p.109.

Departments, Pakistan Agricultural Research Council (PARC) and Provincial Forestry and Livestock Departments etc. Many of these institutions carry out surveys, monitoring and research work of great relevance to environmental protection.

Provincial Environmental Protection Agencies (EPAs) have also been established in all four provinces, which focus on industrial and urban pollution problems. EPA Punjab established in 1987 is very effective and has a large administrative and professional staff. EPA Sindh established in 1989, NWFP in 1992, and Baluchistan in 1995, AJK in 2005, and NA in 2007 can also mobilize the local resources, improve the local economy and promote sustained development.

Environmental sections have been established in all planning and development departments of provincial governments, for environmental screening of the projects, as counterpart of PAK-EPA which include Capital Development Authority, Islamabad, City District Government, Lahore, Karachi, Quetta, Peshawar, Faisalabad, Sukkur, Rawalpindi and Multan.²⁶

In urban areas, environmental responsibilities rest with the provincial Public Health Engineering Departments, with industrial pollution control being the responsibility of the provincial EPAs. Municipal governments have responsibility for solid waste disposal and for sewage handling and treatment.

Environmental institutions at local government level under Local Government Ordinance, 2001 were established. In this connection district environment offices have been established and most of the implementations of PEPA, 1997 have been devolved to local governments. The provincial governments, in exercising its responsibility for legislation and financing, must provide the requisite support to the local governments to deliver improved sanitation services.

Non-Governmental Institutions

Governmental functionaries play important role in environmental management, but for permanent gains emphasis

26 Government of Pakistan, "Pakistan Environmental Protection Agency," Online [home page on-line]; available from www.environment.gov.pk/aboutus/brief-Pak-epapdf; Internet; accessed, 12 Nov 2009.

must shift from the government functionaries to people's institutions and local communities motivating and organizing them to promote self sustained growth without causing undue harm to the environment. The program of environmental safeguard is so vast in scope that it needs utilization of every available effort whether it is by a government functionary, local body, Non-Governmental Organizations (NGOs), or an ordinary citizen. NGOs have primarily been formed by citizens and independent activists who are motivated by their anxiety over environmental threats to the human species and other living being. Some experiences in Pakistan reveal that NGOs can be quite effective in slum up-gradation schemes within urban areas. In Pakistan the term NGOs became well known only in 1990s but existed in Pakistan since independence in 1947. Pakistan has thousands of small non-profit, NGOs. So, there is a wide range of NGOs working on different subjects in different parts of Pakistan, and they have an extremely important role to play in creating community organizations.²⁷

It is very difficult to estimate the number of NGOs working in Pakistan. Because NGOs can be registered under five different laws, with registration offices in different provinces and with a general lack of systematic updating, only rough estimates are possible. According to Planning and Development Division, about 8,500 NGOs are registered in the country. Approximately 6,000 of them come under the Voluntary Social Welfare Agencies Act. The remainders are registered under the Companies Ordinance, the Societies Registration Act, the Trust Act, or the Charitable Endowment Act. By province 50% were in Punjab, 39% in Sindh, 6% in NWFP, 3% in Baluchistan and 2% in others. Of the total, 70% were located in urban areas and 30% in rural areas.²⁸

In general NGOs are poorly developed and relatively ineffective in developing countries. Nevertheless, they have the ability to undertake many of the functions of government more effectively and efficiently such as in welfare field. However, environmental NGOs are not well developed in Pakistan, and

27 Shin'ichi Shigetomi, *The State and NGOs; Perspective from Asia* (Tokyo: Sasakawa Peace Foundation, 2002), pp.94-100.

28 *Ibid.*

environmental advocacy is in their infancy. None of the national groups have yet established a strong advocacy capacity, although their membership comprises competent professionals. Still grassroots NGOs with a focus on environment and conservation are active in various cities, small towns, and villages.

Throughout the world, the conservation movement originated by NGOs and the implementation of conservation is directly related to the strength and viability of such groups. Environmental NGOs have two main functions: transmitting information to their members and acquaintances about the state of the earth and the threats to its health, and transmitting to the government the sense of popular concern about the quality of the environment and the health of the resource base. Environmental NGOs have also been a major source of innovative thinking about how resources should be managed and the environment protected. Thus they serve both as distant early warning systems and as a source of alternate development approaches that should be encouraged and facilitated. The NGOs are playing a vital part all over the world and a great deal has been done by such organizations in Pakistan, but still a lot has to be done in the environmental field.

Environmental Laws (Historical Overview)

Environmental law is a fast developing branch of law. Society has turned increasingly to legal avenues to protect the environment over the past century. It attained global recognition within four decades. The twenty first century will be the century dominated and guided by environmental laws, conventions and ethics. A number of laws dealing with environmental issues have been enacted at the local, national and international levels. Yet there are many gaps in these laws, for this field is still developing. Initially, the prime motivating force behind most environmental legislation was to protect human safety and welfare. In the broadest sense, the field of environmental law encompasses all of the laws, statutes, regulations, agreements, treaties, declarations, resolutions and the like that have a bearing on environmental issues. Environmental laws range in scale from local community ordinance prohibiting litter on the streets to international treaties regulating trade in

endangered species or the release of stratospheric ozone destroying substances.²⁹

In Pakistan, law relating to environment can be found in various statutes. Pakistan has a long tradition of environmental legislation, which is partly inherited from Mughals and British India. All the environment related aspects like land use, forestry, canal irrigation, wildlife protection, energy development, pesticide use, and noise pollution have been regulated to some degree in the past. During the Mughal period, people lived with nature in such a way that the natural ecosystem was not disturbed. The overall environmental conditions were healthy and balanced. However, the Mughals have codified regulations pertaining to hunting only. The Sikh and British rulers also continued these policies. Such as the Criminal Code in 1860 outlawing the killing of any animal whose value exceeded ten rupees. The law, moreover, extended protection to domesticated animals such as elephants, camels, horses, mules, buffaloes, bulls, cows, and oxen.³⁰ These laws have been maintained ever since. The society also had system of community self help for conservation of resources whereby exploitation of resources beyond specified limit was punishable. An example of such case was the confiscation of one sheep or goat of the defaulter which was killed to provide a feast for all the village people.

By the twentieth century, with faunal population coming under increasing threat of elimination, the British government enacted the Wild Birds and Animals Protection Act of 1912.³¹ It limits hunting to certain areas, to non-breeding seasons, to licensed individuals, and of non-endangered species. This law has remained in force and has served as a model after independence. Another Act of 1913 related to the sale of timber in Punjab was enacted known as "The Punjab Forest Act".³² British administration was engaged in numerous projects relating to environment before

29 Hassan, "Legislation as a Tool of Environmental Management", (Islamabad: Proceedings, International Seminar on Environmental Urban Development, 1981).

30. The Pakistan Penal Code (PPC) 1860 of general provisions and responsibilities (Existing Legislation).

31 PPC (1912) of general provisions and responsibilities (Existing Legislation).

32 Government of Pakistan, *The National Conservation Strategy* (Karachi: Environment and Urban Affair Division, 1992), pp.122-24.

independence, such as legislation related to forest management. In 1927 the Forest Act was enacted as its first comprehensive legislation and it remains Pakistan's principal legislative instrument controlling forestry. This act enforces rules governing the use of forests, determines the degree to which timber and other products may be exploited and authorizes the government to punish violators. The "NWFP Hazara Forest Act" was also introduced in 1936 to conserve forests. In 1934 "The Factory Act" was enforced to manage solid wastes, effluents and toxic or hazardous substances. For public health and safety "The Public Health Ordinance" was promulgated in 1944.³³ "The Regulation of Mines and Oil Fields and Mineral Development Act" was introduced in 1948 after one year of the inception of Pakistan for mineral development. In 1952, two acts were introduced for the management of land i.e. "The Punjab Development of Damaged Areas Act" and "The Punjab Soil Reclamation Act". The legislation pertaining to parks and wildlife was enacted in 1954 as "The Kohat Mazri Control Act". In 1959 an ordinance was introduced regarding the livestock i.e. West Pakistan Goats (Restriction) Ordinance and another law were enacted in the same year for public health and safety was "The West Pakistan Factories Canteen Rules (1959)".³⁴ After that Pakistan Penal Code was introduced in 1960 to protect air quality. The "West Pakistan Prohibition of Smoking in Cinema Houses Ordinance" was introduced in 1960. The West Pakistan Fisheries Ordinance (1961) was promulgated to protect marine life. To protect the air quality and noise pollution "The Motor Vehicles Ordinance" was introduced in 1965. For the purpose of forest conservation "The West Pakistan Firewood and Charcoal (Restricted) Act" was introduced in 1964. The "Islamabad Ordinance 1966" and The "Motor Vehicles Rules" were introduced for preservation of landscape, to maintain air quality and avoid noise pollution in 1969.³⁵ There were only six or seven specific environmental laws

33 Government of Pakistan, *The National Conservation Strategy* (Karachi: Environment and Urban Affairs Division, 1992), pp.122-24.

34 *Ibid.*

35 Government of Pakistan, *Gazette of Pakistan* (Islamabad: Ministry of Law and Parliamentary Affairs, 1983), p.13.

were promulgated during the period 1958-1965. During the decade 1970-80 many legislations bearing on environment conservation promulgated. Such as "Baluchistan Sea Fisheries Ordinance (1970) and Rules (1971)" to protect marine life, parks and wildlife. "The Agricultural Pesticides Ordinance (1971) and Rules (1973)" for toxic or hazardous substances.³⁶ "The Sindh Wildlife protection Ordinance (1972) and Rules (1972), "The Punjab Wildlife protection Act (1974) and Rules (1974)" for protection, preservation, conservation and management of parks and wildlife, "The Punjab Plantation and Maintenance of Trees Act (1974)", "The Baluchistan Wildlife Protection Act (1974) and Rules (1975)", "The Antiquities Act (1975)" for cultural environment, "The Management of Protected Forest Rules (1975)", "The NWFP Wildlife Act(1975) and Rules (1976)", "The Pakistan Plant Quarantine Act (1976)", "Territorial Waters and Maritime Zones Act (1976)", "The Punjab Development Cities Act (1976)", "The NWFP Fisheries Rules (1976)", "The Baluchistan Ground Water Rights Administration Ordinance (1978)", to maintain the water quality, "The Grazing of Cattle in the Protected Forests (Range lands) Rules (1978)," "The Baluchistan, NWFP, Punjab, and Sindh local Government Ordinance (1979-80)" for maintenance of land use, water quality, air quality, solid wastes and effluents, forest conservation, parks and wildlife, livestock, and public health and safety. "Islamabad Wildlife Ordinance (1979-80)," for the protection, preservation, conservation and management for parks and wildlife, "Pakistan Animal Quarantine Ordinance (1979-80)," for import and export of animals and animals products, "The Pakistan Epidemic Diseases Act(1979-80)", for public health and safety.³⁷ The first piece of legislation to consider environment as a whole was done in 1983, called "Environment Protection Ordinance of 1983".³⁸ The period from 1983 to 1997 is very effective period of environmental law. In this period the first ordinance regarding the environment was promulgated. With this ordinance the campaign of environmental legislation started which

36 C.H. Ahmed, *Local and Special Laws* (Lahore: Khyber Law Publisher, 1975), p.18.

37 Government of Pakistan, *Gazette of Pakistan* (Islamabad: Ministry of Law and Parliamentary Affairs, 1983), p.15.

38 *The Gazette of Pakistan*, No. 17(1)/83-Pub, dated, 31 December, 1983.

contemplated an enactment of Pakistan Environmental Protection Act, 1997. This act was meant for the protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution and promotion of sustainable development.³⁹ Many rules and regulations were promulgated under this Act. Some of the important rules are given below:

National Environmental Quality Standards (self-monitoring and reporting by industries) Rules, 2001. These are the most important rules under the Pakistan Environmental Protection Act, 1997 as they prescribe pollution limits for the industry. It puts obligations upon all the industries to submit correct and timely Environmental Monitoring Reports to the Federal Environmental Protection Agency.

Pakistan Sustainable Development Fund (Utilization) Rules, 2001. These rules provide the procedure for the sanction and utilization of financial assistance provided by the board. The board observed that the project should protect the environment and prevent the pollution.

Pollution charge for Industry (calculation and collection) Rules, 2001. According to these rules, the industrial unit is to ensure the correct calculation, reporting and payment of the pollution charge. Inspection team shall determine the pollution level of industrial unit at least once a year. The pollution charge is calculated by multiplying the pollution level with actual production during the charge payable period and with the applicable rate per pollution unit for the year.

Environmental Tribunal Procedures and Qualification Rules, 2000. These rules have been promulgated to resolve the disputes relating to the environmental issues. The functions of the Tribunal may be performed by a bench.

Environmental Sample Rules, 2001. Generally, these rules regulate the procedure for obtaining sample from the industrial units, their tests and analysis by the environmental laboratories and trial procedure for the contravention of the provisions of these rules.

39 Jawad Hassan, *Environmental Laws of Pakistan* (Lahore: Bookbiz, 2006), p.16.

Hazardous Substances Rules, 2000. According to these rules every generating unit of hazardous waste shall be responsible for the proper management of the waste generated by it till its final disposal in accordance with the rules and regulations.

National Environmental Quality Standard (Certification of Environmental Laboratories) Regulation, 2000. These rules are very important because they prescribe pollution limits for the industry and certify them according to the rules and regulations. Failure to maintain the limits is punishable with certain amount of fine or imprisonment.⁴⁰

During the twentieth century, the Pakistan government has, at various times, instituted massive programs aimed at preserving and restoring the environment, including the development of parks and recreation systems, restoration of water ways, flood control and protection of wildlife. The period 1970-2000 witnessed the passing of a number of federal statutes that still form the legal basis of environmental protection in Pakistan. But the environment has been continuously deteriorating in our country because the procedure to implement them is weak.

Conclusion/Suggestions

There is a great need that the Ministry of Environment, provincial environment departments, environmental protection agencies, district and tehsil governments and other relevant government and non-government institutions and organizations at all level must be strengthened by provision of adequate manpower, equipment, infrastructure and financial resources. A comprehensive training of personnel of relevant institutions at the federal, provincial, district and tehsil level must be conducted. Training institutions must be established for them. Regarding the national research the priority areas should be identified and adequate funding should be made available. There is a need to strengthen the relevant research and research related institutions. It is also required to build partnerships between government and NGOs for effective environmental management.

40 *Ibid.*, p.138.

After going through the historical development of environmental laws one hopes that environmental condition of Pakistan will be good, but actual situation on ground is much different and environment is continuously deteriorating in the country. Many points emerged after analyzing the development situation and implementation of the environmental legal framework. The main points emerged from the above analysis of the environmental legal framework are: (a) Lack of comprehensive set of environmental laws, (b) lack of adequate formal enforcement procedures and non-availability of the tools of implementation, (c) lack of awareness, (d) lack of respect for the law, and (e) lack of economic incentives.

- a. Lack of Comprehensive Set of Environmental Laws: Pakistan is fairly well endowed with incidental environmental legislation. In existing legislation the specific environmental enactments are few and insufficient. Environmental laws mentioned previously clearly indicate the weakness. There should be specific set of laws regarding the environmental pollution and management. For example, a set of laws related to land improvement and protection, a set for air pollution, for water pollution, noise pollution, solid and effluent management, agriculture pesticides and other aspects related to environment.
- b. Lack of Standard: Pakistan's environmental legislation suffers from lack of quantified limits and standards, which makes these laws ineffective and difficult to enforce. Most of the laws do not mention quantitative standards for emissions, which require sophisticated tools for determining emissions and effluent levels. By not specifying any standards, the rule leaves enforcement to the whims of the enforcing authority. This acts as an impediment to both regular enforcement and voluntary public compliance.
- c. Lack of Adequate Formal Enforcement Procedures and Non-availability of the Tools of Implementation: The environmental laws call for action by government, businessmen, NGO's, local communities and individuals. Laws are useful only when we act upon them. Therefore enforcement procedure and tools of implementation become important. It is necessary to set priorities and then to start implementation. There is shortage of skills in Pakistan to implement the environmental laws because of the deficit of trained personnel like technical staff to assess and monitor emission controls, trained extension staff with

government and NGO's, a cadre of environmental social scientists including economists, primary scientific research staff and well trained administrative professionals who combine organizational efficiency with technical knowledge of environmental issues. If Pakistan establishes its priorities and specifies the quality, quantity, and timing of needed technical assistance, then the environmental laws could be implemented. But the financial resources are important to establish priorities. Unfortunately, the financial resources for environmental improvement are severely limited in our country. These constraints have led to substantial shortfalls in both essential technical knowledge and equipment relating to enforcing regulations concerning the sustainable use of natural resources and protection of the environment.

- d. Lack of Awareness: Awareness of environmental laws and their importance is lacking amongst the regulators, enforcing agencies, and even the judiciary. For example, the Pakistan Penal Code, the most often used and quoted legislative document for enforcement agencies, has a number of environmental clauses (mentioned previously), yet most enforcement personnel are unaware of these or at least of their environmental dimensions. So, environmental education is very important because the low literacy level significantly limits the speed at which improvement in environmental awareness and activity can be achieved. This lack of awareness has slowed the development of environmental pressure groups, which has proved to be the catalyst for better legislation and enforcement.
- e. Lack of Respect for the Law: In our country the respect for the law has been absent for several decades, perhaps this is the result of successive martial laws, which has suspended the most sacred document "the constitution" of the country, in favour of one person. Laws at every level have been suspended by personal whims of authoritarian administrators. The highly stratified society that has emerged over the years has given rise to a feeling that getting away with breaking the law is itself a status symbol. In a setup that abuses the sanctity of the state, no legislative initiative can ever bear fruit. In our society the disrespect for the law has become a way of life. For example, consider the Ordinance of 1965 West Pakistan Regulation and Control of Loudspeakers and Sound Amplifiers, stipulates that no person shall use a loudspeaker in a public place so as to cause annoyance to the residents of the locality. According to the law,

uses of loudspeakers are prohibited near offices, courts, hospitals, or places of workshops. Few, if any, adhere to the spirit of the law, which is meant to avoid annoyance to those living nearby. Loudspeakers are used at private gatherings, wedding celebrations, election campaigns, and so on with no regard to the inconvenience caused to others.

- f. Lack of Economic Incentives: Regulations are generally inflexible and more costly where many people are involved. Cost of enforcement is increased further because people often try to evade the laws. Thus enforcement entails cost of monitoring plus cost of catching law breakers, prosecuting them, and some times, keeping them in jail. In recent years, however, rising cost of regulations, changing economic conditions, increasing emphasis on input reduction, and many other factors have led to increasing interest in economic incentives as a way of sustaining the environment. Government regulation restricts depletion and pollution only by passing laws, but economic incentives are also important to sustain the environment. Incentives are less expensive than regulation because they save on enforcement cost and are more flexible: producers and consumers decide how to pay for the change to meet the goal, each chooses the least costly way. These incentives basically are of two types: government incentives includes subsidies and many other ways that local, state, and national government can reward or discourage behaviours. By rewarding individuals monetarily, economic incentives help meet many goals effectively. The second basic economic incentive is privatization, in which environmental resources become the property of individuals. By transferring resources from the commons to individuals or companies that have a vested interest in them, the basic cause of the “tragedy of the commons” is removed. Despite some success with privatization, it is often less useful than government incentives in solving environmental problems. One problem is that many environmental commons cannot practically be privatized. For example how can we own a part of the atmosphere? Similarly, it is impractical to have ownership of the oceans or rivers.

Despite the drawbacks mentioned above, regulations have been successfully used during the last few decades by many industrial nations. Regulations are more useful where there are few violators. Though it would be incorrect to dismiss the law as a source of effective environmental management, it would also be

wrong to place sole reliance on legislative measures for ensuring better environmental and resource management. The enlightened use of the law could do much to achieve the objectives. Clearly, considerable scope exists for improving the formal enforcement procedures.

Increasingly, people are realizing that simple laws, whether at a local, national, or international level, ultimately will not be sufficient to solve the environmental degradation that the world faces. Many environmentalists believe that a concept known as "Sustainable Development" is needed. Sustainable development focuses on simultaneously making social, economic and political progress to satisfy global human needs, desires, aspirations and potential without damaging the environment. Sustainable development emphasizes equity among different people and nations of the world and equity between one generation and another. We must not leave future generations with a degraded world simply because we wish to enjoy a certain life style in the present. One country should not disproportionately use global resources or cause irrevocable environmental degradation that affects other people or the entire earth.

The environmental governance mechanisms in Pakistan are still at early stage and enforcement is weak due to lack of capacity. Environmental institutions, as a group, should continue to survive and prosper because society is very much concerned about the environment, and justifiably so. However, those radical organizations that continue to conduct business in an unprofessional and unethical manner need to be eliminated in the 21st century. Groups who knowingly and deliberately distort facts and provide false information should be treated the same as those who illegally pollute the environment. Hopefully, government will start taking action on this in future.