

DRAFT

Environmental Laws and Rules/Regulations in Punjab

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ABBREVIATIONS

BOR	Board of Revenue
CBO	Community Board Organization
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
Constitution	Constitution of the Islamic Republic of Pakistan
DCO	District Coordination Officer
DHA	Defense Housing Authority
EIA	environmental impact assessment
EPA	Environmental Protection Agency
FSC	Federal Shariat Court
GMO	genetically modified organism
GOP	Government of Pakistan
Gov	Government
HC	Lahore High Court
HUP&PHED	Housing Urban Development and Public Health Engineering Department
IEE	initial environmental examination
KPK	Khyber-Pakhtun Khuwa
IUCN	The World Conservation Union
LDA	Lahore Development Authority
MEA	Multilateral Environmental Agreement
NEQS	National Environmental Quality Standards
NGO	Non-governmental Organization
NWFP	North West Frontier Province
PEPA	Pakistan Environmental Protection Act, 1997
PHA	Parks and Horticulture Authority
PIDA	Pakistan Irrigation and Drainage Authority
PIL	Public Interest Litigation
PLGO	Punjab Local Government Ordinance, 2002

PPC	Pakistan Penal Code, 1860
PPP	Public-Private Partnership
SC	Supreme Court
SRO	Statutory Regulatory Orders
SWM	Solid Waste Management
TEPA	Transport Engineering Planning Department
WAPDA	Water and Power Development Authority
WASA	Water and Sanitation Authority

1. METHODOLOGY

The methodology followed to compile this volume is based on format adopted after great deliberation and debate for compiling the earlier volumes on Federal, Sindh, Baluchistan and Khyber Pakhtunkhwa (KPK) law reviews. For Punjab, we evaluated the legislation in force for every category specified in the research design, and selected for analysis those laws relevant to the focus on natural resources and processes that affect natural resource management.

Resources tapped to identify and obtain copies of the statutes reviewed in this series include the Pakistan Code, law reports published in Pakistan, academic and commercial legal texts, government offices, and local and international web sites. It is important to note that the amendments in laws are not always reported and available however, in Punjab the Government of Punjab has done a valuable effort and created a website¹ that provides all provincial (Punjab) laws updated till 2011. We enormously benefitted from this effort.

Further, rules and regulations framed under the Acts and Ordinances are not always reported and that poses a great practical difficulty especially where rules are essential for carrying out implementation of a particular Act. Unfortunately the "Punjab laws online" does not provide rules and regulations made under the Acts and Ordinances. We have tried our best to obtain all the relevant rules and regulations from all the sources, however some minor omissions are possible.

The study also contains all the relevant case law concerning the environment in Punjab and also cases that have gone in appeal to the Supreme Court of Pakistan from the Lahore High Court. All the reported cases have been compiled from the Pakistanlawsite² and law reports. Judgments from the Environmental Tribunals have been collected personally from the tribunal members and compiled.

2. GOVERNANCE

The Constitution of the Islamic Republic of Pakistan 1973 (Constitution) envisages three separate organs for efficient governance of the state. The national and provincial assemblies have the exclusive power to legislate and it may delegate its powers to the executive for subordinate legislation. In case of urgency, when Parliament and provincial assemblies are not in session, the President or the Governor, as the case maybe, may promulgate Ordinances for temporary periods. The administrative power of implementation of the law is with the executive at federal, provincial and local levels. The enforcement of laws is to be done by the judiciary and the constitution provides for the Supreme Court of Pakistan (SC), High Courts (HC) for each province and such other courts as may be established by law (Article 175).

2.1 LEGISLATIVE JURISDICTION

When the British quit the Indian Subcontinent in 1947, the Government of India Act 1935, the last pre-Independence constitution of colonial India, served as a provisional constitution for the new state of Pakistan. Subsequently, Pakistani lawmakers framed two Constitutions one in 1956 (Parliamentary system) and the other in 1962 (presidential system) before finally approving the Constitution, which remains in force. There were numerous changes made in the powers of governance periodically,

¹ www.punjablaws.gov.pk (Punjab laws online)- the data contains all the laws of Punjab from 1860 till date

² www.pakistanlawsite.com

primarily by dictatorial governments by 8th amendment and the 17th amendment. However, through the 18th amendment in 2010 various additions/amendments were reverted further and finally in 2010 amendments were brought in the legislative powers of the Parliament and the provincial assemblies [The Constitution (Eighteenth Amendment) Act, 2010 (Act no. X of 2010)]. (Legislative powers spelled out in each of these constitutions are given in Annex 1).

2.1.1 NATURAL RESOURCES

Under the Constitution, the legislative authority over most of the natural resources remains with the provincial assemblies, however “fishing and fisheries beyond territorial waters”; “mineral resources necessary for generation of nuclear energy”; major ports; mineral oil and natural gas; “liquids and substances declared by federal law to be dangerously inflammable” are subjects which fall strictly within the jurisdiction of the Parliament. Further, all the schemes and projects carried out by Pakistan Water and Power Development Authority (WAPDA) and The Pakistan Industrial development Corporation also fall under the legislative power of the Federation. After the 18th Amendment the legislative powers of the federation are further curtailed and subjects in the concurrent list, which were a common domain of both the Parliament and provincial assemblies to legislate, now exclusively fall in the ambit of the Provincial Assemblies. These subjects include environmental pollution and ecology; ancient and Historical monuments, Archeological sites and remains; shipping on inland waters; tourism; and prevention of inter provincial contagious diseases and pests effecting, men, animal and plants. An overview of legislative jurisdiction of the Parliament and the provincial assemblies is given in Annex2.

Regardless of where legislative jurisdiction lies with respect to natural resources, treaties and agreements with other countries, including international conventions and declarations, have remained under the exclusive legislative authority of the federal government since Independence. Under the Constitution prior to 18th amendment, making and implementing treaties, conventions, declarations and other agreements was a federal subject with no specific provision or exceptions related to implementing legislation. This allows the federal government to frame laws to implement its obligations under a wide range of international conventions and multilateral environmental agreements (MEA) concerning the conservation of fauna, non-timber flora and migratory species; the trade in endangered species; the protection of wetlands; and the prevention of marine pollution (see Annex 3). In doing so, the federal government could in theory address the gaps in other federal and provincial legislation governing natural resources. However, after the 18th Amendment the Federal Environment Ministry is dissolved as environment and ecology have devolved exclusively to the provinces. It is yet to be seen how to resolve practical problems that might arise with reference to signing and implementation of MEAs.

2.1.2 PROCESSES AND INSTITUTIONS

Processes and institutions that affect natural resources, whether directly or indirectly, are governed by a combination of federal and provincial laws (see Annex 2). After the 18th Amendment the Constitution only provides for processes and institutions that are governed by the Parliament and all the remaining subjects fall under the exclusive domain of the Provincial Assemblies.

The subjects falling under the Federal Legislative List provide for the following:

- Development of military land and cantonment areas;
- Mineral oil, natural gas and minerals used to produce nuclear fuel;
- Federal surveys including geological surveying;
- Matters related to industries and industrial development depends on the nature of the industry concerned, defense-related industries, for example, have been under the

exclusive purview of the federal government;

- In addition, the federal government may by law declare control over certain types of industrial concerns to be “expedient in the public interest”;
- Customs and export duties;
- Taxes on corporations and non-agricultural income;
- Sales tax and capital tax;
- Terminal taxes on goods and passengers;
- Relevant fees;
- Excise duties on goods and products (except for alcohol, opium and other narcotics);
- Taxation related to mineral oil and natural gas, along with taxes on minerals used in the production of nuclear energy;
- Taxes and duties on the production capacity of “any plant, machinery, undertaking, establishment or installation”;
- Banking other than corporations owned or controlled by a province and carrying on business only in that province;
- Stock exchanges and futures markets with objects and business “not confined to one province”;
- Foreign loans and foreign aids;
- Major ports;
- Aircrafts and air navigation;
- Maritime shipping and navigation;
- Carriage of passengers and goods by sea or by air;
- National highway and strategic roads;
- Railways;
- Electricity;
- Construction of hydroelectric or thermal power plants, grid stations and inter-provincial transmission lines anywhere in the country;
- Import and export “across customs frontiers”;
- Trade and commerce with foreign countries;
- Inter-provincial trade;
- Quality standards for goods intended for export;
- Port quarantine;
- National libraries, museums and research institutions;
- Standards in institutions for higher education and research Scientific and technological institution;
- Legal, medical and other professions;
- Sale of opium for export;
- Explosives
- Treaties and agreements with other countries, including conventions and declarations,
- “International organizations”.

The federal government may nevertheless frame laws on the subject if “one or more” provincial assemblies pass resolutions to that effect (Article 144). Such laws may be subsequently amended or repealed by the provinces.

Under the Constitution, the National Assembly is awarded the power to declare by law that “any trade, business, industry or service” may be owned or carried out exclusively by the federal or provincial government, or a government-controlled corporation, to the “complete or partial” exclusion of “other persons” (Article 253(b)).

2.2 HIERARCHY OF LEGAL INSTRUMENTS

2.2.1 THE CONSTITUTION OF ISLAMIC REPUBLIC PAKISTAN, 1973

The Constitution is the supreme law of the land. All laws have to conform to the Constitution. It establishes the relationship between the federal government and the provinces, empowers the federal and provincial governments to perform their designated functions, and specifies the fundamental rights of all citizens. The Constitution specifically provides that no law can be repugnant to the injunctions of Islam (Article 227) or inconsistent with the guaranteed fundamental rights (Article 8). The SC has held the Constitution to be a “living document” which must be interpreted in a manner that is “not restrictive, pedantic or limited”.⁵

2.2.2 LEGISLATIVE ACTS

First in the hierarchy of sub-constitutional legal instruments are Acts passed by the legislative branch of government—the Parliament and provincial assemblies. If legislation passed by a provincial assembly comes into conflict with a law enacted by the National Assembly, the federal statute overrides the provincial one to the extent of the inconsistency (Article 143).

Some federal laws operate as provincial statutes, either because legislative power with respect to a particular subject has shifted from the federal to the provincial level during one of several constitutional changes, or because the National Assembly was authorized to frame a law on a provincial subject by provincial consent, under Article 144 of the Constitution. This Article also allows the provinces to subsequently amend or repeal such laws. In addition, certain laws framed during the colonial era now operate as provincial statutes because their subject matter no longer falls under the legislative jurisdiction of the federal government.

The motives of lawmakers or the necessity of specific legislation cannot be questioned in a court of law and malafides cannot be attributed to the legislature.³ A law may, however, be tested on the “touchstone of the Constitution” with respect to legislative competence, fundamental rights or other limitations imposed by the Constitution.⁴

2.2.3 ORDINANCES

Under the Constitution, Ordinances may be promulgated by the executive branch of government, by the president, when the National Assembly is not in session (Article 89) or by a provincial governor when a provincial assembly is not in session (Article 128), where the President/Governor is satisfied that circumstances exist which render it necessary to promulgate an Ordinance. The courts have held time and again that this discretion cannot be challenged and that the executive is the sole judge of any such situation.⁵

³ *Ardeshir Cowasjee v. Province of Sindh* (Constitutional Petition No. D-856 of 2002 dated 14 October 2003, not reported); *Fauji Foundation v. Shamimur Rehman* (PLD 1983 SC 457); *Ghulam Nabi v. Province of Sindh* (PLD 1999 Kar 372); *Balochistan Bar Association v. Government of Balochistan* (PLD 1991 Quetta 7); and *Rahim Shah v. Government of NWFP* (PLD 1982 Peshawar 93).

⁴ *Star Flour Mills v. Province of Punjab* (PLD 1996 Lahore 687); and *Balochistan Bar Association v. Government of Balochistan* (PLD 1991 Quetta 7)

⁵ *Ardeshir Cowasjee v. Province of Sindh* (Constitutional Petition No. D-856 of 2002 dated 14 October 2003, not reported); *Fauji Foundation v. Shamimur Rehman* (PLD 1983 SC 457); *Ghulam Nabi v. Province of Sindh* (PLD 1999 Kar 372); *Balochistan Bar*

Ordinances have the same force and effect as an Act but normally remain in force for a limited period of time—three months in the case of governors' Ordinances (Article 128) and four in the case of presidential Ordinances (Article 89). During this period, the president or governors may withdraw an Ordinance, or it may be disapproved or modified by the relevant legislative body. Generally, an Ordinance lapses if the relevant assembly fails to adopt it within the specified period.

In some cases, most notably when the assemblies have been dissolved or suspended, Ordinances have been given the status of a legislative Act by means of special, continuance-in-force orders which have exempted Ordinances from the provisions of Articles 89 and 128. Ordinances protected in this way do not need to be ratified by a legislative body. On occasions, continuation-in-force orders have in turn been repealed by a later, elected government; in other cases the protections have been formalised by the legislature, as with the Constitution (Seventeenth Amendment) Act 2003.

2.2.4 RULES AND REGULATIONS

Rules and regulations provide for procedural and administrative matters that are subsidiary to the provisions of the parent law. They are issued by the executive branch of government, pursuant to a particular Act or Ordinance, for the purpose of implementing specific provisions of that legal instrument. While the legislature delegates to executive authorities the power to make rules and regulations for the purpose of implementing statutory provisions, in doing so the legislature does not delegate legislative functions or create a parallel legislature.⁶

Rules may not be repugnant to the provisions of the law under which they are framed or go beyond the substantive provisions of the parent statute.⁷ The courts have also held that rules framed under a particular law are deemed to be part of that law, with the same force and effect "as if their provisions were included in the statute".⁸

Rules framed under laws that are subsequently repealed remain in force, unless specifically repealed, to the extent that they are consistent with the provisions of the more recent law, particularly if newer rules have not been framed for the same subject.⁹

2.2.5 ORDERS

Orders are usually issued in exercise of a power delegated under a statute. They may deal with a broad range of substantive issues, or with a specific and limited situation, such as the environment protection orders that may be issued under Pakistan Environment Protection Act, 1997 (PEPA).

Administrative orders are issued by an administrative authority in exercise of a delegated power to administer a particular issue. Statutory orders are issued by statutory bodies in performing their designated functions. The power to issue statutory orders is not absolute and a statutory body may

Association v. Government of Balochistan (PLD 1991 Quetta 7); and Rahim Shah v. Government of NWFP (PLD 1982 Peshawar 93).

⁶ Nasim Fatima v. Government of West Pakistan (PLD 1967 Lahore 103).

⁷ Karachi Cooperative Housing Societies Union Ltd. V. Government of Sindh (1990 MLD 389); Ahman v. Additional Commissioner Revenue (PLD 1971 Lhr. 979)

⁸ *ibid*

⁹ Clifton Centre Association v. City District Government (PLD 2003 Karachi 477).

only issue orders that are within the purview of the legal instrument that created it. The law that creates a statutory body provides the powers that the body has with respect to issuing orders.

Executive orders and statutory orders are issued in Pakistan under the more general designation of rules, regulations and statutory regulatory orders (SROs). The status of an order depends on the delegated power under which it is issued. Orders are also issued in situations where there is no statutory delegation, as in the case of provisional constitution orders, other executive orders and the Legal Framework Order, all issued during the period October 1999–August 2002.

While laws may be enacted to have retroactive effect, an administrative order or notification may not operate retroactively “to the disadvantage of persons affected by it”. The same principle applies to clauses in legal instruments where orders and Actions taken under repealed legislation are saved. On this matter the courts have ruled that unless the repealing law itself has retroactive effect, no administrative decisions saved by that law can be applied retroactively.¹⁰

2.2.6 NOTIFICATIONS

Notifications are not a separate class of legal instrument. Rather, they provide a mechanism through which the executive branch of government promulgates rules and regulations. Notifications also serve as a means to communicate specific official Actions taken to accomplish a particular, limited purpose, such as designating a protected area.

2.2.7 MULTILATERAL ENVIRONMENTAL AGREEMENTS

The Constitution provides for implementation of treaties and agreements with other countries to be done by the Parliament. Once a multilateral agreement is ratified it needs to be incorporated into the law of the land and then it is treated in the same way as any enactment of the country. Annex 3 gives the list of MEAs signed and ratified by Pakistan.

2.3 EXECUTIVE

The federal government is empowered to exercise its authority in two ways: through administrative authorities directly under its control and through provincial governments. In the latter case, the federal government may entrust any of its functions to a provincial government, with the consent of that government (Article 146). Conversely, Article 147 allows a province to entrust its executive authority to the federal government or its officers. The federal government may direct the provinces to take specified Actions in the following matters: to ensure that provincial executive authority is exercised in such a way that it does not “impede or prejudice” the exercise of federal executive authority (Article 149). The federal government may also assume executive authority over a province during a declared emergency (Article 232).

Article 99 of the Constitution gives the federal government the power to adopt Rules of Business to govern its administrative operations. The Federal Rules of Business, 1973, as amended, are statutory rules, assigning functions and dividing responsibilities between various ministries, their divisions and departments, and semi-autonomous bodies. These Rules provide for the distribution of responsibility amongst ministries, establish the hierarchy of responsibility within individual ministries, and lay down operational procedures, some of which are compulsory, for interaction between ministries. Ministers take operational decisions while policy issues are referred to the Cabinet. Subject to the Rules,

¹⁰ *Taj Mahal Hotel Limited v. Karachi Water and Sewerage Board* (1997 SCMR 503)

business within a ministry is conducted in accordance with administrative guidelines and policies issued by the government from time to time. The 1973 Rules of Business are not explicit, however, on the subject matter of jurisdiction of ministries or their functions.

The executive power of provincial governments extends to the same subjects over which provincial assemblies enjoy legislative authority (article 137). Under Article 129 of the Constitution, the provincial government consisting of the chief minister and provincial ministers exercises the executive authority of a province (Article 129).

Article 139 gives provincial governments the power to adopt rules of business to govern their administrative operations. As at the federal level, provincial Rules of Business are statutory rules.

The business of the Punjab government is divided among various departments and "attached departments" which are semi-autonomous, as provided in the Punjab Government Rules of Business 1974, as amended. The rules provide for the establishment and functioning of provincial government departments, known collectively as the "secretariat". Provincial Rules of Business establish the hierarchy of departments, provide for the division of responsibilities between various departments and attached departments, and establish the manner in which responsibilities are to be carried out, besides dealing with other miscellaneous issues. Subject to the Rules of Business, affairs within a department or attached department are conducted in accordance with administrative guidelines and policies issued by the provincial government from time to time. The Rules of Business also provide for interaction between various departments, which in certain cases is compulsory. The departments relevant for natural resource management and procedures include agriculture; environment protection; forestry, wild life and fisheries; housing, urban development and public health engineering; industries; irrigation and power; livestock and dairy development; mines and minerals; planning and development; tourism and transport departments.

The Constitution requires each province to establish a system of local government, and to devolve political, administrative and financial responsibility to the local level (Article 140-A). The system of local governments across the country was reconstituted in 2001 by means of provincial Ordinances promulgated in that year and Punjab Local Government Ordinance, 2001 (PLGO) was promulgated in Punjab. This legislation aims to devolve political power to the grassroots level (PLGO, preamble) for good governance and it provides for delegation of powers to authorities subordinate to provincial governments. To this end, administrative and financial authority for a number of subjects that were previously the responsibility of the provincial government now lies with local-level bodies (section 14 read with first schedule, part A). The PLGO creates various tiers of local-level government such as unions, tehsils/ towns and districts/ city districts (section 5. PLGO specifies the powers of each tier with respect to development, the maintenance of law and order, and the overall management of the areas and resources under their control.

2.4 JUDICIARY

Article 175 of the Constitution establishes the SC along with the provincial HCs. Article 203C creates the Federal Shariat Court (FSC), which is empowered to decide whether any law or provision of a law is repugnant to the injunctions of Islam (Article 203D). Article 212 provides for administrative courts and tribunals as well as other courts to be established by law. The environmental tribunals setup under PEPA are one example of courts created by law. Other special courts have been established to deal with subjects ranging from traffic offences to terrorism.

Federal and provincial courts form part of a single national judicial system with the SC at the apex, serving as the appellate authority for all decisions taken by the provincial HCs (Article 185). The SC has original jurisdiction to hear matters pertaining to the enforcement of fundamental rights, disputes

between a province and the federal government or between provinces (Article 184), and questions of law that may be referred by the president (Article 186). Decisions of the SC are binding on all other courts in the country, to the extent that the ruling “decides a question of law or is based upon or enunciates a principle of law” (Article 189). This has been held by the courts to apply in cases where principles of law have been decided “Actually and finally” but matters related to fundamental rights may be “adjudicated afresh” if new evidence is presented.¹¹

Each province has civil and criminal trial courts of original jurisdiction, created by law, to deal with matters within their respective territorial and pecuniary jurisdiction. The jurisdiction of the Lahore HC, the apex judicial authority for the province of Punjab, is established in Article 199 of the Constitution. A provincial HC has original jurisdiction in certain matters including constitutional jurisdiction, under which it may enforce fundamental rights, direct specific performance of the public duties of the federal and provincial governments as well as their respective functionaries, and review executive Actions (Article 199). Indeed, the courts have ruled specifically on the point that it is not up to the judiciary to question the “wisdom of the legislature”.¹² The courts may, however, measure a law against the “touchstone of legislative competence or fundamental rights or any limitations imposed by the Constitution”.¹³

The HC supervises the lower judiciary (Article 203) and hears appeals against decisions of the subordinate judiciary. When a provincial HC exercises its constitutional jurisdiction to review the exercise of executive or administrative authority, it may modify the Actions in question or set them aside. This power is akin to the jurisdiction of the English courts to issue writs.

Article 212 of the Constitution provides for administrative courts, tribunals and other courts to be established by law. PEPA, meanwhile, provides for the setting up of environmental tribunals in each province (section 20). Public interest litigation (PIL) under Article 199 of the 1973 Constitution came to be used as the primary mode of enforcing rights under PEPA primarily because of the delay in establishing and staffing the environmental tribunals.

Decisions of a HC are binding on all courts subordinate to it (Article 201). Provincial HC rulings carry persuasive rather than authoritative force before other provincial HCs.

3. NATURAL RESOURCES

Legislative authority over natural resources lies for the most part with the provinces. In the province of Punjab laws aimed specifically at protecting and conserving natural resources are scant, old and not amended keeping in view the modern concepts of conservation. A single provincial wildlife Ordinance provides for the protection of certain species but allows government officials to grant broad exemptions and awards unqualified indemnity from prosecution to such officials for Acts performed in their official capacities, creating scope for mismanagement.

Other provincial laws governing natural resources also fail to provide holistic protection. The fisheries Ordinance focuses almost entirely on the regulation of commercial fishing, with a few provisions concerning the size of fish that may be taken and the types of fishing methods that are prohibited. Land laws deal with a wide range of matters related to tenure as well as land use but fail to provide for the

¹¹ Punjab Chest Foundation v. Government of Pakistan (1997 CLC 1379)

¹² Ardeshir Cowasjee v. Province of Sindh (High Court Appeal No. 271 of 2004, dated 1 September 2006, not reported)

¹³ Ghulam Nabi v. Province of Sindh (PLD 1999 Karachi 372)

conservation of soil resources. A federal forest Act dating back to 1927 governs forests in the province.

Water is the only sector where there is some relatively recent provincial legislation that tries to incorporate concepts of water resource management, however even here the law lacks a holistic and modern water resource management plan. Till date there is no legislation regulating the use of underground water, ambient water standards are yet to be set and water classifications are yet to be notified. Modern concepts of community participation in the management of natural resources is entirely missing in almost all the laws dealing with natural resources and, where it is introduced such as Water and Drainage Authority Act, 1997, it is not properly implemented.

In addition, natural resources in the province are governed by federal laws, many of which are more than 100 years old, and by provincial legislation framed for other sectors. Pakistan Environment Protection Act, 1997¹⁴ (PEPA) is the most serious and effective law protecting the natural resources by regulating certain Activities harmful for these resources and also through the introduction of environmental impact assessment (EIA) for Activities harmful for the environment. However PEPA shall cease to exist by the operation of the 18th amendment in the Constitution once the provincial assemblies legislate provincial environmental laws for their respective province. We have included some commentary on PEPA nonetheless under various heads presuming that provincial environmental law will be more or less on the same lines with few amendments and changes. At the local level, the district works and services office is responsible for assisting provincial environmental agency in discharging its functions and various other aspects related to the implementation of PEPA (Punjab District Government Rules of Business, section 3, read with schedule II, item 11(v)).

3.1 LAND, TENURE

¹⁴It is a federal law and primary legislation to protect, conserve, rehabilitate and improve the environment, to prevent and control pollution, and promote sustainable development. PEPA defines "environment" very broadly to include air, water, land, layers of atmosphere, organic and inorganic matter, ecosystems and ecological relationships, buildings, structures, roads, social economic conditions effecting community life and inter-relationship between these factors (section 2(x)), It establishes Pakistan Environment Protection Agency (EPA) headed by a director general appointed by the Federal Government (section 5). Federal EPA is responsible for administration and implementation of the Act and rules made there under, preparing national environment policy, annual national environment reports NEQS, ambient air land and water standards etc. Provincial governments establish provincial EPAs that shall be headed by a director general appointed by the provincial government (section 8). All the powers of the federal EPA can be delegated to provincial EPA's (section 26). All the powers of federal and provincial EPAs are to be exercised through the respective director generals (sections 5 & 8) however, they can further delegate it. Almost all the powers of the federal EPA have been delegated to the provincial EPAs. PEPA establishes a Council that is responsible to approve comprehensive national environment policies, approve the National Environment Quality Standards (NEQS), provide guidelines for the protection and conservation of species, habitats etc (section 4). PEPA regulates certain emissions and discharges and hazardous substances and hazardous waste and provides penalties for the same (sections 11, 13, 14, & 15). It also establishes environmental tribunals and empowers judicial magistrates to be environmental magistrates (section 20 & 24).

The Constitution protects the property rights of individuals, subject to laws allowing for the compulsory acquisition of property “for a public purpose”, and conditional upon the payment of compensation (Articles 24(1) and 24(2)). The term ‘public purpose’ is not defined and is therefore open to a broader interpretation that may include conservation or the protection of land and other natural resources.

The same holds true in the case of the Land Acquisition Act 1894, where the term is defined but in terms that are not exclusive. As such, the government may use the machinery provided in the Act to acquire land for the purpose of establishing protected areas, sanctuaries or national parks, or to conserve or protect land and other natural resources.

Other provincial land laws provide for the operation of government colonies, measures to protect land from erosion and “improvement”. The Land Improvement Loans Act, 1883 defines the term ‘improvement’ as any Activity likely to increase the value of land and, as such, also allows for a broader interpretation. Laws related to tenure govern the relationship between landlords and agricultural tenants, and provide for matters related to the transfer and consolidation of landholdings.

Most of the legislation dates back at least three decades, with some laws enacted in the late 19th and early 20th centuries. More recent legislation comes in the form of the PLGO, which does not concern land directly except to specify penalties for certain offences related to the dumping of hazardous materials on government property. The PLGO and rules outline the powers of various local government agencies with respect to the ownership of property and specify the enforcement responsibilities for various land laws at the local level.

Apart from the general provisions in the PLGO related to public land, there are no provisions in the law specifically aimed at preventing the contamination of soil or specifying measures to clean up land affected by such contamination. Older laws assume that uncultivated land is not productive. Tenure laws, meanwhile, provide only limited security to tenants and contain no provisions that would encourage, either directly or indirectly, the conservation and wise use of soil resources.

3.1.1 Punjab Local Government Ordinance, 2001 (No. XIII)

UNDER PLGO from the district government down to village and neighborhood councils, all tiers are permitted to acquire, hold and transfer immovable property (sections 13, 49, 50, 74 and 94(4)). Citizen community boards, non-elected voluntary organizations that may be set up under the Ordinance, may also hold property (sections 99(8) and 101(2)). In addition to their other functions, zila councils may approve plans for the reclassification of land (section 40(a)).

Under the PLGO, discharging dangerous chemicals, flammable materials or “hazardous or offensive articles[s]” onto public land is an offence punishable with a maximum of three years’ imprisonment and/or a fine of 15,000 rupees, in addition to a penalty of 1,000 rupees for each day the offence continues (section 141, read with the fourth schedule, part I, items 8 and 21). Similar penalties apply in the case of failure to deliver possession of property to the local government upon cancellation or expiration of a lease (section 141, read with the fourth schedule, part 1 item 4). Other offences, which are subject to an immediate fine of 500 rupees, include failure to keep land cleared of plastic bags and “injurious” or “offensive” vegetation (section 141, read with the eighth schedule, items 3 and 25). In such cases, a repeated offence within three months incurs a maximum penalty of six months’ imprisonment and/or a fine of 5,000 rupees in addition to a penalty of 200 rupees for each day that the offence continues to be perpetrated.

3.1.2 Punjab Local Government Conduct of Business Rules, 2001

These rules are framed under section 31 of the PLGO and provide for the functioning of district offices and “grouped” offices. The responsibilities of district offices are listed in schedule II read with rule 3(2)). The district land revenue and estate office, which operates as part of the grouped revenue office (rule 3(1), read with schedule I, item 10), handles a wide range of subjects related to tenure including land reform, the consolidation of holdings, the maintenance of land records and the administration of government colonies (schedule II, item 10(i)). The land revenue and estate office is also responsible for the administration of laws related to land, acquisition and tenancy (schedule II, item 10(i) (E)). The rules state that these functions are to be carried out “subject to” provincial law and policies laid down by the provincial government, Board of Revenue (BOR) and Punjab Land Commission, suggesting that the district exercises delegated responsibility.

3.1.3 Punjab Local Government (Property) Rules, 2003

These rules, framed under the PLGO, provide for the management and maintenance of local government-owned property. Local governments are required to “take such steps as may be necessary” to ensure that such property is managed in the “best interest of the public”(rule 3). What constitutes the “best interest” is not defined. Local governments may acquire property “for any purpose” either by agreement with its owners or compulsorily through the provincial government under the provisions of the Land Acquisition Act 1894 (rule 15).

3.1.4 Land Reforms Act, 1977 (No. II)

Under this federal law, all powers in relation to a province are delegated to the government of that province (section 2(2)). The objective of this Act was to bring about a more equitable distribution of land for the benefit of tenant farmers. To this end, the law fixed a ceiling on the area of land that may be owned. The provisions of this Act were challenged before the FSC. In 1990, the Court ruled that ceilings on landholdings were against the injunctions of Islam, invalidating sections 3, 4, 5, 6, 7(5), 8, 9, 10, and 11–17. Those portions of section 7 that remain valid prescribe procedures for making declarations of land ownership. Sections 18–27 concerning the Federal Land Commission also remain valid, as do the procedural provisions of chapters VII and VIII.

3.1.5 Land Reforms Regulations 1972 (Martial Law Regulation No. 115)

This Martial Law Regulation places certain restrictions on the ownership and possession of land. It was challenged before the FSC that, in 1990, invalidated most of its substantive provisions on the grounds that they were against the injunctions of Islam. Regulations 7–10, 13, 14, 18 and 25(3) (d) were invalidated in their entirety while regulations 2(7), 15–17, 19–21 and 25(1) were deemed to be repugnant to Islamic injunctions with respect to specified conditions. The status of provisions on joint holdings (regulations 22 and 23) and on alienation (regulation 24) is left undetermined, pending future decision of FSC. Regulations that remain valid concern land commissions (regulations 4–6), the exchange of land (regulation 11), declarations of land ownership (regulation 12), and the procedural provisions of regulation 3 and parts VIII and IX, as well as portions of regulation 25 (the rights of tenants) and regulation 21 (the use of land recovered from universities and certain charitable institutions).

3.1.6 Punjab Land Revenue Act, 1967 (WP No. XVII)

This Act gives the Provincial Government power to vary the limits of a district and division (section 5), the preparation and maintenance of records-of-rights (sections 39, 40 and 41), and a number of related matters. The law requires that a record-of-rights is prepared for every estate (section 39) and all acquisition of land is reported (sections 42 and 42-A). Revenue officials are empowered to enter and survey land (sections 30 and 116) and mark boundaries including boundaries between “riverian estates” (sections 117 and 123). Landowners affected by the delimitation of riparian or riverine boundaries are entitled to compensation (section 126). Joint holders of land may apply to “partition” their holdings (section 135). Such an application may, however, be refused in the case of grazing areas, embankments, watercourses, wells or tanks, as well as the land from which these works are supplied with water, if partition of these holdings is likely to “cause inconvenience” or “diminish the utility” of such works and holdings (section 136). The Act allows revenue officials to enforce customary tenure practices in areas where the periodic redistribution of landholdings is an established custom (section 149). Similarly, revenue officials may act to remove encroachments from lands that have been reserved in the revenue records as commons (section 175). According to the provisions of the law, all unclaimed or unoccupied land, wasteland and “any spontaneous produce or other accessory interest in land” vests with the government unless ownership is expressly provided for in the record-of-rights completed on or before 18 November 1871 (section 50(1)) or July 1879. For records prepared after that date, these interests vest with the landowners concerned unless government ownership is expressly provided (section 50(2)). Third parties whose rights are affected in such matters are entitled to compensation (section 51). Both the government and the Board of Revenue (BoR) are empowered to make rules under this Act.

3.1.7 Punjab Consolidation of Holdings Ordinance, 1960 (WP No. VI)

This Ordinance provides for the consolidation of landholdings on the application of landowner themselves (section 3(2)) or on the recommendation of revenue officials (section 3(1)). For the purposes of this Ordinance, the term ‘consolidation’ is defined as the “redistribution of all or any of the lands in an estate or sub-division of an estate so as to reduce the number of plots” (section 2(f)).

Once a decision regarding consolidation is taken, a consolidation scheme is prepared (section 9) and objections are heard (section 11). Compensation may be awarded in cases where the redistribution of land under a scheme leaves a landowner in possession of land that is worth less than their original holdings (section 12). Following consolidation, the rights of landlords and tenants in the newly created holdings remain the same as before consolidation (section 16).

Government officials and others appointed under this Ordinance to carry out consolidation functions enjoy indemnity from prosecution for action taken “in good faith” (section 27), and civil courts may not entertain a suit or application related to consolidation proceedings under this Ordinance (section 26). The BoR has the power to make rules governing a wide range of operational and procedural matters (section 29).

3.1.8 The Punjab Requisitioned Land (Continuance) Act, 1958 (No. XXX)

This Act allows the government to continue using immovable property requisitioned under various laws that expired or were repealed (section 3). In case of continued requisition, the government is required to pay compensation to the owners (section 6). The purpose for which land is requisitioned is not explicitly stated in this law, and the definition provided for the term ‘requisitioned land’ refers to the Defence of India Act, 1939 that had expired by that time. Besides validating prior requisition, the law allows the government to acquire requisitioned land under specified conditions (section 5): if works have been carried out on the land at state expense, and such works continue to be required for state purposes (section 5(3)(a)); or where the cost of restoring the land to its original condition is excessive in relation

to the value of the land at that time, and the owner refuses to accept the land “released” from requisition without payment of compensation (section 5(3)(b)).

3.1.9 Punjab Tenancy Act, 1887 (No. XVI)

This Act regulates the relationship between landlords and agricultural tenants, and spells out the conditions under which various tenancy arrangements persist (sections 5–15). The law provides certain safeguards with regard to land and agricultural labor. For example, tenants who have “improved” the land are entitled to compensation if they are evicted (section 68). For the purposes of this law, the term ‘improvement’ is defined as any work which increases the “value of tenancy” of the land, including the construction of irrigation and drainage works, and reclaiming, leveling, terracing or planting trees etc. (section 4(19)). The land lord cannot make improvements without the consent of the Collector. The provincial government may make rules to govern a number of matters related to tenancy agreements including the mutual rights and obligations of landlords and tenants.

3.1.10 Colonization of Government Lands Act, 1912 (No. V)

This Punjab law, adapted first for all of West Pakistan and subsequently amended and adapted for the province of Punjab in 1974, provides for the administration of government-owned land that has been declared a “colony”, and spells out the rights of tenants in such colonies. For the purposes of this law, a colony is defined simply as “any area to which this Act shall be applied” (section 3).

The provincial government may declare any land it owns to be a colony (section 4), or withdraw this designation (section 5). The BoR, meanwhile, may grant land situated within a “colony” to any person on such conditions as it thinks fit” (section 10(1)). The law deals at length with the rights of government tenants, including provisions related to the acquisition of ownership rights over land included in a tenancy (section 30). In cases where a tenant has acquired ownership, the government nevertheless retains all rights to such land with respect to distributaries channels as well as mines, quarries and mineral deposits located in such land (section 30, read with schedule II, item 1). To this end, the government is entitled to enter the land and carry out exploration and excavation (schedule II, item 2). It is, however, obliged to pay compensation for damaged caused to the land as a result of these Activities (schedule II, item 3).

The government also retains the right to evict tenants but those who have “improved” the land are entitled to compensation upon eviction (section 25). The term ‘improvement’ is defined broadly to include tree plantation, the construction of wells and irrigation works, flood protection and reclamation (section 3).

Under the law, certain protections are in place for government land that is “not included in any tenancy”, or has not been allotted for a “residential enclosure”, or is used in common by a community (section 33). It is an offence to clear or break up such land for cultivation without permission from a revenue official (section 33(a)).

3.1.11 The Punjab Land Preservation Act, 1900 (No II)

This Punjab law was adapted for West Pakistan and subsequently amended and adapted for Punjab by means of the Punjab Laws (Adaptation) Order, 1974. This Act allows the provincial government to provide for the prevention of soil erosion and the conservation of sub-soil water (section 3). In areas notified under section 3, the provincial government may regulate or temporarily prohibit Activities such

as clearing, breaking up or cultivating land not ordinarily under cultivation (section 4(a)); quarrying stone or burning lime in places where stone or lime has not ordinarily been quarried or burned (section 4(b)); cutting trees or timber, or removing forest produce other than grass, except for agricultural purposes (section 4(c)); setting fire to trees, timber or forest produce (section 4(d)); and herding or pasturing goats and sheep (section 4(e)). The government may examine forest produce taken from notified areas (section 4(f)) and regulate, restrict or prohibit the granting of permits to inhabitants of surrounding areas to take trees, timber or forest produce, pasture animals, erect buildings or carry out cultivation (section 4(g)). The government may apply similar restrictions to specified villages that fall within a notified area (section 5).

Besides regulatory powers in notified areas, the government may also order owners or occupiers of land to execute works including the leveling, terracing, drainage and “embanking” of fields (section 5-A (a)); the construction of “earth-works” (section 5-A (b)); and the protection of land from the “Action of wind or water” (section 5-A (d)). Similarly, with respect to the beds of torrents and streams, the government may itself “proceed at once” to carry out the necessary measures, or order owners and occupiers of land to regulate the flow of water and reclaim or protect land (section 8). In areas declared under section 8, all private rights related to land stand suspended for the duration specified in the declaration (section 9) while water rights and the right of way are to be preserved “as far as circumstances admit” (ibid). The government is not obligated to pay compensation for any such activities carried out in “good faith” (sections 11 and 13).

Government officials are authorized to enter and survey land notified under sections 3 and 8, to erect “bench-marks” and demarcate boundaries, and to do “all other Acts which maybe be necessary” upon payment of “reasonable compensation” for damage or injury to property or rights as a result of survey operations (section 13).

Violating orders issued under this Act for a notified area is a punishable offence (section 19). At the same time, offences committed with respect to forest produce under various sections of the Forest Act 1927 are deemed to be offences committed under the Land Preservation Act (section 20). The law sets out procedures for claims, compensation and appeals (sections 14 and 16). The determination of compensation is to be “guided, so far as may be” by the sections 23 and 24 of the Land Acquisition Act (section 15(1)) and may be awarded in the form of cash, land, a reduction in revenue or “in any other form” (section 15(2)). The provincial government has the power to make rules under the Act (section 22). The law grants indemnity from prosecution to the provincial government as well as “any public servant” for acts committed “in good faith” (section 21).

3.1.12 Land Acquisition Act, 1894 (No. I)

This law regulates the acquisition of land for public purposes. The Act does not define the term ‘public purpose’ except to state that it “includes the provision of village-sites” (section 2(f)) but a broader interpretation is not excluded. Land may also be acquired for a “company that is engaged or is taking steps for engaging itself in any industry or work which is for a public purpose” (section 40(1) (aa)). In addition, the law allows for the “temporary occupation and use” of waste or arable land for a maximum period of three years (section 35). Compensation is to be provided in cash (section 31). Detailed procedures to be followed prior to and during acquisition, and in the determination of compensation, are specified (sections 4–16, 23 and 24 ff.). The government may, however, bypass normal procedures to take possession of land in case of “urgency” (section 17(1)). Similarly, railway authorities are permitted to take immediate possession of land in specified situations, including in case of an “unforeseen emergency” (section 17(2)), but these provisions serve to ensure the unhindered flow of railway traffic.

The law provides for a preliminary enquiry to survey land and assess its suitability, allowing government officers to bore into the subsoil, dig trenches, and cut down or clear standing crops and

“jungle” areas (section 4). Powers under this Act, including the power to make rules (section 55), lie with the provincial government while local government officials administer specified acquisition procedures. The federal government may refer to the courts in disputes over acquisition (section 18).

3.1.13 Land Improvement Loans Act, 1883 (No. XIX)

This federal law allows government loans to be disbursed for the “improvement” of agricultural land. The term ‘improvement’ is defined as “any work which adds to the letting value of land”, and includes works related to water storage and distribution, irrigation, drainage, reclamation and flood protection (Section 4(2)). At the same time, however, the law provides for a broader definition by allowing other Activities to be declared as improvements for the purposes of this Act (section 4(2) (f)). As such, although the law does not provide incentives for the use of environmentally friendly “improvement” works, this possibility is not entirely excluded. Besides individuals, such loans may also be offered to village communities or other collectives (section 9). All powers under this Act lie with provincial governments.

3.1.14 Transfer of Property Act, 1882 (No. IV)

Both the federal and provincial governments exercise specified powers under this Act, which is the primary law governing the transfer of property. It contains detailed provisions related to the sale, mortgage, lease, exchange and gift of movable and immovable property, as well as the rights, liabilities and obligations of parties involved in such transactions. For the purposes of this law, the term ‘immovable property’ does not include “standing timber, growing crops or grass” (section 3).

In transactions involving land, easements annexed to the land as well as “all things attached to the earth” are included in the transfer (section 8). Where “bona fide holders” have made “improvements” to property, they are entitled to claim compensation in cases, where they are subsequently evicted by “any person having a better title” (section 51). Such title-holders also have the right to enter the land in question to gather any crops that might have been sown (ibid). The term ‘improvement’ is not defined in the law.

3.1.15 The Punjab Special Premises (Preservation) Ordinance, 1985 (No. XXXIV)

The object of the Ordinance is to preserve certain premises of historical, cultural and architectural value in Punjab and to control and regulate alterations therein and demolition and re-erection thereof. “Special Premises” means any premises of historical, cultural or architectural value declared as such by the Government.

No special premises can be altered, renovated, demolished or re-erected without prior approval of the government or committee. In case any damage is done to the premises it has to be restored to the original position (sections 5, 7 & 8). Government & committee can direct owner of any special premises to properly preserve the Premises and may compulsorily acquire the premises (sections 9 & 10). The Ordinance prohibits of billboards, neon signs and other advertisements etc on or near the special premises without prior approval (section 12). Whoever contravenes the provisions of the Ordinance may be liable to Imprisonment that may extend to one year and with fine. The fine will be utilized to restore the premises to original condition (section 14).

3.1.16 Punjab Soil Reclamation Act, 1952 (No. XXI)

An Act to provide for reclamation and improvement of areas damaged by *thur* and *sem* for preventing further damage and maximizing agriculture production. Board constituted under the Act frames schemes for reclamation of a local area or for prevention of *thur* or *sem* (salinity and water logging) (section 17).

Once a scheme is sanctioned in an area all underground water shall come under the control of the board except for water used for domestic use and for livestock. The board has the power to order tube-wells or wells closed down for betterment of area (section 26). Further, the GoP may compulsorily acquire land for the purposes of reclamation (sections 33 and 34).

3.1.17 The Punjab Development of Damaged Areas Act, 1952 (No. XV)

The Act provides for development of damaged areas in Punjab. The GoP may declare any local area or part of local area as damaged area. An improvement Trust established under Punjab Town Improvement Trust Act, 1922 may frame a scheme or schemes for the development of damaged areas. The schemes may include demolishing of buildings, relaying out of any land, alteration of streets, creating open spaces in interest of the residents, raising, lowering or reclamation of land, construction of drainage, water-supply etc (section 4). Land may be acquired by the trust through application to the collector for development of damaged area (section 7).

3.1.18 The Punjab Land Utilization Authority Ordinance, 1981 (Ord. VI)

The authority established under the Ordinance may take temporary control of certain cultivatable waste land for execution of approved projects. The authority may take over for limited period not exceeding ten years the control and management of uncultivated state land not covered by any scheme, or the land of any person, including that of a charitable trust, a corporate body etc. (section 7). The authority may make schemes for any land which has not been used for two years and which is capable of being cultivated (section 8). The authority has the power to give loans to individuals who desire to cultivate their land (section 14-A).

3.1.19 The Punjab Alienation of Land Act, 1900 (No. XIII)

The Act puts certain sanctions on alienation of agriculture and agriculture related land without the prior approval of the collector for example upon a person alienating the land who is not a member of agriculture tribe etc. (sections 3 and 4). The Act also provides for temporary alienation of land (section 6).

3.1.20 The Punjab Housing And Town Planning Agency Ordinance, 2002 (No. LXXVIII)

The purpose of the Ordinance is to provide shelter to the shelter less and to establish comprehensive system of Town Planning at provincial, regional, district, tehsil and union council level in order to ensure systematic, integrated growth of urban and rural areas.

The agency created under the Ordinance is to identify: state and other lands for developing low income and low cost housing schemes; facilitate land availability through various innovative measures; develop a comprehensive land information system (land bank) to cater for the planning and development requirements for a period of five to ten years (forward planning); formulate provincial land use policy; plan and prepare regional development plans (inter district spatial planning/master plans) for an integrated, coordinated and systematic planning to ensure orderly growth and development of physical

infrastructure such as highways, railways, etc (section 4). Agency may declare any area as controlled area and all such preventive Actions may be taken to control haphazard growth (section 15). The Ordinance provides for acquisition of land to fulfill its purposes (section 17).

3.1.21 The Punjab Kachi Abadis Act, 1992 (No. Viii)

The purpose of the Act is to regularize, develop and improve kachi abadis (squatters' dwellings) in Punjab. The director general may identify area to be declared to be a kachi abadi. Undertake redevelopment schemes for resettlement of shiftees from the kachiabadi and the areas that cannot be regularized as kachi abadi (Section 4). The schemes prepared under the Act may relate to community planning, housing, rehabilitation, community facilities, roads and streets, etc. (section 7). The GoP may, by notification, declare any land as kachi abadi, but no land belonging to federal government can be declared so without prior approval of federal government. Private land can also be declared with consent of the person/society. In case consent is not given the land may be acquired (section 6).

3.1.22 The Punjab Jinnah Abadis for Non-Proprietors in Rural Areas Act, 1986 (No. III)

The Act provides for housing facilities to non-proprietors in the rural areas of Punjab. "Non-proprietor" means a person who is permanently residing in a rural area and who or any member of whose family does not own any agricultural land or other immovable property anywhere in Pakistan. "Rural area" means an area other than the area defined as urban area by or under any law relating to local government.

The GoP may grant land, free of cost, not exceeding seven marlas in rural area to non-proprietor in revenue estate in a union council in which he ordinarily resides, for construction of his house subject to condition that he shall not alienate his house or land for a period of at least ten years (section 3 & 5). Land of non-proprietor may be acquired where non-proprietor has built residential houses for permanent residence at any time for the purpose of the Act provided no orchard land, well or tube well or on which building is constructed by the owner shall be acquired (section 8).

3.1.23 The Punjab Conferment of Proprietary Rights on Non-proprietors in Abadi Deh Act, 1995 (No. I)

This Act was promulgated to provide for conferment of proprietary rights on non-proprietor in abadi deh. "Abadi deh" means and includes an area, which recorded as abadi deh in record of rights prepared under the Punjab Land Revenue Act, 1967 but does not include an urban area. The land which is situated within the abadi deh and which is under a house owned by non-proprietor shall vest in the non-proprietor free of charge (section 3).

3.1.24 Pakistan Environment Protection Act, 1997 (No. XXXIV)

Under the Act the federal EPA is to establish ambient land standards (section 6 (1) (h)). PEPA provides for conducting an EIA for a project that involves change of land use (section 12 read with section 2 (xxxv))

3.2 FORESTS, TIMBER

Since independence, the Forest Act 1927 has been in force throughout most of the country. It is a federal statute that operates as a provincial law and awards wide powers to the provinces. Provincial

assemblies may amend this law or enact new forestry legislation for their respective provinces. However, in Punjab it is still the main law for forest regulation with some provincial amendments. Under the Forest Act the strategy for conserving the forest is of limited vision where local communities are kept out of management of forest and have very few rights.

Other laws governing this sector are designed to regulate the exploitation of forest and plant resources, and contain no provisions regarding sustainable use or conservation. Existing forest laws do not allow for classification based on species or conservation status. The laws contain limited definitions, leaving the details to be worked out through statutory rules that are often not made or not accessible to the public.

3.2.1 Punjab Local Government Ordinance, 2001 (No. XIII)

Certain types of forests are to be managed by the “grouped” district agriculture office; these are specified as “forests excluding watershed management and natural forests, guzara forests or protected forests” (first schedule, part A, item viii; and part C, item ii). In city districts, meanwhile, the provincial government may establish a “municipal office” for the “integrated development and management” of recreational facilities and forests (section 35, read with first schedule, part D, item iii (k)).

The provincial government may frame rules to govern forestry at the local level (section 191, read with the fifth schedule, part I (Rules), item 10) while local councils may frame by-laws for the types of forests for which they are responsible and for plantations (section 192, read with fifth schedule, part II (bylaws), item 26). The general powers of local governments with respect to forests include preparing plans for “improvement, development and exploration of forest and maintain, plan and work forests in accordance with such plans” (section 195, read with the Sixth Schedule, item 18 (Arboriculture)). Further the concerned local government shall “plant trees on public streets and other public places within local area and take all such steps as may be necessary for the plantation and protection of trees on such streets and places” (section 195, read with the sixth schedule, item 17 (Arboriculture)).

Under PLGO, cutting down of any tree where “such Action is declared under this Ordinance to be a cause of danger or annoyance to the public” is an offence, punishable with imprisonment for a term of up to six months and/or a fine of 5,000 rupees, in addition to a penalty of 200 rupees per day for each day the offence continues (section 141, read with the fourth schedule, part II (D), item 40).

3.2.2 Forest Act, 1927 (No. XVI)

Enacted 80 years ago, the Forest Act 1927 remains the basic law for forest management across Pakistan except KPK. Technically, this legislation operates as a provincial law and Punjab has made its own amendments from time to time.

Designed to protect forest areas and regulate forest produce, the Forest Act provides for the creation of various classes of forests and the GoP has the power to notify reserved forests, village forests, protected forests, and forests not owned by the government. The provincial government has the power to “reserve” state-owned forest-land, assume control of privately owned forest land, and declare any government-owned forest land to be a protected area.

Standing forests and wasteland on government-owned land, or over which the government enjoys proprietary rights, may be declared reserved by the government through notification in the official gazette (section 3). Vast number of Activities are prohibited in reserved forests including clearing

land, kindling of endangering fire, felling, cutting and burning of trees and plants, cultivation, grazing livestock, trespassing, mining and quarrying, collecting forest produce, construction of buildings and encroachments, and damaging the soil, water, natural resource are prohibited in reserved forests. Further any Action regarding hunting, shooting, fishing, setting traps or snares and poisoning the water are also prohibited (section 26).

These offences are punishable with imprisonment which may extend to six months or a fine which may extend to ten times the value of damage if the damage is more than 100,000 rupees. The Act provides various penalties depending on the value of damage. Further if the offence is committed after sunset and before sunrise or where the person is previously convicted the punishment and penalty may double (section 26).

The government may assign rights over a reserved forest to a village community and the village community may use the forest produce other than timber and pasture and is responsible for protection and improvement of forest (section 28). Such forests are known as village forests. The government retains the power to make rules to regulate the management of village forests. The concept of community participation for conservation of a natural resource can be employed under this provision of the law.

Any provincial government-owned forests and wasteland not included in a reserved forest may be designated as protected forest (section 29). The provincial government may declare trees or classes of trees to be reserved, close any portion of the forest for not more than thirty years and prohibit quarrying of stones, burning of lime, removal of forest produce, breaking up and clearing for cultivation for building, herding cattle or for any other purpose (section 30). The provincial government may also suspend the rights of private persons in such forests, "provided that the remainder of such forest be sufficient, and in a locality reasonably convenient, for the due exercise of the rights suspended in the portion so closed" (section 30(b)). This suggests that the government does not have absolute power to close rights of private persons in protected forests and must take into account the interests of right-holders. Once declared a protected forest the government has no power to de-notify the same.

For offences committed in protected forests the penalties are the same as for reserved forests (section 33). In protected forests the provincial government has powers to make rules regarding cutting, sowing, conversion and removal of trees, granting of license to inhabitants of a village/town, granting of license to persons for felling/removing of trees or timber, examination of forest produce passing out of forest, and clearing or breaking of land for cultivation, etc (section 32)

In addition to government-owned forests and wasteland, the Forest Act also allows the authorities to regulate privately owned forests and land. This may be done when the protection of privately owned forests "appears necessary" for any of the following purposes: protection from floods or landslides; preserving soil; maintaining watersheds; safeguarding roads, bridges and railways; and the "preservation of the public health" (section 35). In such cases, the government is authorized to regulate or prohibit grazing, setting fires and clearing land for cultivation. In case of neglect or willful disobedience by the owner, or above orders the provincial government may place such forest or wasteland under the control of forest officer. Further the provincial government may declare that all or any of the provisions of the reserved forest shall apply to such forest or land (Section 36). The government may also carry out works on this land and, if necessary, acquire such land "for public purposes" (section 37).

The provincial government also has the power to notify any wasteland, which is not a reserved or protected forest, as unclassified forest and may direct that all or any provisions of this Act relating to reserved or protected forest shall apply to such unclassified forest (section 28-A).

The law allows forest officials and police officers a wide range of powers, including the authority to

arrest suspected offenders without a warrant (section 64), release detainees on bond (section 65) and Act to prevent a forest offence from being committed (section 66) and may also seize property (section 52). The government may award forest officials additional powers to enter and survey land, issue search warrants, hold inquiries into forest offences, compel the attendance of witnesses and record evidence (section 72).

The Forest Act introduces collective responsibility for forest management, requiring all rights holders in reserved and protected forests to furnish evidence to the authorities about forest offences committed in their areas, and to prevent or extinguish forest fires (section 79). If the provincial government and any private person are jointly interested in any forest or wasteland or its produce the government may either undertake the management of such forest, wasteland or produce itself or authorize the person jointly interested to do manage the same (section 80).

A recent amendment in 2010 has introduced public-private partnerships for development of forests. The government may enter into private-public partnership for development, preservation and conservation of a forest. Under these public-private partnerships the government may permit any person to use forestland or wasteland for increasing the productivity of the forest and developing a forest park or forest based industry without disturbing the natural features of the forest. The government shall not permit construction of a permanent structure, change of land use for purposes other than development of forest or forest related Activities, and housing project (section 80-A).

The provincial government has wide-ranging powers to make rules governing the harvesting of timber and non-timber forest produce, and duties to be levied on timber and other forest produce (section 39). The provincial government also controls the transit of timber and forest produce, including inter- and intra-provincial transport, whether by land or water (sections 41 and 42). The federal government controls the import, export and international transport of timber and non-timber forest products (section 41-A). Maximum penalties for offences related to the transit of timber (section 42(1)) is six months imprisonment and a maximum fine of 1 million rupees, or both doubling of punishment if the offense is committed after sunset and before sunrise or if the accused is a previous convict for a forest offence.

Penalties for counterfeiting or altering any marks upon timber or trees and interfering with forest boundaries (section 63) are imprisonment up to two years' or a fine of up to 1 million rupees, or both and doubling of punishment if the offense is committed after sunset and before sunrise or if the accused is a previous convict for a forest offence.

Incidents of cattle trespass in a reserved forest, or in a protected forest that has been closed to grazing are handled under the Cattle Trespass Act 1871 (section 70).

The provincial government may make rules and sub-delegate its powers to forest officers, who have policing and enforcing tasks in addition to responsibility for surveying, mapping and implementing rules issued under the law (section 72). All the powers under the Forest Act are exercised by the provincial government except for the power to regulate the movement of timber across customs frontiers, which remains with the federal government (section 41-A).

3.2.3 Punjab Land Revenue Act, 1967 (WP No. XVII)

This Act provides for the preparation and maintenance of records-of-rights, and a number of related matters. According to the provisions of the law, all forests vest with the government unless ownership is expressly provided for in the record-of-rights completed on or before 18 November 1871 (section 50(1)). For records prepared after that date, these interests vest with the landowners concerned unless government ownership is expressly provided (section 50(2)). Third parties whose rights are

affected in such matters are entitled to compensation (section 51).

3.2.4 The Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 (No. II)

The Act is primarily for the protection, preservation, conservation and management of wildlife and provides for various protected areas that include “sanctuaries”, “wildlife breeding farms”, “national parks” and wildlife parks, zoological gardens, zoos and safari park”. The Act restricts or prohibits Activities that are harmful to plantations and forests in these various types of protected areas. The Act strictly prohibits exploitation of forest in sanctuaries except for reducing fire hazards, epidemic or insect attacks or other natural calamities (section 16 (2)). Further damaging or destroying of vegetation in sanctuaries is prohibited and introduction of any exotic plant species is also forbidden (section 16 (3)).

In wildlife breeding farms, felling, trapping, burning or in any manner damaging, destroying, taking, collecting, removing or taking away a plant or tree or leave, fruit or seed is prohibited (section 16-A).

Once an area is declared a national park, the Act provides for protection and preservation of flora and fauna in the natural state and strictly prohibits felling, trapping, burning or in any manner damaging, destroying, taking, collecting, removing or taking away a plant or tree within the national park (section 17). Similarly these Activities are also prohibited in wildlife parks, safari parks or zoological garden or zoo (Section 18-A).

Whoever contravenes the aforementioned provisions shall be punished with imprisonment of not less than one year or more than five years or with fine not exceeding thirty thousand or with both (section 21 (ii)).

3.2.5 Punjab Firewood and Charcoal (Restriction) Act, 1964 (WP No. XI)

This is a provincial Act prohibiting the burning of charcoal and firewood in factories, brick-kilns, limekilns, and such other fire-places or class of fire-places as may be notified by the provincial government (section 3). “Factory” is defined as any premises where any process is being carried on with the aid of power (Section 2 (a)). “Firewood” is defined as any kind of wood used for burning of fire but does not include shrubs, looping of trees not exceeding six inches in girth or stump of trees (section 2 (b)). The prohibition under the Act shall not apply to any fire-place for making pottery, kilns used for personal use and firewood used for domestic use. Further, the provincial government has the power to allow burning of firewood, etc in any specific area subject to certain conditions (section 3).

The penalty for noncompliance is simple imprisonment that may extend to thirty days or a fine up to rupees five hundred (section 4). Forest officers with a warrant may arrest anyone suspected of committing an offence under this Act or rules pursuant to it. They may also seize firewood or charcoal involved in the offence (section 6).

The preamble to this law states that the restrictions are imposed “in the public interest”, which may be interpreted to include conservation. The provincial government may make rules to implement the provisions of this Act (section 8).

3.2.6 Grazing of cattle in the Protected Forest (Rangelands) Rules, 1978

These rules apply to the province of Punjab and regulate, through licensing, grazing of cattle in the protected forest (rangelands). The license can be cancelled or refused to anyone involved in Activities subversive for the forest. Further the licensee is prohibited to carry any cutting instrument in the

grazing area and also prohibited to lop or injure any trees or bushes except in the manner permissible by the authority. Authority means the division 1 forest officers of the concerned area and it works through its forest officers authorized to carry the functions under the rules.

3.2.7 Cutting of Trees (Prohibition) Act, 1992 (No. XVIII)

This federal law focuses on border security rather than the protection of forests. It prohibits the cutting of trees near Pakistan's international borders and provides for the demarcation of such zones. Trees in these areas cannot be cut without the permission of an officer designated by the provincial government (section 3).

All powers under this Act lie with provincial governments, including the power to make rules (section 10) and to demarcate zones in border areas (section 8). Provincial government officers have the power to enter, survey and map the land, and to "blaze any tree" (section 9). Authorized officials are permitted to act in order to prevent the commission of an offence and to take "such measures as may be prescribed under the rules" for this purpose (section 7).

The maximum penalty under this law is a fine of 5,000 rupees (section 4) but tools used to commit an offence as well as trees taken illegally may also be subject to confiscation (section 6).

3.2.8 The Punjab Plantation and Maintenance of Trees Act, 1974 (No. VI)

The Act provides for plantation and maintenance of trees in the province of Punjab. The Act requires occupier of any land to plant three trees per acre (section 3). Land is defined as land that is occupied or has been let for agricultural purposes or for purposes subservient to agriculture or for pastures and includes the sites of buildings and other structures on such land but does not include land, which is occupied as site of any building in a town or village (section 2 (c)). "Occupier" is defined as any person in actual physical possession of the land and includes the owner (section 2 (d)). In case the occupier fails to do the above the Forestry and Wildlife Department shall be empowered to plant the trees on the said land (section 3). The occupier shall be responsible for maintenance of such planted trees.

The penalty provided for non-compliance is Rupees 1 for each tree not planted rendering the enforcement meaningless. Sindh has a new more effective law i.e. Sindh Plantation, Maintenance of Trees and Public Parks Ordinance 2002. A similar law is required for Punjab.

3.2.9 The Punjab Goats (Restriction) Ordinance, 1959 (No. XLII)

The Act is principally for restricting the number of goats in the province of Punjab. The provincial government has the power to declare that in any specified area grazing, pasturing or keeping of goats will be unlawful (section 3). Specified area may include forests protecting them from over grazing.

The penalty for non-compliance is simple imprisonment that may extend to six months or a fine, which may not exceed 500 rupees.

3.2.10 The Punjab Forest (Sale of Timber) Act, 1913 (No. III)

The Act provides for control of sale of timber and establishment of sale depots for such timber in the province of Punjab.

3.2.11 Land Preservation Act, 1900 (No. II)

The Act is to provide for preservation and protection of certain portion in the Punjab territory. It empowers the provincial government to notify any area where it is desirable to provide for conservation of subsoil water or prevention of erosion in any such area (section 3)

In areas notified for preservation Activities under section 3, the provincial government may regulate or temporarily prohibit cutting of trees or timber, or removing forest produce other than grass, except for agricultural purposes (section 4(c)). It may also impose restrictions on setting fire to trees, timber or forest produce (section 4(d)). The provincial government may examine forest produce taken from notified areas (section 4(f)) and regulate, restrict or prohibit the granting of permits to inhabitants of surrounding areas to take trees, timber or forest produce, pasture animals, erect buildings or carry out cultivation (section 4(g)). The provincial government may apply similar restrictions to specified villages that fall within a notified area (section 5).

Under the Act, the provincial government is responsible for providing policy and procedure for implementation and the district officer revenue is responsible for Actual implementation.

Violating orders issued under this Act is a punishable offence (section 19). At the same time, offences committed with respect to forest produce under specified sections of the Forest Act 1927 are deemed to be offences committed under the Land Preservation Act (section 20).

3.3 FISHERIES

There is no provincial legislation to promote the protection, preservation or development of fisheries for the purpose of environmental conservation. Provincial laws for the most part serve to regulate the commercial aspects of the fisheries sector. The Punjab Fisheries Ordinance 1961, for example, does not require that exploitation be integrated with the conservation and sustainable use of fish resources, although some clauses restricting fishing methods and specifying allowable catch sizes of individual specimens may operate indirectly as conservation measures. Fisheries laws make no mention of subsistence fishing. The sector is also governed by the federal Fisheries Act 1897, which deals with freshwater fisheries.

Under the Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 the term 'wildlife' is defined broadly in the Act as "organic resources, animals, birds, reptiles, vegetation, soil and water" (section 2(t)). It is worth noting that, although fish are "organic resources" and thus may be included within the definition, fish are not specifically mentioned in the law. The only species of fish that the Act specifically protects is Indus dolphins and prohibits their hunting.

3.3.1 Punjab Local Government Ordinance, 2001 (No. XIII)

Under the provisions of the PLGO, administrative and financial authority in the "fisheries" has been devolved to the district level (section 14, read with the First Schedule, part A). The sector is to be managed by the district government as part of the "grouped" agriculture office (section 14, read with the first schedule, part C, item ii).

3.3.2 Punjab District Government Rules of Business, 2001

Fisheries are to be managed as part of the grouped agriculture office (rule 3(1), read with schedule 1,

item 2). The agriculture office is responsible for enforcing fisheries law at the district level, and for the “lease of fishing rights, conservation, management and promotion of fisheries in water areas except rivers, canals, and barrages/pond areas which have no boundaries” (schedule II, item 2(vi)) within its jurisdiction. Its functions include issuing angling licenses, aquaculture development, fish stock replenishment in natural water bodies and supervising the operation of hatcheries. The agriculture office also performs tasks related to extension services, education, training, awareness-raising Activities and the collection of statistical data for the fisheries sector (schedule II, item 2(vi)).

3.3.3 The Punjab Fisheries Ordinance, 1961 (No. XXX)

The Punjab Fisheries Ordinance, 1961 is an Ordinance to amend and consolidate the law relating to fisheries in the province of Punjab.

Under this Ordinance the director general of fisheries is appointed by the provincial government and have powers including leasing out any water other than private water for the purpose of catching fish, giving special permits for fishing in sanctuaries, etc (section 2 & 4).

Other authorities responsible for administration under the Ordinance are inspector of fisheries and district fisheries office. District fisheries officer shall be responsible for the conservation, management and development of district water areas and will be empowered to lease out fishing right of the water area exclusively confined within the district boundary (section 2).

Inspectors of fisheries are to be appointed by the provincial government and shall be deemed to be public servants (section 3). Inspector of fisheries is responsible for collecting information under the Ordinance, may search without warrant, arrest offenders, seize fish, nets, etc and any other duties delegated to it by the director general.

The definition of “fish” in the Ordinance only provides that “fish includes shell-fish” (section 2). “Fixed Engines” are defined as “any net, cage, trap, or other contrivance for taking fish, fixed in the soil or made stationary in any other way” (section 2). The Ordinance also defines “private water”, “water” and “district water”. The term “fisheries” has not been defined as a whole. Permits and licenses are also not defined properly.

The said Ordinance prohibits the destruction of fish by explosives in any water (section 6), destruction of fish by poisoning the water (section 7), and prohibits taking, killing, capturing or possessing trout if less than nine inches and mahashair, rahu, mori, thaila and calbans if less than 12 inches (section 8 read with 1st schedule). Further, capturing of fish through net, cage, trap or other contrivance for taking fish requires license or permit issued under this Ordinance. Further, capturing of fish is prohibited in months provided in the 1st schedule of the Ordinance in all waters except for private waters (section 9). Licenses under section 9 shall be issued by such authorities, on payment of such fees and on such conditions as may be prescribed by the rules made under the Ordinance (section 9).

The GoP has the power under this Ordinance to declare any water to be a sanctuary for fish, for a period that may be specified. During such time the capture, possession or the killing of fish without a special permit issued by the director general of fisheries shall be prohibited (section 11).

Every ranking officer in the village shall be responsible for giving the inspector of fisheries any information of any unlawful fishing Activity within the limits of his village as soon as the commission of such offence comes to his knowledge (section 12)

Destruction of fish by explosives or poisoning water and unlawfully fishing in a sanctuary are punishable with imprisonment up to 2 years or with fine that may extend to 10,000 rupees or with both. Other offences are punishable with fine that may extend to 3000 rupees.

3.3.4 West Pakistan Fisheries Rules, 1965

These rules were framed under the West Pakistan Fisheries Ordinance 1961. In Punjab the Ordinance was adopted as the Punjab Fisheries Ordinance 1961 in the year 1974. The rules framed under the West Pakistan Ordinance, 1961 remain effective under the Punjab Fisheries Ordinance 1961.

The 1965 rules provide for a number of matters related to fishing including various categories of fishing licenses and leases, the terms under which they are granted, license fees, and types of fishing gear and nets that may be used. Restrictions are imposed on the size and number of fish of a particular species that may be caught.

3.3.5 Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 (No. II)

This Act enables the provincial government to designate protected areas, and to impose restrictions on the hunting of various species of wild birds, reptiles and mammals. The term 'wildlife' is defined broadly in the Act as "organic resources, animals, birds, reptiles, vegetation, soil and water" (section 2(t)). It is worth noting that, although fish are "organic resources" and thus may be included within the definition, fish are not specifically mentioned in the law. The only species of fish that the Act specifically protects is Indus dolphins and prohibits their hunting. The maximum penalty for hunting Indus dolphin is two years' imprisonment and/or a fine of not less than 10,000 rupees and not more than 15,000 rupees (section 21 read with 3rd schedule, part B (mammals), item 69).

It is to be noted that except for Indus dolphins the Act does not regulate any other fish, however the meaning of fish can be read into the definition of "organic resources" and can be indirectly regulated under the provisions relating to wildlife.

Polluting of water is prohibited within the wildlife sanctuaries, wild life breeding farms, national parks, wild life parks, zoological gardens, zoos and safari park. These provisions may also, indirectly, protect fish species without specific mention of protection.

3.3.6 Forest Act, 1927

The Act prohibits and punishes removing and causing damage to water and fish in reserved forests (section 26). Further the provincial government has power to make rules for fishing, poisoning water, fish and water for protected forest (section 32)

3.3.7 Fisheries Act, 1897 (No. IV)

This federal Act, which operates as a provincial law, regulates certain aspects of fisheries within both public and private waters. Private waters are defined as waters that are the "exclusive property of any person" or in which "any person has [...] an exclusive right of fishery whether as owner, lessee or in any other capacity" (section 2(3)) while fish are defined to include shellfish (section 2(1)).

The law forbids the use of explosives for the purpose of fishing in "any water" (section 4(1)). This prohibition extends to the sea for up to a distance of one marine league from the coast (section 4(2)). The law also prohibits the use of poison to catch or destroy fish in "any water" but gives the provincial government the discretion to modify that prohibition for a specific area (section 5).

The provincial government has the power to regulate fishing by making rules to govern the erection of fixed engines, construction of weirs and the use of fishing equipment (section 6(3)), and to prohibit fishing in any area for a period of up to two years (section 6(4)). Such rules may be extended to private waters with the written consent of the owner or those with exclusive fisheries rights in such waters (section 6(2)). The police or a provincial government officer may, under limited conditions, arrest without a warrant, persons suspected of committing an offence under this Act (section 7).

Offences under this law are also covered by the Punjab Fisheries Ordinance 1961, where the penalties stipulated are significantly higher.

The 1897 Fisheries Act is to be read as “supplemental” to other legislation governing fisheries (General Clauses Act 1887, sections 8 and 10).

3.4 WILDLIFE, FAUNA AND NON-TIMBER FLORA

The Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 gives the provincial government wide power to regulate the hunting and capture of wild birds and animals. There are no restrictions on the licensing powers of the provincial government, nor are there legislative guidelines for the coordinated management and sustainable use of wildlife. The Act does not provide for the conservation of wildlife habitat, the protection of breeding populations of wild animals, or the promotion of research required to establish the parameters for such Activities. Nor does it accommodate the country's obligations under various international treaties and agreements concerning the conservation of biodiversity, the protection of migratory species and the trade in endangered species. The limited protections afforded to specified wildlife species are further weakened by the fact that broad exemptions may be granted by government officials in a variety of situations to allow prohibited Activities.

Other laws dealing with wildlife are very old. The Glanders and Farcy Act, 1899, for example, deals with communicable diseases among domestic livestock while there are no laws to govern current issues, including diseases of wild animals that can infect domestic animals, such as avian influenza. Similarly, the Prevention of Cruelty to Animals Act, 1890 focuses on working conditions for draught animals with only marginal provisions concerning Activities such as bear-baiting and no provisions to regulate or prohibit the keeping in captivity of exotic species, including endangered species.

3.4.1 Punjab Local Government Ordinance, 2001 (No. XIII)

Under the PLGO the subject of wildlife remains under the jurisdiction of the province. As such, the PLGO contains no provisions specifically concerning wildlife but certain provisions of the Ordinance indirectly apply.

For example, PLGO provides that zila/ tehsil/ town/ union councils may make by-laws for registration of sale and control of animals (Section 192 read with fifth schedule, part II (by-laws), item 10). The word “animal” is not defined in PLGO and hence can be interpreted broadly.

Further, the Ordinance allows local governments to declare certain animals to be “dangerous” and to provide for the “detention, destruction or disposal” of such animals (section 195, read with the sixth schedule, item 3). This is to be done by means of by-laws. “Picketing” or “tethering” of animals can be prohibited by the local governments (section 195, read with the sixth schedule, item 1). Local governments are also empowered to establish, maintain and manage veterinary hospitals and

dispensaries, make by-laws for prevention of contagious diseases among animals, and maintain zoological gardens, etc (section 195, read with the sixth schedule, item 5 & 8).

Local governments are empowered to regulate “dangerous articles and offensive trades”(sixth schedule, item 44)which includes the keeping of animals “likely to create nuisances”(annex, item 15).

Grazing areas are regulated by the union administration (section 76(o)), which establishes cattle pounds and provides “protection” from stray animals and animal trespass(section 76(n)).Animals found trespassing on agricultural land may be seized and sent to a government pound (sixth schedule,item 10(1)). Under the PLGO, the union administration is also responsible for enforcing the provisions of the Cattle Trespass Act 1871 (section 141(6), read with the tenth schedule). The remaining provisions of the Ordinance are related to domestic and food animals.

Under the PLGO, keeping “ferocious dogs and other animals” in a residential area or taking them to public places is an offence, punishable with an immediate fine of 200 rupees(section 141, read with the eighth schedule, item 7). A repeated offence within a period of three months incurs a maximum penalty of up to six months’ imprisonment and/or a fine of 5,000 rupees, in addition to a daily penalty of 200 rupees while the offence continues (section 141 (2) (c)). Since “other animals” are not defined specifically, this clause may be interpreted to refer to exotic pets, including endangered species. It is also an offence to set free a diseased animal (ibid.). Other offences, punishable with similar fines, concern animal trespass, tethering of cattle, bathing animals near drinking water, and keeping birds in a manner dangerous to air traffic, etc (section 141, read with the eighth schedule, items 16, 22, 31, 41, 42 & 44).

3.4.2 Punjab Wildlife (Protection, Preservation, Conservation and Management) Act 1974 (No. II)

This Act is for the protection, preservation, conservation and management of wildlife in the province of Punjab (preamble). The term ‘wildlife’ is defined broadly as “organic resources, animals, birds, reptiles, vegetation, soil and water” (section 2(t)). The Act also defines “game animal” ((wild animal specified in the first or the fourth schedule- section 2(d)), “protected animal” (wild animal specified in the third schedule- section 2 (n)), “wild animal” (wild bird or animal specified in the first, second, third or fourth schedule- section 2 (s)), and “unprotected animal” (wild bird or animal specified in the fourth schedule- section 2 (v)).

Firstly, the Act regulates hunting (section 9 & 10) and monitors the trade in animals and animal parts (section 14 & 15). It provides that “protected animals” shall not be hunted (section 9 (ii)). Birds and animals given in third schedule are protected throughout the year and hunting them is completely prohibited. Permits are required to hunt game animals along with other conditions provided in the Act or rules made there under (section 9(iii)). First schedule gives a list of wild birds and animals that can be hunted on an ordinary shooting license and a list of wild animals for the hunting of which a special permit is required. The schedule also provides for other conditions such as number of specimens that may be taken and the season in which hunting is permitted. Fourth schedule gives a list of animals that are not protected.

Possession of wild animals and animal parts is authorized only under a certificate for lawful possession (sections 12, 13 and 14). The import of endemic or exotic species, or any trophy or meat of a kind specified in second schedule requires an import permit (section 14) and export out of Punjab any wild animal, trophy or meat specified in second schedule requires an export permit. All professional traders dealing with wild animals, trophies or meat etc. require a valid license issued under the Act (section 15).

The Act provides for protected areas with specific restrictions within the area. These areas include wildlife sanctuary within which hunting, killing or capturing of wild animals is prohibited. Further it prohibits introduction of any domestic animals. However it may allow through specific order introduction of domestic animals (Section 16). Wildlife breeding farms, National Parks, Wildlife park, zoological garden or zoo and safari park prohibit hunting, shooting, trapping, killing or capturing of wild animals or firing or doing any other Act which may disturb a wild animal or interfere with the breeding places (Sections 16-A, 17 and 18-A). Within Game Reserve, hunting and shooting may be allowed through special permit (Section 18).

The protections offered to some species are limited by provisions that allow broad exceptions to be made in every case. Any animal, including one belonging to a species listed as protected, may be killed in defense of oneself for another, or to protect livestock and standing crops (section 23). The government may also grant exemptions in the interest of any scientific or public purpose (section 44). Similarly, although killing a “protected animal” is prohibited (section 9(i)), the government may grant a specific permission to hunt any species of wild animal in a specified area by any specified means (section 44).

It is worth noting that while law prohibits hunting or killing of “protected animals”, except under specified conditions, the Act does not impose an outright ban on their possession. The provisions related to possession, including trade and import or export (sections 12–14), all specify that a license is required but the general term “wild animal” is used and that term, as defined in section 2(t), includes game animals as well as protected animals.

The law requires that the government establish a Wildlife Management Board (section 4), which operates a fund (section 5). The board shall Act as an advisory board formulating policy regarding conservation and development and further to supervise Activities in the field of wildlife protection, preservation, conservation and management (section 6). A fund is created but Act does not state where monies in the fund come from or on what they are to be spent. These matters may be addressed by means of rules framed by the provincial government (section 7).

Wildlife officials, forest officers and other officials are awarded powers to: arrest suspected offenders without a warrant (section 31); officer can search any premises with a valid warrant for the same (section 25); seize wild animals as well as equipment involved in a suspected offence (section 26); any officer not below the rank of a game inspector may release suspects on bond (section 32); and power to “compound” offences (section 38). The government may delegate to wildlife officials additional powers to hold an inquiry, call witnesses, issue search warrants and prosecute a case (section 39).

This Act repeals: The Punjab Wildlife (Protection, Preservation, Conservation and Management) Ordinance, 1973; The Elephant Preservation Act, 1879; The West Pakistan Wildlife Protection Ordinance 1959; The Wild Birds and Animals Protection Act 1912 in their application to the province of Punjab (section 48-49).

3.4.3 Punjab Wildlife (Private wildlife Breeding Farm) Rules, 2008

These rules are notified under the Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 and provide for wildlife breeding farms for birds and animals by private persons. The provincial government is the authorizing agency through a license for the establishment of breeding farms and the rules also provide conditions for establishment of such farms.

3.4.4 Punjab Wildlife (Private Game Reserves) Rules, 2002

These rules are notified under the Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 and provide for the procedure and conditions for management of a private game reserve established under section 20 of the Act.

3.4.5 Punjab Wildlife (Protection, Preservation, Conservation and Management) Rules, 1974

These Rules, framed under the Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 focus on procedures concerning license fees and permits. They contain detailed provisions related to various types of hunting and shooting permits, and specify license fees, renewal charges and other conditions applicable in each case. The rules contain a detailed table of the various permits, licenses, special permits and special licenses that may be issued under the Act. Such licenses, etc also give details about the nature of wild animals, validation periods for these licenses, authority granting the licenses and license fees, and other relevant specifications (rule 3- 8). The rules also recognize registration of CBO's and NGOs in specific areas for conservation purposes and allow trophy-hunting programs to be organized by them (rule 6).

Animals and birds listed in the 1st Schedules of the Act may not be cooked or served in a public place, hotel, café, restaurant, hostel, boarding house or any other catering establishment, except during the hunting season for each species, as specified in the schedule (rule 9). Carrying firearms within a national park, wildlife sanctuary or game reserve, or taking a "sporting dog" into such areas, is prohibited, except with a permit or in cases where a right of way has been established (rule 10).

These Rules repeal 1973 rules.

3.4.6 Glanders and Farcy Act, 1899 (No. XIII)

This federal law allows steps to be taken to control the spread of communicable diseases among domestic animals. The term 'disease' is defined to mean glanders, farcy or any other "dangerous epidemic disease" (section 2(1)). Although the provisions of this law apply to horses, camels, asses and mules (section 2(2)); the precautionary measures specified also prevent wild animals from becoming infected. The law does not cover avian diseases, nor does its provisions apply to any diseases afflicting other types of animals.

Inspectors appointed by provincial government (section 4) are authorized to enter and search fields, buildings and "other place[s]" in order to determine whether infected animals are being kept on the premises (section 5). Inspectors may seize animals suspected of carrying disease (section 6) and must have all such animals examined by a veterinary practitioner (section 7). Animals found to be diseased are to be destroyed (section 8) and the premises, on which they were kept, along with the surrounding area, must be disinfected (section 9). Animals that have come into contact with diseased animals may not be removed from the premises except "in good faith for the purpose of preventing infection" or after obtaining a license from the authorities (section 11). The law also requires owners of diseased animals to inform the authorities (section 10).

The maximum penalty for violating the provisions of sections 9 and 11 is imprisonment for a term of one month and/or a fine of 50 rupees (section 13). All powers under this law lie with the provincial government, which may also make rules to carry out the purposes of this Act (section 14). For this Act to come into effect, the provincial government must issue a notification applying the law to "any local area" (section 3).

3.4.7 Prevention of Cruelty to Animals Act, 1890 (No. XIII)

This federal law, which operates as a provincial law and delegates all powers under it to provincial governments, applies to “animals” defined as “domestic or captured” animals (section 2(1)). The term “captured animals” may include wild animals once captured. The most of the prohibitions provided under the law are either outdated or cannot be regulated and need to be amended. The penalties provided under the Act are also very low and need to be revised also. Maximum penalties under the Act are a fine of 500 rupees and/or imprisonment for a term of two years.

3.5 PROTECTED AREAS

No national system has been established to designate and manage protected areas. National parks, sanctuaries and other types of protected areas are established under provincial wildlife laws. In Punjab, protected areas are created under the provisions of the Punjab Wildlife Act, which allows for the designation of protected areas but does not provide any criteria for designation. The law does not provide for inter-provincial coordination in designating and managing protected areas, or set out basic principles for the declaration and management of protected areas.

There is no provincial legislation governing the conservation of wetlands specifically. The Punjab Heritage Foundation Act, 2005 aims to protect archeological, architectural, historical, or cultural sites in the province, however the powers for conservation are vague, not detailed and no mechanisms are provided.

3.5.1 The Punjab Heritage Foundation Act, 2005 (No. I)

A new provincial heritage Act was enacted to conserve, maintain, rehabilitate and develop the Punjab heritage. “Punjab heritage” is defined as “archeological, architectural, historical, or cultural site notified to be a Punjab heritage by the government” (section 2 (k)). “Site” is defined as “any land, building, structure, remains, park, garden, or any other place or location (section 2 (l)). The Act establishes a foundation to carry out the purposes of the Act, i.e. to preserve, conserve, maintain, and rehabilitate the Punjab heritage through various means, including technical or financial assistance and to create awareness among the people for preservation of its heritage (sections 3 and 4).

The foundation for its running shall generate a fund from grants-in-aid from governments, voluntary contributions from non government bodies, individuals etc., income from other sources (Section 5). The overall management and control of the affairs of the foundation, shall vest in the Board of Governors. The board shall include chief minister, chief secretary, members of provincial assembly, non-official members etc. (section 6). In addition to the board there shall also be an executive committee and a Tajdeed-e Lahore Committee for better running of the foundation (sections 8 and 9).

The board shall have the power to undertake measures for the preservation, conservation, maintenance and rehabilitation of the Punjab heritage. To prepare and approve projects for heritage, to acquire or take on lease any site having archeological, historical, cultural or architectural value. To undertake promotional and cultural Activities at the heritage site, to undertake and promote research and arrange materials for publication of periodicals, monographs, pamphlets, newspapers, books and posters in furtherance of the objects of this Act (Section 7).

3.5.2 The Punjab Special Premises (Preservation) Ordinance, 1985 (No. XXXIV)

The object of the Ordinance is to preserve certain premises of historical, cultural and architectural value in Punjab and to control and regulate alterations therein and demolition and re-erection thereof. "Special Premises" means any premises of historical, cultural or architectural value declared as such by the Government.

No special premises can be altered, renovated, demolished or re-erected without prior approval of the government or committee. In case any damage is done to the premises it has to be restored to the original position (sections 5, 7 & 8). Government & committee can direct owner of any special premises to properly preserve the premises and may compulsorily acquire the premises (sections 9 & 10). Whoever contravenes the provisions of the Ordinance may be liable to Imprisonment that may extend to one year and with fine. The fine will be utilized to restore the premises to original condition (section 14).

3.5.3 Pakistan Environmental Protection Agency(Review of IEE and EIA) Regulations, 2000(SRO 339(1)/2000 dated 13 June 2000)

These federal regulations¹⁵ empower the federal EPA to designate "environmentally sensitive areas", and to issue guidelines related to projects planned for these areas (regulation 21). Such projects are required to undergo a prior EIA (schedule II, part I). The Punjab EPA exercises the powers and functions of the federal EPA in this province.

3.5.4 Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974 (No. II)

This Act enables the provincial government to establish "protected areas" with reference to any area that is either the property of the government or over which the government has the proprietary rights and specifies Activities that are prohibited in such areas. There are different categories of protected areas recognized under the Act.

The provincial government may designate any area to be a "wildlife sanctuary", to serve as an "undisturbed breeding ground for the protection of wildlife" (section 16). "National parks" may be established in order to protect and preserve "flora and fauna in the natural state" (section 17). In a "game reserve", meanwhile, hunting of wild animals is forbidden except under a "special permit" (section 18).

In a wildlife sanctuary exploitation of forest; hunting, killing or capturing of wild animals "within one mile of the boundaries" of a sanctuary; using a firearm; cultivation of land; introduction of exotic species; and polluting of water is prohibited (section 15(2) & (3)). In addition, taking up residence within the perimeters of a sanctuary, and damaging or destroying land or vegetation are also prohibited (section 15 (3)). The provincial government, however may authorize any of the aforementioned Acts for specific purposes except for hunting, killing or capturing the

¹⁵These regulations, issued under section 33 of PEPA, are to be read with section 12 of PEPA. They contain detailed procedures that must be followed in the IEE/EIA process, such as conducting public hearings, issuing notices, recording decisions and accepting or rejecting an EIA/IEE. Regulation 5 (a) requires that an EIA is carried out for any project likely to cause an "adverse environmental effect". Schedule I of the regulations sets out the type of projects that require an IEE. Schedule II specifies the types of projects that require an EIA. The regulations provide for the monitoring of projects after completion. The federal EPA is authorized to cancel the approval of any project at any time if it is found that conditions of approval have been violated or false information is provided (regulation 19).

wild animals section 15 (3))

The same prohibitions apply to national parks, however the provincial government may authorize any of the prohibited Activities for specific purposes (section 17 (4)). The Act further provides that a national park shall be accessible to public for recreation, education and research (section 17 (2)). The construction of access roads, rest houses, hostels, and other buildings and amenities in a national park must be carried out in a manner that does not “impair the object of the establishment of the national park” (section 17(3)).

Public access to a wildlife sanctuary is prohibited, except under conditions that are to be specified by means of rules framed pursuant to the Act (section 16(2)), while public access to a national park is permitted for recreation, education and research (section 17(2)).

3.5.5 Punjab Fisheries Ordinance, 1961 (No. XXX)

Under this Ordinance, the provincial government has the power to declare any water to be a sanctuary and anyone wanting to kill, capture, or possess any fish from such waters will require a special permit from the director general of fisheries (section 11)

3.6 FRESHWATER

Provincial laws provide a framework for the management of freshwater resources, with detailed arrangements concerning the establishment of boards and agencies that carry out these functions at the local level. What is missing, however, is a coordinated mechanism to monitor, manage and control the contamination of freshwater sources, and penalizing offenders. Further, coordinated efforts for the proper resource management and conservation are completely missing.

The Punjab Irrigation and Drainage authority Act, 1997, PLGO, PEPA, development authorities created under various enactment, Canal and Drainage Act 1873, and Pakistan Penal Code, 1860 all contain provisions related to the pollution or contamination of specified water sources however no substantial efforts are made to control water contamination.

Provincial laws do not cover modern concepts of conservation and sustainable use of water even though there are some very recent enactments in the water sector. There are still no ambient water standards, water classifications are missing and ground water usage is unregulated.

3.6.1 Punjab Local Government Ordinance, 2001 (No. XIII)

Under the provisions of the PLGO, water supply is included in the municipal services that are to be provided by various tiers of local government (section 2(xxii)) but the provisions of the Ordinance also apply to land that is “covered with water” (section 2(xiv)). In addition, local governments are responsible for managing a number of freshwater sources including springs, wells, ponds, tanks, water courses, culverts and “any channel used for supplying water other than [a] canal, river, lake or stream”, defined collectively as “water reservoirs” (section 2(xxxix)).

At the lowest tiers of local government, village and neighborhood councils are responsible for developing and improving water supply sources, and for mobilizing community involvement in the maintenance and de-silting of canals and water courses (sections 96(1)(a) and 96(1)(k)). Village and neighborhood councils are also required to take measures to prevent the contamination of water (section 96(1) (d)).

Public sources of drinking water, including wells, water pumps, tanks, ponds and “other works for the supply of water” are provided and maintained by the union administration (section 76(k)). The union nazim is required to report to the “concerned authorities” any breach of a public watercourse within the union area (section 80(f) & (v)).

At the middle level, the tehsil municipal administration is responsible for water supply as well as the “development of water sources”, other than the systems maintained by the unions and village councils (section 54(1) (h) & (i)). In cities, town municipal administrations are responsible for water supply distribution other than integrated systems maintained by the city district (section 54-A (p) & (i)).

At the district level the zila council for city district reviews the development of an integrated system of water reservoirs and water sources, and approves development schemes for the “beautification” of areas along rivers (sections 40(e) and 40(d)).

On-farm water management has also been decentralized and is to be handled by the “grouped” district agriculture office (section 14, read with the first schedule, parts A and C). In city districts, the provincial government may where necessary establish additional offices to develop water sources, to manage measures for flood control, and to carry out tasks related to “environmental control”, including the control of water pollution “in accordance with federal and provincial laws and standards” (section 35, read with the first schedule, part D).

Zila council, tehsil municipal administration, tehsil council as well as the union council may impose taxes and charges for the development and maintenance of water supply (sections 39(b), 54(l), 67(i) and 88(b), read with the second schedule, parts I, II, III and V). Local governments may also frame by-laws to govern a number of matters related to water supply, including the prevention of water contamination and pollution (section 192, read with the fifth schedule, part II, items 25, 34, 41 and 42).

Local governments may declare any water source that is not private property to be a “public watercourse” (section 195, read with the sixth schedule, item 96). Local governments also control, regulate and inspect private sources of water supply (section 195, read with the sixth schedule, item 95). Similarly, the local government may require owners of tanks, reservoirs or pools that are “in a ruinous state” to carry out repairs (section 195, read with the sixth schedule, item 72(2)).

General powers of local governments with respect to water supply and management include the removal of obstructions to watercourses, and implementing schemes for the prevention of water pollution (section 195, read with the sixth schedule, items 36 and 48(2)).

Under the PLGO, discharging dangerous chemicals, or “hazardous or offensive article[s]” into a public watercourse is an offence, punishable with a maximum of three years’ imprisonment and/or a fine of 15,000 rupees in addition to a fine of 1,000 rupees for each day the offence continues (section 141, read with the fourth schedule, part I, items 8 and 21). The same penalties apply to industrial or commercial operations that fail to prevent effluent from “mixing up with the water supply” (section 141, read with the fourth schedule, part I, items 9 and 25).

Other offences, punishable with an immediate fine of 500 rupees, include watering animals, or bathing or washing near a well or other source of drinking water (section 141, read with the eighth schedule, item 22). In such cases, a repeated offence within three months is punishable with up to six months’ imprisonment and/or a fine of 5,000 rupees, in addition to a fine of 200 rupees for each day the offence continues.

3.6.2 Pakistan Environment Protection Act, 1997 (No. XXXIV)

Under PEPA the term ‘environment’ is defined to include water (section 2(x) (a)) and various forms of

pollution are defined in detail. The term 'discharge' is defined as "spilling, leaking, pumping, depositing, seeping, releasing, flowing out, pouring, emitting, emptying or dumping" (section 2(vi)), while effluent consists of "any material in solid, liquid or gaseous form or combination thereof being discharged from industrial activity or any other source" (section 2(viii)). Emission standards, meanwhile, are defined as "permissible standards established by the federal or provincial EPA for emission of air pollutants and noise and for discharge of effluents and waste" (section 2(ix)).

Section 11 prohibits discharges and emissions in excess of the limits prescribed under the National Environmental Quality Standards (NEQS) (SRO 742(I)/93 dated 24 August 1993 and SRO 549(I)/2000 dated 8 August 2000). Section 16 allows an environmental protection order to be issued in cases where discharges and emissions are found to be causing or likely to cause "an adverse environmental effect". Section 12, which requires an environmental impact assessment (EIA) or initial environmental examination (IEE) to be carried out for all projects, can be used to ensure that new development does not damage natural resources, including freshwater.

3.6.3 Pakistan Environmental Protection Agency (Review of IEE/EIA) Regulations, 2000 (SRO 339(I)/2000 dated 13 June 2000)

The regulations¹⁶ require that specified types of irrigation projects undergo prior environmental assessment. Schedule I lists the types of projects related to water and dams (part F) that must undergo a prior IEE while schedule II lists those projects related to water and dams (part E) that require a prior EIA.

3.6.4 Punjab Irrigation and Drainage Authority Act, 1997 (No. XI)

The Act establishes the "Punjab Irrigation and Drainage Authority" (PIDA) "to implement the strategy of the government of Punjab for streamlining the Irrigation and drainage system; to replace the existing administrative setup and procedures with more responsive, efficient and transparent arrangements; to achieve economical and effective operation and maintenance of the irrigation, drainage and flood control system in the province; to make the irrigation and drainage network sustainable on a long-term basis and introduce participation of beneficiaries in the operation and management thereof;" (preamble)

On the establishment of PIDA all employees of the irrigation wing of the Irrigation and Power Department shall become employees of PIDA (section 11). Further, all assets and liabilities and all the rights and obligations of the irrigation and power department shall transfer to the PIDA (section 15).

PIDA under the Act comprise of a chairman who shall be the minister for irrigation and power and such other members notified by the provincial government. At least six of the PIDA members shall be farmers and number of non-farmer authority members shall not exceed the number of farmers in the PIDA (section 3). The affairs of the authority are to be carried out by a board of management consisting of a managing director and three general managers. These managers are to be appointed by the authority and approved by the provincial government. The board shall work under the control and guidance of PIDA (section 4). The Act gives some qualification criteria for the managers and provides that "...they shall have technical background and practical experience in the profession relevant to their job description" (section 4 (2)). No other criteria are provided either for the authority members or for the management board. PIDA is also empowered to employ officers, servants, experts and

¹⁶ General summary at footnote 15

consultants for performance of its functions under the Act (section 9). PIDA has the power to delegate any of its functions, powers and duties to the managers and officers mentioned above (section 10).

Under the Act, PIDA shall have control over all the rivers, canals, drains, streams, hill torrents, public springs, natural lakes, reservoirs (except such reservoirs as are under the control of WAPDA) and underground water resources within the province of Punjab to give effect to schemes to be prepared under the Act in relation to public purposes (section 8).

PIDA shall exercise all the powers under the Canal and Drainage Act 1873, the Soil Reclamation Act, 1952, and any other law for the time being in force relating to the subject matter. It has the power to fix rates for supply of irrigation water and fix fee for disposal of drainage effluent and levy fines for late payments and recovery of arrears (section 5).

PIDA has wide powers relevant for water resource management including: power to formulate and implement policies in the water resources sector with a view to continuously improve and achieve effective, economical and efficient utilization, preservation and improvement of water resources in the province (section 5 (6)); power to prescribe a procedure for the filing of documentation regarding water allocation in the province and all concessions, licenses and leases granted by any entity under the Act and to prescribe a criteria for granting, modifying, renewing, suspending, revoking etc, of such concessions, licenses, etc (section 5 (9), (10)); power to operate and maintain the irrigation tube-wells, drainage, storage reservoirs and flood control infrastructure in the province including hill torrent control and development works for irrigation of adjoining lands including watershed management practices in catchment areas (section 5 (11)); power to plan, design, construct and improve the irrigation, drainage, storage reservoirs and flood control system with a view to ensure optimal utilization of the water resources of the Province on an equitable and efficient basis (section 5 (12)); power to formulate, implement and regularly update policies, studies and research programs with a view to development and management of water resources, solve, eliminate and prevent water logging and salinity, and to develop irrigated agriculture in the province (section 5 (28)); to conduct studies with a view to regularly analyze and evaluate the impact of the operations and policies of PIDA on the ecology and environment within the province with a view to establish the various available options for the minimization of the adverse impact of such operations and policies, if any, and to adopt the optimal options for further Action (section 5 (29)); to coordinate and regulate the measures being undertaken or required to be undertaken in the province for recording and gauging surface waters, monitoring of groundwater table and quality of water and the compilation of data relevant thereto and in this regard to establish and regularly maintain proper liaison with similar work being undertaken in other provinces (section 5 (30)); and power to undertake anti-erosion operations including conservation of forests and reforestation and with a view to achieve this purpose, to restrict or prohibit by general or special order the clearing or breaking up of land in the catchment areas of any rivers, hill torrents and other streams (section 5 (17)).

The Act envisages the importance of involving the stakeholders for improving the water resource management and provides for establishment of "area water boards" and "farmer's organizations" (section 14 (1)). The Act provides that "PIDA shall, within one year of its establishment, devise and implement pilot programs, policies and take steps there under to ensure that an area water board covering selected canal command and farmers' organizations at the minor and distributory level are formed in a phased manner in accordance with the relevant bye-Laws and regulations framed by PIDA" (section 14 (2)). It further provides that "the pilot area water board and farmers' organizations shall be vested with such functions and power as would be required to enable them to become financially self-sustaining and self-sufficient to the extent of recovering complete O&M charges for maintaining canals and subsidiary drains within a maximum period of ten (10) years in the case of area water board and seven (7) years for farmers' organizations from the respective dates of their formation" (section 14 (3)). However, the Act limits the expansion of these water boards and farmers' organizations all over the province and puts a condition that "the process of setting up of further area

water boards and farmers' organizations will depend upon the successful functioning of the pilot project" (section 14 (4)).

Further, the Act provides that the area water boards shall comprise not less than eight members who shall be representatives of the farmers and three out of who shall be from the tail reaches of canals. The chairman of the area water boards shall be a representative of the farmers and the number of non-farmer members of such boards shall not exceed the farmer members (section 14 (proviso to sub section.1)).

One of the functions of PIDA under the Act is to formulate, adopt and implement policies aimed at promoting, formation, growth and development of area water boards and farmers organizations and faithful monitoring of the results thereof (section 5 (24)); and to formulate and implement policies with a view to ensure that PIDA and other entities as the case may be under the Act become fully operative as self supporting and financially self sustaining entities, to the extent of full recovery of O&M cost of canals and subsidiary drains within a period of 7 to 10 years (section 5 (27)).

The Act also provides for notification of rules by the provincial government and notification of regulations by the authority (Section 16 &17).

3.6.5 Pilot Area Water Board Rules, 2005

The rules are framed under Punjab Irrigation and Drainage Authority Act, 1997 for the area water boards established under the Act.

3.6.6 Pilot Farmers Organization Rules, 2005

The rules are framed under Punjab Irrigation and Drainage Authority Act, 1997 for the farmers' organizations established under the Act

3.6.7 The On-Farm Water Management and Water Users Association Ordinance, 1981 (No. V)

The Ordinance is to provide for on-farm water management, conservation and optimum utilization of irrigation water sources and formation of water users' associations in the province of Punjab (Preamble).

Basically the Ordinance is about reconstruction, maintenance, or improvement of watercourses. The field officer is to pass orders of performing such works directing all the irrigators jointly responsible for carrying out the construction work or making use of the watercourse. Every irrigator responsible for such works on watercourses shall execute his share of work and shall be responsible for costs accordingly. If the persons responsible for carrying out the works fail to do the same, the field officer may take necessary steps for carrying the works. Where the irrigators responsible for working on the watercourse have formed and registered as an association under the Ordinance, the field officer provide an opportunity to such association to carry out the job and in case it fails to do the same, the field officer may take necessary steps to get the work done at the cost of the irrigators (section 3).

In the Ordinance "watercourse" means any channel which is supplied with water from a canal but which is not maintained at the cost of government). "Irrigator" is any person for the time being directly driving benefit by such irrigation and includes a landowner, tenant or lessee of such land. "Field officer" is defined as the district officer on-farm water management or any other officer empowered as

such by government. "Association" is a water users association under the Ordinance (section 2). The Ordinance also provides for formation, registration and cancellation of registration of associations (section 6 & 10).

The Ordinance further provides that any person willfully obstructing the work of reconstruction, etc of a watercourse carried out either by an association or anyone employed by the association shall be deemed to be obstructing a public servant and shall be punishable accordingly (section 12).

3.6.8 Punjab Wildlife (Protection, Preservation, Development and Conservation) Act, 1974 (No. II)

The definition of wildlife in this Act includes water (section 2(t)). Polluting water in a wildlife sanctuary is prohibited (section 16(3) (viii)) unless the government grants an exemption for "specific purposes". Similarly, polluting water "flowing in and through" a national park is a punishable offence (section 17(4) (v)) unless the government grants an exemption for "specific purposes".

The maximum penalty for polluting the water in a sanctuary or national park is imprisonment not less than one and more than five years and/or a fine of minimum 20000 rupees and maximum 30000 rupees (section 21(ii)) in addition to the confiscation of weapons and equipment involved in the offence.

3.6.9 Punjab Fisheries Ordinance, 1961 (No. XXX)

The Ordinance prohibits putting any poison, lime or noxious material into any water with the intent to catch or destroy any fish that may be therein (section 7). The penalty for poisoning any water under the Ordinance is two years imprisonment and/or 10000 rupees fine (section 17).

3.6.10 West Pakistan Water and Power Development Authority Act, 1958 (No. XXXI)

This federal law is for the unified and coordinated development of the water and power resources of Pakistan. The Act constitutes WPDA (section 3) and it can frame schemes for a province for: irrigation, water supply and drainage; flood control; and prevention of water- logging.

3.6.11 Punjab Development of Damaged Area Act, 1952 (No. XV)

The Act provides for development of damaged areas in the province of Punjab. The Act does not define the term "damaged area" and only provides that the provincial government may declare any area to which the Towns Improvement Act, 1922 applies as damaged area and the improvement trust created under Town Improvement Act may prepare schemes of water-supply and schemes to promote the health of the residents of the area comprised in the scheme, including the conservation and preservation from injury or pollution of rivers and other sources and means of water-supply (section 4).

3.6.12 Forest Act, 1927 (No. XVI)

Although this law focuses on forest-related issues, poisoning water in a reserved forest is an offence under section 26(1) (i), punishable with a fine of 500 rupees and/or a sentence of six months in prison. This provision is difficult to enforce, however, since the term 'poison' has not been defined.

3.6.13 Punjab Minor Canals Act, 1905 (No. III)

The Act is to make better provision for the control and management of minor canals. It extends to the divisions of Rawalpindi, Sargodha, Lahore, Multan, Quetta and Kalat except the tribal areas. The provisions of the Act apply only to the canals specified in the two schedules under the Act. The Act specifically bars the jurisdiction of Canal and Drainage Act, 1873 on the canals specified in its two schedules.

It regulates the construction of canals on notified natural channels, lakes, etc; levy of water dues; maintenance of canals and distribution of water; suspension of rights over a canal; repair of canal banks; and supply of water through existing and new water-courses; etc. The collector is responsible for administration of the Act and is defined as head revenue officer of a district.

The Act prohibits corruption or fouling of water of any canal so as to render it unfit for the purposes for which it is ordinarily used. The Act also prohibits wastage of water by the user or by the person responsible for maintenance of a watercourse. Punishment for the above Acts is fine not exceeding 50 rupees and/or imprisonment up to one month.

3.6.14 Canal and Drainage Act, 1873 (No. VIII)

This federal law regulates matters related to irrigation, navigation and drainage and extends to the province of Punjab (section 1).

The law allows the provincial government to use and control for public purposes the water from all rivers and streams flowing in natural channels, and of all lakes, sub-soil water and other natural collections of still water (preamble).

In the Act, the term 'canal' is defined broadly to include all canals, channels, tube-wells and reservoirs constructed and maintained by the provincial government; all works, embankments, structures, supply and escape channels connected to such canals, channels, etc; all water courses; and all parts of a river, stream, lake or natural collection of water or natural drainage channel which is declared by the provincial government to be used for any purpose under the Act (section 3(1)). Watercourses are, in turn, defined as channels supplied with water from canal and all subsidiary works that are not maintained with government expense (section 3(2)), which suggests the law applies to privately owned or maintained irrigation channels as well.

Although this law deals primarily with the construction and maintenance of irrigation and drainage channels, it prohibits the "corrupting or fouling" of canal water rendering it less fit for the purpose for which it is ordinarily used (section 70(8)), imposing a fine of 3000 rupees and/or three months' imprisonment. An amendment of the Act in 2006 further provides that the provincial government may prohibit the discharge of any effluent, including any solid or liquid matter or combination of them from industrial, municipal or any other source, into any river, canal and drainage work including any natural drainage channel (section 59-A). The divisional canal officer is empowered to impose special drainage charges as may be prescribed for contravention under section 59-A, and other consequential costs and shall take other necessary steps to prevent such contravention (section 59-A (2)).

The Act further provides that any person, organization or entity, interested in discharging any effluent into any river or drainage work, etc, once it is prohibited by the provincial government, shall apply to the divisional canal officer for grant of permission for the discharge of such effluent. The applicant has to obtain a certificate of no adverse impact of such discharge on environment from the authority

designated in this behalf under any law for the time being in force relating to environment. The divisional canal officer shall determine the feasibility of such permission on the basis of above no objection certificate and may either refuse or grant permission subject to such terms and conditions including levy of drainage charges as may be prescribed (section 59-A (3), (4), & (5)).

The original Act contained no provisions for the sustainable use of freshwater resources or for their preservation. However an amendment in the Act in 2006 require the provincial government to take “necessary steps” for “proper management of the sub-soil water to protect the aquifer, the quality and availability of such water” (section 62-A). The Act requires the provincial government to come up with schemes for the “proper management of the sub-soil water” (section 62-A (2)).

The Act provides for the construction and maintenance of works related to canals (part III), and empowers canal officers to enter and survey land for this purpose (section 14). General provisions related to water supply and water rates are covered in parts IV and V, including charges to be levied and penalties incurred on account of waste or unauthorized use (sections 33 and 34).

The divisional canal officer may remove, detain and fine vessels violating the provisions of this Act by causing danger to a canal or to other vessels (section 49). In cases where an obstruction to a river, stream or drainage channel is causing or might cause “injury to any land or the public health or public convenience”, the provincial government may order its removal (section 55).

All powers under this Act, including the power to make rules, lie with the provincial government.

3.6.15 The Punjab Public-Private Partnership for Infrastructure Act, 2010 (No. IX)

The Act regulates the infrastructural projects implemented through Public Private Partnerships (PPP) (section 2). PPP is defined as partnership between the public sector (represented by a government agency) and a private party, for the provision of an infrastructure facility or service with a clear allocation of risks between the parties (section 3 (q)).

The projects to be undertaken under the Act are to be for more than twenty million rupees (section 35). The list of infrastructure sector for which the projects can be made is given in schedule I, which includes canals or dams (schedule I read with section 2).

The GoP is to establish the PPP cell in Planning and Development Department to promote and facilitate PPP development in the province (section 5). The GoP is to establish a risk management unit in the Finance Department to act as a fiscal guardian for projects (section 6).

One of the essentials for considering any proposals for the government agency responsible for a project to be carried out under the PPP is the EIA report under PEPA. The government agency while considering a bid has to make the EIA an essential part of consideration to grant a partnership agreement and subsequent loans.

3.6.16 Punjab Land Preservation Act, 1900 (No. II)

Under the Act, the provincial government can take certain measures to provide for the conservation of sub-soil water (section 3). It can restrict or prohibit the clearing or breaking up or cultivating of land; quarrying of stone or the burning of lime and; cutting of trees or timber (section 4).

3.6.17 Pakistan Penal Code 1860 (No. XLV)

According to the Constitution, criminal law and all matters included in the Pakistan Penal Code (PPC) except for areas that are exclusively federal subjects and criminal procedure including all matters in the Code of Criminal Procedure are part of the concurrent legislative list (Article 142(b), read with the fourth schedule, concurrent list, items 1 and 2).

The PPC deals specifically with the pollution of water in chapter XIV on public health and safety. Here, "fouling" or "corrupting" the water of a public spring or reservoir is listed as an offence, punishable with up to three months in prison and/or a fine of 500 rupees (section 277). This provision is limited in scope, since it applies only to reservoirs and public springs, and the terms 'fouling' and 'corrupting' are not defined. But provisions of PEPA (sections 6 and 7) and the NEQS (appendix I) may be applied to facilitate enforcement of section 277. Other sections of this chapter may be interpreted to include the protection of water resources, including section 268 on public nuisance, section 269 on negligence likely to spread infectious disease, and section 284 on negligent conduct with respect to the possession and handling of poisonous substances.

Similarly, chapter XVII on offences against property contains certain provisions that may be interpreted to include the protection of water resources. Sections 425–440 deal with "mischief", defined as damage to property resulting in destruction or loss of utility. Section 430 provides specifically for mischief caused to irrigation works while section 431 deals with damage to rivers or channels. Meanwhile, chapter XXIII, section 511 on attempted offences could also be interpreted to include offences related to the "fouling" or "corruption" of water.

3.6.18 Easement Act, 1882 (No. V)

The Act recognizes the right of every owner of land on the water of every natural stream passing through or over his land flowing in a defined natural channel shall be allowed to flow without interruption and without material alteration in quantity and temperature by other persons (section 7 illustrations h). Further the Act protects the right of every owner of land of water that naturally passes or percolates by, over or through his land, shall not be "unreasonably" polluted by other persons (section 7 illustrations h). It seems "reasonable" pollution is permitted, however the term is not defined.

3.6.19 The Lahore Development Authority Act, 1975; Punjab Development of Cities Act, 1976; The Cholistan Development Authority Act, 1976; The Murree-Kahuta Development authority Act, 1986; The Bahawalpur Development Authority Act, 1991; The Dera Ghazi Khan development Authority Act, 1991; The New Murree Development Authority Act, 2004;

These Acts establish development authorities for development of various cities in the Punjab and one of the functions of all these authorities is to prepare, implement and enforce schemes for supply of water within the specified area.

3.6.20 The Punjab Soil Reclamation Act, 1952 (No. XXI)

Primarily the Act is for the speedy reclamation and improvement of the areas damaged by thur and sem and for preventing further damage and for maximizing agricultural production (preamble).

However there are provisions relevant for water resource management. The Act provides for

establishing a Punjab Land and Water Development Board for carrying out the purposes of the Act(section 3). Powers of the board include: installation, management and maintenance of tube-wells; doing all Acts intended to promote the health, well being and prosperity of the residents of a local area, including preservation from injury or pollution of rivers and other sources and means of water-supply; construction of watercourses, etc; replacement of canal water-supply by tube-well or open well; and carrying out of lining of channels in consultation with the Irrigation Department; (section 17).

Notwithstanding anything contained in the Canal and Drainage Act, 1873, under the afore mentioned schemes, the board may also provide for: the improvement, alteration, extension or curtailment of any watercourse; the transfer of any area from one source of irrigation to an other; the temporary increase or decrease of water allowance to any area; the alteration, amendment or cancellation of any order already in force regarding the distribution of water on any water-course or the mutual rights or liabilities in respect of the use, construction or maintenance of a water-course; and the construction of any field drains and drainage works (section 17 (xx)).

As soon as a scheme for a local area or part thereof is sanctioned as notified, the use of underground waters in that area except the water used for domestic purposes or for watering livestock shall come under control of the board (section 26).

For carrying the schemes under the Act, the board may direct: leveling, terracing and raising embankments of fields; afforestation; execution of earthworks in fields or ravines; construction of surface field drains or sub-surface drains; training of streams; field research; permitting sitting of tube-wells and boring and use of water there from in place of that of canal; and integration of surface and sub-surface irrigation supplies; construction of water-courses; and research (section 28)

The Act provides penalty for construction of unauthorized water channels (section 65).

4. PROCESSES AND INSTITUTIONS

Processes and institutions that affect natural resources, whether directly or indirectly are governed by a combination of federal and provincial legislation. A substantial number of laws provide for the development of urban and semi-urban areas in Punjab through development authorities established under these laws. They primarily focus on the delivery of municipal services within their jurisdiction. Recent amendments in some of these laws also give mandate of pollution control to these authorities. PLGO works for providing the same services in areas that do not fall under the purview of these statutory authorities.

Relatively few provincial laws govern Industry, trade and commerce, most of which are completely silent regarding the environmental concerns related to these areas. Laws regulating mining industry also fail to take into account the environmental impact of extraction activities. Commerce and industry are bolstered by a tax regime that aims to maximize revenue generation for the government but fails to exploit the possibility of taxation to discourage polluting industries. This oversight is particularly egregious since the tax structure is amended regularly to increase rates of taxation or add new levies.

Federal laws govern imports and exports and some recent orders contain limited provisions concerning the trade in potentially harmful substances. Federal law also controls the trade in endangered species but contains a glaring omission in this regard. While the export of species protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is prohibited, the same restrictions are not placed on imports.

Trade between provinces is regulated at the federal level while the provincial government may frame laws to regulate the movement of goods within the province. Laws on the subject focus on price control

and maintaining stocks of essential commodities, with no provisions concerning the types of articles that may be freely traded.

Agriculture is a subject that falls under the exclusive legislative purview of the province. Legislation for agriculture focuses once again on the development of the sector and regulates inputs such as seeds, pesticides and fertilizers, without taking into consideration the impact of unsustainable agricultural practices on the environment. However some laws provide limited and indirect environmental protection.

Phytosanitary and quarantine laws are haphazard yet some areas of concern are being regulated under these laws such as food quality, agricultural pests and management of epidemics among livestock. However they fail to take into account modern threats to human, plant and animal health.

Transport is a sector where the province enjoys widespread if not exclusive powers. Provincial laws for the sector focus on the regulation and licensing of motor vehicles, without any provisions related to the control of emissions or the use of cleaner fuels. The tourism industry in the province is largely unregulated.

The single most important legislation governing processes and institutions that potentially affect natural resources is PEPA. It regulates waste, effluents and emissions of industry, municipalities and motor vehicles, hazardous substances and hazardous waste. Rules and regulations framed under this Act provide for a wide range of matters including bio-safety, pollution charges on industry, hospital waste, hazardous waste, the control of emissions, environmental monitoring and testing, impact assessment, and the establishment of environmental tribunals.

4.1 URBAN AND RURAL DEVELOPMENT

Most provincial legal instruments govern development in urban and semi-urban areas while rural development is relatively unregulated except for the PLGO. There is no single law or authority governing all development activities or to provide overall guidelines for such works in urban areas of Punjab. Urban development was primarily dealt by the development authorities created under the Punjab Development of Cities Act, 1976 and Lahore Development Authority Act, 1975 and subsequently through other development authorities, which regulated all aspects of development including preparing schemes for environmental protection in general and for preservation of historical buildings and for conservation of natural resources etc. These development authority laws pre-dated PEPA, which requires that environmental assessments to be carried out for specified projects. The development authority laws contain no specific provisions to monitor or regulate the environmental impact of development schemes. However, the recent building regulations under the LDA Act require an NOC from relevant EPA before setting up a hotel, hospital, industry etc.

PLGO devolved political power and decentralized administrative and financial authority to accountable local governments for good governance and, effective delivery of services. Under PLGO, local governments were empowered for urban and rural development and services. However in city districts, the development authorities and agencies made there under, providing municipal services, continued to work but came under the administrative and financial control of the CDG.

Presently in urban areas in Punjab, in addition to PLGO and development authorities, the private housing schemes incorporated under various statutes are also providing municipal services within their specified areas.

The main areas of concern in urban development is that there is no overarching authority which is looking at the development of the entire urban area as a whole. In particular this causes serious issues for holistic planning and allocation and management of resources. There is lack of coordination

between the various development bodies, which again results in bad planning and wastage of valuable resources.

4.1.1 Lahore Development Authority Act, 1975 (No. XXX)

The purpose of the Act was to create a body for comprehensive planning and development of the entire city of Lahore with related agencies for implementation of other projects. The power of the authority included establishment of a comprehensive system of metropolitan planning and development in order to improve the quality of life in metropolitan area of Lahore. Economical and effective utilization of land and to evolve policies and programs related to the improvement of environment of housing, industrial development, traffic transportation, health, education, water supply, sewerage, drainage and solid waste disposal etc.

As per section 36 of the PLGO, Lahore Development Authority (LDA) is under the administrative and financial control of the local government and the composition of the LDA is amended accordingly. LDA Act provides that the government shall establish an authority which shall consist of: zila nazim of Lahore city district (chairman), town nazims of the towns of Lahore city district, director general of the LDA, district coordination officer (DCO) of Lahore city district, representative of Planning & Development Board Punjab, Finance Department, HUD&PHED, Local Government and Rural Development Department (section 4).

LDA is responsible for a continuous process of comprehensive development planning for the area with the objective of preparing a metropolitan development plan, "area" being the city district of Lahore. LDA Prepares and implements annual development programs, provides appropriate urban design and protect public safety. It establishes, maintains and periodically revises planning controls and building regulations for the area. LDA is also responsible to prepare, implement and enforce schemes for solid waste disposal, water supply, sewerage and drainage system, transportation and traffic, health, education, housing and urban renewal including slums improvement and redevelopment. Further the LDA is required to prepare and implement schemes for environmental improvements and preservation of objects or places of historical, archaeological, scientific cultural and recreational importance. The LDA is also responsible for beautification and uplift of the area (section 6). LDA is empowered to prepare schemes and prescribe environmental standards to be adopted by the government agencies (section 21). It is also responsible for construction, maintenance, upgrade charging toll on roads, bridges, etc. (section 6). LDA shall have exclusive right to use ground water resources and no person can install a tube well without its approval (section 29).

According to the Act no person or local body or government agency can prepare a planning or development scheme within the area except with the concurrence of the LDA (section 13(5)). However, the PLGO is doing exactly the same. LDA may notify any area as controlled areas for the prevention of haphazard growth, encroachments and unauthorized construction in such area (section 18).

LDA may issue interim development orders for areas for which a scheme is under preparation and restrict or regulate, by general or special order, any change in the use of land, alteration in building structures, etc (section 6).LDA may remove any obstruction in the execution of its schemes (section 6). No conversion of use of land allowed without prior approval of the LDA. Anyone violating these provision shall be liable to imprisonment which may extend to one year plus a fine extending 500 rupees per day till the default lasts (section 38). DCO or any other person authorized shall summarily eject any person illegally occupying and land or property (section 39). Any building erected or used in contravention of the law shall be removed (section 40). LDA shall have full powers to undertake improvements of the environment of the area and to effectively encounter all sources of pollution (section 20). Whoever contravenes the provisions of the Act may be liable to Imprisonment, which may

extend to six month or with fine (section 33). Whoever damages the property which vests in LDA will be liable to imprisonment for a period which may extend to one year or fine (section 34).

LDA with the consent of the provincial government may fix betterment fee where any new scheme is executed (sections 23& 24). There shall be a Lahore Development Authority Fund, constituting of money from Punjab government, federal government, fees, rates etc. (section 27). There shall be a separate fund for services related to water supply, sewerage and drainage under the head of "water supply and sanitation" (section 27). The Authority with prior approval of district government and provincial government may impose fees, rates and other charges to fund its schemes (section 28).

4.1.2 Lahore Development Authority Building and Zoning Regulations, 2007

New updated building and zoning regulations were issued in 2008 providing detailed procedure for planning, zoning and building. The regulations provide details of site requirements for residential, commercial and industrial areas, specification for parking area, space and safety requirements, structural design of multistory buildings and BTS/towers and Antennas. It also provides for role and responsibilities of consultants, resident engineer, contractor, authority etc. The regulation in specific also require NOC from Environment protection agency for industrial buildings, hospitals, hotels, urban development projects and complex of buildings on plot of 20 kanal or above. Another NOC is required from traffic engineering agency.

4.1.3 WASA (Water And Sanitation Agency)¹⁷

WASA is an agency created under section 10(2) of LDA Act, 1975 to perform all functions and exercise all powers of the LDA with regard to water supply, sewerage and drainage with power to collect rates, fees and charges for water supply, sewerage and drainage. Historically, before 1967, WASA was a part of Lahore Municipal Corporation, a water wing of Lahore Improvement Trust from 1966-1976 and finally after implementation of LDA Act WASA became an agency of LDA in 1975.

Functions of WASA are forecasting of demands for services of water supply, sewerage and drainage preparation of plans and design for their extensions, rehabilitation and replacement. Further, WASA is responsible for construction, improvement, maintenance and operation of water works, sewerage works and main storm water drainage channels and pumping stations and collections of rates, fees and charges. Service Area of WASA is the city of Lahore except Cantonment, Model Town, GORs, railway colonies, PWD colonies and private housing schemes.

4.1.4 TEPA (Traffic Engineering Planning Agency)¹⁸

TEPA was created in 1987 under section 6(3) (xii) of the LDA Act, 1975 as an agency under the LDA Act. TEPA, as such, is not mentioned in the LDA Act as WASA. TEPA plans, designs and contracts major roads but the operation and maintenance are left to local government. TEPA handles projects outside LDA, infact all across Punjab and even Islamabad. Pakistan Army for the new GHQ also engaged it. Its jurisdiction however, does not extent to Cantonment or DHA. Primary function of TEPA is to plan, design and implement traffic engineering and traffic management programs. No such agency under any other city working under the Development of Cities Act, 1976.

¹⁷ Information is based on WASA's website.

¹⁸ Information is based on LDA's / TEPA's website

4.1.5 The Punjab Development Of Cities Act, 1976 (No. XIX)

Punjab Development of Cities Act was made on same lines as LDA Act for the planning and development of other metropolitan cities in Punjab. The Act like LDA Act is to establish a comprehensive system of metropolitan planning and development in order to improve the quality of life in the cities of Punjab. The Act shall extend to the entire province of Punjab. It presently applies to the cities of Multan (MDA), Faisalabad (FDA), Gujranwala (GDA) and Rawalpindi (RDA) (section (3) (1)). The law repeals Town Improvement Act, 1922 to the extent of the cities notified.

The authorities in different notified cities have similar powers and responsibilities as LDA, for planning and development including making comprehensive master plans, preparing and implementing annual development program, providing appropriate urban design and protecting public safety. The authorities are responsible to prepare, implement and enforce development schemes for solid waste disposal, transportation and traffic, health, education facilities, housing, urban renewal including slums improvement and redevelopment etc. (section 7). Authorities shall also undertake beautification of the Area or to prepare schemes and prescribe environmental standards to be adopted by the government agencies (section 20). Authorities shall have exclusive right to use ground water resources. No person without the approval of the Authority shall install a tube well (section 28)

No planning or development scheme shall be prepared by any person or local body or government agency within the area except with the concurrence of the Authority (section 12). The authority may give direction for controlled areas for the prevention of haphazard growth, encroachments and unauthorized constructions (section 17). No conversion of use of land is allowed without prior approval of the authority. Anyone violating the said provision shall be liable to imprisonment which may extend to one year plus a fine extending to 500 rupees per day till the default lasts (section 37). The authority shall have full powers to undertake improvements of the environment of the area and to effectively encounter all sources of pollution (section 19).

The Authority with the consent of the provincial government may fix betterment fee where any new scheme is executed (sections 22 & 23). There shall be an Authority Fund, constituting of money from Punjab government, federal government, fees, rates etc (section 26). There shall be a separate fund for services related to water supply, sewerage and drainage under the head of "water supply and sanitation" (section 26). The Authority with prior approval of district government and provincial government may impose fees, rates and other charges to fund its schemes (section 28).

4.1.6 Parks And Horticulture Authority (Notification dated 21st September, 1998)

Parks and Horticulture Authority (PHA) for Lahore has been established under sections 3 & 4 of Punjab Development of Cities Act, 1976, the GoP has established PHA consisting of Chief Minister of Punjab, Minister for HUD & PHE, Minister of Local Government and Rural Development, Chief Secretary Punjab, Chairman Planning and Development Board Punjab, four members of provincial assembly nominated by Chief Minister and others.

Under the notification PHA is to exercise and perform such functions in its local limits of city of Lahore which local councils under Punjab Local Government Act, 1975 perform (notification dated 12.03.1999) for beautification of city. PHA exercises exclusive authority to lease outdoor advertisements, bill boards etc and collect revenue in the notified area of Lahore (notification dated 26.12.1998). Outdoors advertisement rights to Lahore shall transfer from all provincial departments to PHA (Notification dated 8.12.1999). Further through notification dated 17th November 1998, LDA has transferred all parks, green verges, central medians, roundabouts, boundaries, monuments and fountains to PHA.

4.1.7 Parks And Horticultures Authority (Regulations) (Notification dated 29th April, 1999)

PHA regulations for outdoor advertisement and up keep of green strips between the boundary walls of houses building and the roads. Applicability of PHA regulations shall be on all federal, provincial governments, autonomous, semi autonomous local bodies of the province etc, intending to carry out outdoor advertisement, within the limits of the area (regulation 2). No exemption from these regulations except with prior approval of director general (only for public interest and charitable nature) (regulation 3).

Director general will have exclusive powers to remove any billboard etc on being indecent, obscene and offensive to good taste. DG on behalf of authority shall use all powers provided in development of cities Act 1976. Authority may withdraw any of its approval granted under regulations 7 & 8 without assigning any reason (regulation 9). The owners of houses, shops, commercial buildings etc. shall be responsible to maintain sites between their boundary walls and roads. No land and green belt shall be used in manner inconsistent with PHA regulations etc. (regulation 14).

Authority shall charge for each sign/ advertisement/ substance at the rate and manner as fixed from time to time (regulation 10-a). Authority may also determine charging for permitting shop signs levied and collected by PHA (regulation 10-b). All outdoor advertisements displayed on the roads, shops within the city will be charged in accordance with the specification of PHA (regulation 11). Rate/ lease money for all type of advertisement publicity signs in case of private land will be in schedule C etc. (regulation 12).

4.1.8 The Disposal Of Land By Development Authorities (Regulations) Act, 1998 (___)

The object of the Act is to regulate the disposal of land by the development authorities. Development authorities is defined as "Lahore Development Authority, the Bahawalpur Development Authority, the Dera Ghazi Khan Development Authority, an authority established under the Development of Cities Act, 1976, a trust established under the Punjab Town Improvement Act, 1922 and the director general of Housing and Physical Planning Punjab (section 2 (2)).

At the time of sanctioning of housing scheme, plots in a scheme shall be categorized as residential, commercial, industrial and public amenity plots. Once sanctioned the scope of the plot shall not be altered without the approval of competent authority (section 3). The land in the housing scheme shall be disposed of for residential purposes through public auction, through ballot or allotment according to the size of the plot (section 4). Non-residential plots shall be sold through auction (section 4). It also provides for allocation of public amenity plots for graveyard and mosques (section 4). Conversion of public utility or amenity plot in a housing scheme for any other use is prohibited (section 5).

Any person illegally converting the use of the plot shall be liable to imprisonment for a term which may extend to one year and fine which may extend to 1000 rupees per day till the default continues (section 6). The development authority may order to remove, demolish or alter a building, which is made in contravention of the Act (section 6).

4.1.9 Disposal of Land By Development Authorities (Regulation) Rules, 2002

The object of the Rules is to lay down a procedure for disposal of land by development authorities. Amenity plots in housing scheme shall only be converted if the housing scheme has not been developed or if the housing scheme is developed but the changes are required, they may be approved by the provincial government. Schemes sponsored by private developers may be altered by director general of relevant development authority (rule 16).

4.1.10 The Punjab Housing And Town Planning Agency Ordinance, 2002 (No. LXXVIII)

The purpose of the Ordinance is to provide shelter to the shelter-less and to establish comprehensive system of town planning at provincial, regional, district, tehsil and union council level in order to ensure systematic, integrated growth of urban and rural areas.

The agency is to identify state and other lands for developing low income and low cost housing schemes. Facilitate land availability through various innovative measures, develop a comprehensive land information system (land bank) to cater for the planning and development requirements for a period of five to ten years (forward planning). Suggest measures to check growth of slums and squatters (Kachi Abadis), formulate resettlement and relocation plans. Plan a comprehensive program for the development of satellite, intermediate, secondary and industrial towns to reduce migration and drift to bog settlements. Formulate provincial land use policy, plan and prepare regional development plans (inter district spatial planning/master plans) for an integrated, coordinated and systematic planning to ensure orderly growth and development of physical infrastructure such as highways, railways, etc. Develop packages in which prime state land occupied by squatters shall be offered to private developers for commercial use provided they arrange and finance up gradation or relocation of squatters. It is interesting how the Act recognizes right of squatters. Facilitate public private partnership or ventures in housing and development of recreational activities (theme parks) (section 4). Agency may declare any area as controlled area and all such preventive actions maybe taken to control haphazard growth (section 15)

There shall be a fund formed which shall vest in the agency (section 18). Revenue to be generated from rates and fees charged by the agency (section 21). Whoever contravenes with the provisions of the Act may be liable to Imprisonment, which may extend to three years or with fine amounting to 50,000 rupees (section 26). No conversion of land is allowed and anyone acting in violation of the Ordinance shall be liable to one-year imprisonment or a fine per day amounting to 500 rupees (section 31). All unauthorized persons may be ejected by the agency and all buildings constructed in violation of this Ordinance shall be demolished, amended etc (sections 32 & 33).

4.1.11 The Punjab Kachi Abadis Act, 1992 (No. VIII)

The purpose of the Act is to regularize, develop and improve areas occupied by squatters (Kachi Abadis) in Punjab. The director general may identify area to be declared to be a Kachi Abadi for squatters. Undertake redevelopment schemes for resettlement of shiftees from the Kachi Abadi and the areas, which cannot be regularized as Kachi Abadi (section 4).

Area reserved for roads, streets, water supply, sewerage or other conservancy arrangements, hospitals, schools, colleges, libraries, playgrounds, gardens, mosques, graveyards, high tension lines, or is not safe from flood hazard shall not be declared to be a Kachi Abadi (section 6(4)). The director general shall prepare scheme for development, improvement or regulation of Kachi Abadi. The schemes may relate to community planning, housing, rehabilitation, community facilities, roads and streets, etc. (section 7). The director general shall prepare schemes for the dwellers of Kachi Abadi especially housing schemes (section 7).

The GoP may by notification declare any land as Kachi Abadi, but no land belonging to Federal government can be declared so without prior approval of federal government. Private land can also be declared with consent of the person/society. In case consent is not granted the land maybe acquired (section 6).

The schemes shall be executed by the development authorities or tehsil municipal administration (section 7). There could be a fixed betterment fee in case the value of property in the scheme has increased in consequence of execution of the scheme. The fee could extend to half of the enhanced

value of the property after execution of the scheme (section 16).Whoever contravenes with the provisions of the Act may be liable to Imprisonment, which may extend to one year or with fine, which may extend to 20000 rupees (section 20).

4.1.12 The Punjab Jinnah Abadis for Non-Proprietors in Rural Areas Act, 1986 (No. III)

The Act provides for housing facilities to non-proprietors in the rural areas of Punjab. "Non-proprietor" means a person who is permanently residing in a rural area and who or any member of whose family does not own any agricultural land or other immovable property anywhere in Pakistan. "Rural area" means an area other than the area defined as urban area by or under any law relating to local government.The GoP may grant land, free of cost, not exceeding seven marlas in rural areas to non-proprietor in revenue estate in a union council in which he ordinarily resides for construction of his house subject to condition that he shall not alienate his house or land for a period of at least ten years (sections 3 and 5).

4.1.13 The Punjab Conferment of Proprietary Rights on Non-proprietors in Abadi Deh Act, 1995 (No. I)

The Act is to provide for conferment of proprietary rights on non-proprietors in abadi deh. "Abadi deh" means and includes an area, which recorded as abadi deh in record of rights prepared under the Punjab Land Revenue Act, 1967 but does not include an urban area. The land which is situated within the abadi deh and which is under a house owned by non-proprietor shall vest in the non-proprietor free of charge.

4.1.14 The Thal Development Act, 1949 (No. XV)

The Act is to provide speedy development of the any local area brought under irrigation by execution of Thal Project and for re-settlement thereon of refugees and others and for levy of development fee. Thal Development Act is one of the few legislations, which provides for re-settlement.

The Authority constituted under Thal Development Act is empowered to frame scheme for development of any local area which include provision for open spaces, playing fields, national parks, nature reserves, forests and forest parks, camping grounds, camp sites, holiday camps and holiday villages, and cemeteries and places of religious worship. Further provisions for breaking up, cultivation, afforestation or plantation of lands and raising, lowering or reclamation of any land for the production of food grains, fruit, vegetables, fuel, fodder and the like and provision of means of irrigation and irrigation channels by the Authority are also provided. The Authority is empowered to look into and develop system of drains or sweets for the improvement of ill-drained and insanitary localities. Further it can look into fisheries, poultry farms, live stock farms, dairy farms, sheep farms, bee farms, etc(Section 21). The Authority may regulate, restrict or prohibit clearing or breaking up of land for cultivation, quarrying of stone, admission, herding of cattle, the felling, girdling, lopping, tapping or burning of trees (section 30). Whoever contravenes the provisions of this Act shall be liable to a fine not exceeding 200 rupees.

4.1.15 The Murree-Kahuta Development Authority Act, 1986 (No. XXVI)

The Act provides for establishment of Murree-Kahuta Development Authority for the development of Murree and Kahuta Tehsils of Rawalpindi. "Area" is defined as the jurisdiction of the Authority and it can prepare, implement and enforce schemes for development of education, health, agriculture and industry, forest conservation and development, preservation of wildlife, environment protection,

promotion of tourism, improvement of water supply, land slide management, development of irrigation facilities, development of means of communication, construction and development of housing, sewerage, drainage, environmental improvement and slum clearance for the area (section 5).

Authority shall consist of, Chief Minister, minister in charge, all members of provincial and national assembly whose constituency falls partly or wholly within the region and chairman, Planning and Development Board etc. Chief Minister shall be the chairman of the Authority (section 4).

The Authority shall prepare schemes for the area or any part thereof. The schemes prepared may be amended, modified or abandoned by the Authority as decided by the Authority (sections 13 &14). Any illegal construction may be demolished removed or altered etc. (section 29). It may develop planning controls and building regulations, provide for appropriate urban design and protect public safety (section 7). Whoever contravenes the provisions of this Act shall be liable to punishment up to one year or with fine up to 1000 rupees or with both (section 25).

4.1.16 The Murree Kahuta Hilly Areas Development Authority (Repeal) Ordinance, 1978 ()

The Ordinance repeals the Murree Kahuta Hilly Areas development Authority Act, 1975.

4.1.17 New Murree Development Authority Act, 2004 (No. I)

The Act provides for establishing a New Murree Development Authority by the GoP (section 3). The primary function of the Authority is to plan, develop and manage a new township near Murree. Authority shall consist of, Chief Minister as Chairman, Chief Secretary, Government of Punjab, Chairman Planning & Development Department, Government of Punjab, Secretary, Finance Department, other relevant secretaries, director general of the Authority and five Non-official members to be appointed by the GoP (section 4).

The Authority may prepare master plans and phased master program for the area. Prepare scheme for environment protection, historical, archeological and cultural heritage. Prepare scheme for housing, water supply, sewerage, drainage, solid waste disposal, transportation and traffic. Develop planning controls and building regulations. Provide appropriate urban design and protect public safety (section 7).

Conversion of property to a different use or purpose other than the one provided under a scheme is prohibited unless it is with the approval of the Authority (section 20). Any illegal construction shall be demolished removed or altered (section 21). Whoever contravenes the provisions of this Act shall be liable to a penalty that will be prescribed and punishment up to six months (sections 15 & 16). If the contravention continues the fine is 1000 per day till the contravention continues and imprisonment up to one year (section 21).

4.1.18 The Bahawalpur Development Authority Act, 1991 (No. XI)

The Act provides for establishing an Authority for the development of Bahawalpur comprising of area of revenue division of Bahawalpur excluding the desert area (that falls under the jurisdiction of Cholistan Development Authority).

The Authority may prepare scheme for development of agriculture and industry, forest, conservation and development, development of irrigation facilities, development of means of communication, environment protection, and historical, archeological and cultural heritage. Prepare scheme for housing, water supply, sewerage, drainage, solid waste disposal, transportation and traffic. Develop

planning controls and building regulations. Provide appropriate urban design and protect public safety (section 5).

The GoP may appoint a director general and such other persons as required (section 4 & 6). Conversion of property to a different use or purpose other than the one provided under a scheme is prohibited unless it is with the approval of the Authority (section 29). Any illegal construction shall be demolished removed or altered (section 31). Whoever contravenes the provisions of this Act shall be liable to a penalty that will be prescribed and punishment up to six months (sections 24). If the contravention continues the fine is 500 rupees per day and imprisonment up to one year (section 29).

4.1.19 The Cholistan Development Authority Act, 1976 (N. XIV)

This Act establishes the Cholistan Development Authority for development of Cholistan area of Bahawalpur Division. It consists of a minister nominated by the GoP, three members of Bahawalpur Division, Commissioner, Chief Engineer, Irrigation, Bahawalpur and other members from relevant departments. Managing director shall be the principal executive officer of the Authority.

The Authority has the power to work for afforestation, plantation, reclamation of land for production of food grains etc., to provide means of irrigation, to provide drinking water for human beings, to locate sweet water points, construct roads and parks, provide for conservation, preservation of forests and multiplication of wildlife and natural vegetation etc. There is no provision for penalty in case of contravention of the provisions of the Act.

4.1.20 The Dera Ghazi Khan Development Authority Act 1991 (No. VI)

An Act for the development of Dera Ghazi Division and establishes an Authority with director general and chairman appointed by the GoP.

The Authority may prepare scheme for development of agriculture and industry, forest, conservation and development, development of irrigation facilities, development of means of communication, environment protection, and historical, archeological and cultural heritage. It can prepare scheme for housing, water supply, sewerage, drainage, solid waste disposal, transportation and traffic and develop planning controls and building regulations. It may provide appropriate urban design and protect public safety (section 5)

Whoever contravenes the provisions of this Act shall be liable to a penalty, which may extend to 5000 rupees or imprisonment up to six months or both (sections 24).

Conversion of property to a different use or purpose other than the one provided under a scheme is prohibited unless it is with the approval of the Authority (section 29). Any illegal construction shall be demolished, removed or altered (section 31). Penalty for continuous contravention is fine of 500 rupees per day till the contravention continues and imprisonment up to six months (section 29).

4.1.21 The Punjab Land Preservation (Extension to Dera Ghazi Khan Excluded Area) Regulation, 1959 (No. I)

A Regulation to extend the provisions of the Punjab Land Preservation Act, 1900, to the Dera Ghazi Khan excluded area in the province of the Punjab.

4.1.22 The Town Improvement Act, 1922 (No. IV)

Punjab Town Improvement Act, 1922 is applicable to the cities where Development Authorities have not been established for the improvement and expansion of towns. The provisions of the Act shall be vested into the trust created for each town. The Trust shall consist of a chairman and other trustees appointed by the Provincial Government (sections 3 and 4).

The Trust is empowered to make improvement or rebuilding schemes for dangerous buildings and congested streets (Sections 22 and 23). "Development and expansion schemes" which may provide for "lay-out" of the locality to be developed (section 24). The Trust may frame housing schemes if directed by the government, which include "housing accommodation scheme", "re-housing scheme", and "re-housing of displaced resident house-owners" (sections 24-A, 25, 26 and 27). The Trust has further powers to demolition of illegal or dangerous buildings, to provide for open spaces, reclamation of land, provide for drains, water supply and lighting of streets, promotion of health of residents etc (section 28).

Development and improvement powers under the Punjab Local Government Act, 1975 have been vested in the Trust (Section 49). Further, the Provincial Government may declare any area as controlled area, within which haphazard development, land uses, growth of colonies, construction of buildings shall be controlled by the Trust (section 55-A).

A separate chapter for penalties is given for the contravention of the provision of the Act. The penalties do not exceed more than 500 rupees. However, the Trust has the power to remove or demolish buildings illegally constructed or dangerous for human beings (sections 77-91).

4.1.23 Punjab Local Government Ordinance, 2001 (No. XIII)

PLGO is one of the main laws along with the development authority's enactments on urban development and the perhaps the core law on rural development in Punjab. It extends to whole of the province of Punjab other than areas notified as cantonments under the Cantonments Act, 1924 or Cantonments Ordinance, 2002 (Section 1(2)).

Section 36 states that administrative and financial control of all the authorities/ agencies providing municipal services shall be under the City District Government (CDG).

Municipal services include water supply, sanitation, conservancy, removal and disposal of sullage, refuse, garbage, sewer or storm water, solid or liquid waste, drainage, public parks, roads, bill boards, zoning, master plans, environment etc (section 2(xxi)).

Zila nazim shall be responsible for providing a vision for district wide development, oversee formulation and execution of the annual development plan, delivery of services and functions of district government (section 18)

District Coordination Officer co-ordinates the Activities of the group of offices for coherent planning, synergistic development, prepare reports on the implementation of development plans etc. (section 28) Executive District Officer prepares development plans and implement approved plans etc. (section 29). Zila council approves long term and short-term development plan (section 39).

Zila council in a city district shall approve master plans, zoning, land use plans, including classification and reclassification of land, environment control, urban design, urban renewal and ecological balances. Approve proposals of district government for public transport and mass transit systems, construction of expressways, flyovers, bridges, roads, underpasses, and inter town streets. Approve development schemes for beautification of areas along rivers (Section 40). In case of town in a city district the zila council shall perform the function of approval of such macro municipal plans as may be notified by the CDG (section 41). Review development of integrated system of water reservoirs, water sources

treatment plant, drainage liquid and solid waste disposal, sanitation and other municipal services (section 40). WASA or similar agencies coming under the control of the district or CDG (section 182) if working in a tehsil shall be further decentralized to the concerned tehsil municipal administration (TMA) (section 52). TMA also prepare plans for land use, zoning etc. Prevent encroachments, regulate signboards etc, water supply, sewerage, sanitation and solid waste, roads, traffic planning etc (section 54). PLGO provides for similar provision for town municipal administration (section 54-A).

Zila council in a city district shall approve master plans, zoning, land use plans, including classification and reclassification of land (section 40). Exercise control over land use, land sub division, land development and zoning by public and private sectors for any purpose, including agriculture, industry, commerce, markets, shopping and other employment centers, residential, recreation, parks, etc (section 54-A).

Tehsil/town council shall approve land use, zoning and master plan for tehsil/town development and maintenance programs etc. (section 67 & 67 A). Union administration is to identify deficiencies in the delivery of services and improve and maintain public open spaces, public gardens and playgrounds, public sources of water, water supply, maintain lighting of streets, public places (section 76). Union council shall approve the annual development plan of the union administration (section 88)

Zila council in a city district shall approve environment control and ecological balances (Section 40). Union nazim shall report to the concerned authority regarding environmental and health hazards, etc. (Section 80). Union council shall promote plantation of trees and beautification of public places in the union. Review implementation of rules and byelaws governing land use, housing, markets, zoning, environment, roads, traffic, tax, infrastructure and public utilities.

Penalties are provided under chapter 16 read with fourth, eighth and tenth schedule. Maximum penalties specified in the PLGO amount to three years' imprisonment and/or a fine of 15,000 rupees, in addition to a fine of 1,000 rupees for every day the offence continues to be committed, for Activities such as violating prohibitions set out in the master plan, sanctioned development schemes or any other law in force, or carrying out "building operations" in a manner that is dangerous for those passing by or living in the vicinity (sections 141-143 and 147, read with the fourth schedule, part I, items 12, 16 and 28). Similar penalties apply in the case of immovable encroachment on public land, and failure to demolish a building declared by the authorities to be dangerous (section 141, read with the fourth schedule, part I, items 20 and 24). Lesser penalties apply for erecting or demolishing buildings, in whole or in part, in a manner that is declared to be a danger or annoyance to the public (sections 141-143 and 147, read with the fourth schedule, part II, item 40).

Other offences under the PLGO, which are subject to an immediate fine but may also incur imprisonment for up to six months and/or a fine of 5,000 rupees in the case of a repeated offence, cover a wide range of matters concerning the cleanliness and proper maintenance of public places, residential neighborhoods and streets, and the installation and repair of water and sewage pipelines (section 141(2)(c), read with the eighth schedule, items 3, 5, 10, 11, 24, 25 and 28-30). "Damaging or polluting [the] physical environment" in a manner that endangers public health is also an offence (item 26). Abetting or attempting to commit these offences is punishable with the same penalty as the offence itself (item 47).

The provincial government may make rules for local government works, development authorities and the regulation of site development schemes (section 191(1), read with the fifth schedule, part I, items 7-9) while local councils may frame by-laws for zoning, master planning and buildings (section 192(2), read with the fifth schedule, part II, item 3).

The rules framed under section 31 of the PLGO provide that works and services group of district office is responsible for spatial planning and development, roads and buildings, transport and environment in the district.

4.1.25 Punjab Tehsil/Town Municipal Administration Rules Of Business, 2002

These Rules were framed under section 31 of PLGO and provide that "Tehsil Office of Infrastructure and Services" has been allocated development of water supply, sewage and sewage treatment, storm water drainage, sanitation and solid waste collection, traffic planning and engineering, street lighting, fire fighting, parks and playgrounds. "Tehsil Office of Planning" has been allocated the following business; prepare spatial plans, exercise control over land use, land subdivision and land development and zoning, etc. and building control

4.1.26 The Punjab Tehsil/Town Municipal Administration (Works) Rules, 2003

These Rules were framed under section 31 of PLGO and provide that "Tehsil Administration Works" is responsible for classification of works and for annual development plan and its specifications.

4.1.27 Punjab Local Government (Property) Rules, 2003

These Rules, framed under the PLGO, provide for the management and maintenance of property owned by the local government. Local governments may prepare property development schemes, including plans involving acquisition, and "take such steps as may be necessary" to implement such schemes (section 15). Committee is to be constituted to identify redundant/encroached property, which may be disposed (Section 8). Power to dispose of land is permitted through open auction (section 11 and 12).

4.1.28 City District Government Lahore, Solid Waste Management Byelaws, 2005

Object of the byelaws is to establish a scheme for solid waste disposal in the city district, Lahore. Public streets shall be swept and cleaned under the direction of CDG. Each person shall be responsible for the cleanliness of roads or footways in front of their private properties (rule 3, 4 & 5).

The CDG may arrange for removal and carriage of refuse. CDG will provide landfill for final disposal of land waste. Individual shall be responsible to collect all sorts of waste from their property and to deposit the same in public receptacles. Hospitals and clinic shall keep infectious waste separate from other waste. District Officer (DO) solid waste management (SWM) may formulate any system feasible for collection with approval of CDG (rule 6, 7 & 8).

DO, SWM may give notice to owner/occupier of building/land to clean up, make arrangements for fixing sanitary and waste. If the notice is not complied with DO, SWM may cause necessary steps to be taken at the expenses of the owner/occupier and shall be deemed to be taxed levied on owner/occupier. Occupier of any premises shall not keep or allow to use the premises for any collection of dirt, ashes, soil, filth, refuse or any other offensive matter for more than 48 hours otherwise if there are proper receptacles. DO, SWM may also require the occupier of the premises to clean, sweep, water and dust on the front of the adjoining street (rule 9, 10, 11 & 12). Rule 31 lays down the procedure for removal and disposal of carcasses.

DO, SWM may prohibit or order the owner to take such action as to control gases, heat radiation, noise, vibration, odor etc. which is offensive, dangerous and injurious to health(rule 29). DO, SMW may direct any owner of swimming pool to properly maintain it. DO may even direct it to be closed incase of danger of infection etc. (rule 30)

No housing/site development schemes, multi-storey building may be approved without reserving utility plots for the purpose of collection of waste and garbage (rule 17). No person shall be allowed to deposit dust, dirt, paper, ashes, carcass, refuse, boxes, barrels etc. in public places, etc (rule 16).During construction period, no public place shall be used for storage or placement of any building material and reasonable precaution shall be taken to prevent danger to life due to flying dust or falling fragment etc. (rule 18).Sanitary provisions are stated in rules 19-24. No obstruction of public drains is allowed without approval of CDG Lahore. DO, SWM may direct any owner to construct public drain (rules 26-27). DO, SWM or any other officer of CDG Lahore may for the purposes of these byelaws may enter any building or land to make any sudden inspection (rule 32).

Any violation under these Rules shall be treated under the laws as an offence under PLGO and DO,SWM shall have authority to seal the premises. Bylaws provide for a fine of 500 rupees50 rupees for each day the violation continues (rule 34).

4.1.29 Colonization of Government Lands Act, 1912 (No. V)

This law provides for the administration of government-owned land that has been declared a “colony”. For the purposes of this law, a colony is defined simply as “any area to which this Act shall be applied” (section 3).

The provincial government may declare any land it owns to be a colony (section 4) or withdraw this designation (section 5). The BOR, meanwhile, may grant land situated within a colony“to any person on such conditions as it thinks fit” (section 10(1)).

4.1.30 Land Acquisition Act, 1894 (No. I)

This law regulates the acquisition of land for public purposes and provides for primarily compensation in cash (section 12). This is the principal statute governing the acquisition of privately owned land for public purposes. In addition, the law allows for the “temporary occupation and use” of waste or arable land for a maximum period of three years (section 35).

The law provides for a preliminary enquiry to survey land and assess its suitability, allowing government officers to bore into the subsoil, dig trenches, and cut down or clear standing crops and “jungle” areas (section 4). It lays down procedures for hearing objections that may be raised to proposed acquisition (section 5-A). Provincial governments administer the land acquisition procedure. Other powers under this Act, including the power to make rules, lie with the provincial government.

4.1.31 Defence Housing Authority Lahore Order, 2002 (Chief Executive Order No. 26)

It’s a Federal law but the provincial government has power to amend the same. It provides for a Defence Housing Authority (DHA) established by the Federal Government for carrying out the purpose of the Order (section 3). DHAis empowered to plan, develop and regulate a housing facility in the areas notified by it (section 13). Its jurisdiction extends to specified areas. The Authority shall have an executive board, which shall be empowered to plan new developments and projects (section 7(2) (g)), plan housing schemes (section 7(2) (h)). The board can also re-plan any housing, commercial or amenity unit. (Section 7(2) (j))

The executive board shall develop and execute new developments and projects through joint ventures (section 7(2) (g)), plan, approve and execute mergers and amalgamations with other adjoining housing schemes or cooperative societies (section 7(2) (h)). The primary function of the DHA is to develop housing facilities.

Conversion of property to a different use or purpose other than the one provided under a scheme is prohibited unless it is with the approval of DHA. Any illegal conversion of property shall be punishable with fine extending to 2000 rupees per day till default continues or with six months imprisonment (section 18). Illegal conversions provide for penalties and DHA can remove/demolish such unauthorized use or construction. All buildings constructed in violation of the provisions of the Order, rules and regulations are liable to be altered or demolished (section 19)

4.1.32 Pakistan Environment Protection Act, 1997 (NO. XXXIV)

PEPA provides that no person shall discharge or emit or allow discharging or emitting of any effluent or waste or air pollutant or noise in an amount, concentration or level higher than NEQS (section 11). No project shall start without an IEE & EIA filed with government agency (section 12). No person shall import hazardous waste into Pakistan and its territorial waters etc (section 13). No one shall generate, collect, consign, transport, treat, dispose of, store, handle or import any hazardous substance (sections 14). No motor vehicle shall be operated emitting air pollution and noise, which exceeds the NEQS (section 15).

Federal government may levy a pollution charge for violation of provisions of PEPA (section 11). Federal or provincial EPA may direct stoppage, preventing, lessening or controlling, replacement etc of any emission or discharge of any effluent, waste, air pollutant or noise or disposal of waste (section 16).

Whoever contravenes or fails to comply with the provisions of sections 11, 12, 13 or 16 shall be punishable with a fine that may extend to 1 million rupees and additional fine of 1000 rupees per day during which such contravention or failure continues and imprisonment up to two years for second time offenders (sections 17, 18 & 19). Contravention of section 14 and 15 is punishable with fine up to one hundred thousand rupees and additional thousand rupees for continuing contravention and up to two years imprisonment for second time offenders (section 17).

4.1.33 Hospital Waste Management Rules, 2005

The Rules framed under PEPA provide for collection and disposal of hospital waste. Every hospital is responsible to properly manage the waste generated by it. There shall be a waste management team in every hospital. The team will be assigned duties (Rules 3-14).

Every waste management officer shall prepare waste management plan to deal with the waste i.e. with its segregation, collection, transport, storage and final disposal (rules 15-20). Health officer may inspect any hospital, incinerator, a landfill located within the area of his jurisdiction to check that the provisions of these rules are complied with (rule 23). Government shall constitute Hospital Complaint Scrutiny Committee for each district. Comprising of 2 medical superintendents of the hospitals owned by the government one of which shall be chairman of committee and one CEO of private sector hospital. The Committee could direct hospitals to take specific action regarding their waste (rule 23)

The federal and provincial government may constitute Hospital Waste Advisory Committee, which shall consist of health personals from federal, provincial and private sector (rule 24)

4.1.34 The Punjab Heritage Foundation Act, 2005 (No. I)

A new provincial heritage Act was enacted to conserve, maintain, rehabilitate and develop the Punjab heritage. "Punjab heritage" is defined as "archeological, architectural, historical, or cultural site notified to be a Punjab heritage by the government" (section 2 (k)). "Site" is defined as "any land, building, structure, remains, park, garden, or any other place or location (section 2 (l)). The Act establishes a foundation to carry out the purposes of the Act i.e. to preserve, conserve, maintain, and rehabilitate the Punjab heritage through various means, including technical or financial assistance and to create awareness among the people for preservation of its heritage (sections 3 and 4).

The foundation for its running shall generate a fund from grants-in-aid from governments, voluntary contributions from non government bodies, individuals etc., income from other sources (Section 5). The overall management and control of the affairs of the foundation, shall vest in the Board of Governors. The board shall include chief minister, chief secretary, members of provincial assembly, non-official members etc. (section 6). In addition to the board there shall also be an executive committee and a Tajdeed-e Lahore Committee for better running of the foundation (sections 8 and 9).

The board shall have the power to undertake measures for the preservation, conservation, maintenance and rehabilitation of the Punjab heritage. To prepare and approve projects for heritage, to acquire or take on lease any site having archeological, historical, cultural or architectural value. To undertake promotional and cultural Activities at the heritage site, to undertake and promote research and arrange materials for publication of periodicals, monographs, pamphlets, newspapers, books and posters in furtherance of the objects of this Act (Section 7).

4.1.35 The Punjab Special Premises (Preservation) Ordinance, 1985 (No. XXXIV)

The object of the Ordinance is to preserve certain premises of historical, cultural and architectural value in Punjab and to control and regulate alterations therein and demolition and re-erection thereof. "Special premises" means any premises of historical, cultural or architectural value declared as such by the GoP.

GoP may appoint a Committee for performing the purposes of the Ordinance. The committee or the GoP may appoint a Committee of Experts to advise them on the matters (sections 3 & 4). No plan for the special premises shall be passed without the approval of the GoP or commission (section 6). No development plan or scheme within a distance of 200ft from special premises shall be undertaken without prior approval GoP or committee (section 11).

No special premises can be altered, renovated, demolished or re-erected without prior approval of the GoP or Committee. In case any damage is done to the premises it has to be restored to the original position (sections 5, 7 & 8).

GoP and Committee can direct owner of any special premises to properly preserve the premises and may compulsorily acquire the premises (sections 9 & 10). The Ordinance provides for prohibition of billboards, neon signs and other advertisements etc on or near the special premises without prior approval (sections 12).

The GoP may receive voluntary contributions and donations for the acquisition, preservation or restoration of special premises (sections 13). Whoever contravenes the provisions of the Ordinance may be liable to Imprisonment, which may extend to one year and with fine. The fine will be utilized to restore the premises to original condition (section 14).

4.1.36 The Punjab Land Preservation Act, 1900 (No. II)

The purpose of the Act is preservation of certain areas in the Province for conservation of sub-soil water or the prevention of erosion notified by the government (section 3). Surveys to be done to identify areas for preservation under the Act (section 13). In the notified area under section 3 the Government may prohibit certain Activities such as breaking up or cultivation of land, quarrying, cutting of trees, etc. (sections 4 & 5). If the Government considers it desirable to regulate the beds of Nalah may by notification declare that area as vesting in the Government. The Government can also suspend private rights in the area (sections 8 & 9). Whoever contravenes the provisions of the Act may be liable to imprisonment, which may extend to one month or with fine, which may extend to 100 rupees(section 19).

4.1.37 The Punjab Highway Ordinance, 1959 (No. XXXII)

The purpose of the Ordinance is to monitor, control and manage the highways in Punjab. The Highway Authority appointed by the provincial government shall maintain a common and public Highway, all roads, carriageways, cart ways, street and lanes together with bridle ways, foot path and adjacent pavements. Highway would also include culverts, bridges and works of every description etc. (section 2). The Authority shall have the power to construct, build and maintain all necessities along the highway e.g. roads, drainage, lighting, roadside trees. Any damaged caused to nearby property shall be compensated (sections 5 & 7). Authority may restore, replace or compensate in case damage is caused while construction (section 14). No other authority other than the Highway Authority can execute any aforesaid work without its approval (section 7).

The Authority may regulate kind, number and speed of vehicles (Human and Animal Power) (sections 5 & 15). No encroachment is allowed except with permission of the authority on payment of fee (section 6). Highway Authority may temporarily or permanently close the highway (sections 12 & 13).

All highways maintained by Highway Department or provincial property maintained by local bodies cannot be used to construct any means of access or to erect any building of 220 ft tall from middle of highway without prior approval. This restriction may also be applied to other highways. Anyone injured by these restrictions shall be compensated (sections 8, 9 & 10). Authority shall determine building line along the Highway (sections 16 & 17).

Provincial government will appoint Highway Authority, in case provincial governments fails to appoint the same, local authority will act as Highway Authority, otherwise provincial government will perform the needful (section 3). For the offences under the Ordinance, a police officer can arrest and Authority can fine up to 500 rupees and imprisonment up to 3 months (section 25).

4.1.38 The Punjab Highway Authority Act, 1989 (No. V)

The purpose of the Act is to maintain a unified system of motorways, super highways and highways in the province of Punjab. The Punjab Highway Authority shall consist of Chief Minister, chairman Planning and Development and other relevant personal. The Authority shall prepare for the approval of

the government comprehensive master plans for motorways, super highways etc. It is empowered to look into land use, zoning and land reservation, transport, communications & works, etc. (section 5). The Authority may require a government agency within whose jurisdiction any particular aspect of development scheme lies to execute such schemes (section 10). The Authority may execute scheme, which have not been carried out by the relevant government agencies (section 11).

4.1.39 The Punjab Graveyards (Preservation and Maintenance) Act, 1958 (No. XXV)

The Act is for preservation and maintenance of graveyards in Punjab. The provincial government may declare and notify limits of a graveyard. Any person aggrieved of the same may apply to the government (sections 5 & 6). The GoP for the use of graveyard and for any other ancillary matter shall hold graveyards in trust. The appointed committee shall protect the graveyard from encroachments and shall be kept and maintained in good condition (sections 13 & 14). The graveyard scheme shall be drawn by the Committee (section 15).

4.1.40 The Miani Sahib Graveyard Ordinance, 1962 (No. XLIV)

An Ordinance to promote the functions of the Lahore Graveyard Committee. All possession falling under Miani Sahib Graveyard shall vest in Lahore Graveyard Committee under West Pakistan Graveyard (Preservation and Maintenance) Act, 1958. Whoever contravenes with the provisions shall be liable to imprisonment, which may extend to three years or with fine extending to 5000 rupees or both.

4.1.41 Punjab Soil Reclamation Act, 1952 (No. XXI)

An Act to provide for reclamation and improvement of areas damaged by *thur* and *sem* for preventing further damage and maximizing agriculture production. To implement the provisions of this Act, a Punjab Land and Water Development Board is constituted (sections 3 and 4). The Board frames schemes for reclamation of a local area or for prevention of *thur* or *sem* (salinity and water logging) (section 17). The government has power to sanction, reject or return any scheme framed by the Board. The Board may also modify the scheme sanctioned by the provincial government on its own if it is for less than five lacs otherwise with approval of the government (sections 21 and 23).

Once a scheme is sanctioned in an area all underground water shall come under the control of the Board except for water used for domestic use and for livestock. The Board has the power to order tube-wells or wells closed down for betterment of area (section 26). Whoever contravenes with the provisions of the Act shall be liable of fine not exceeding 500 rupees.

4.1.42 The Punjab Development of Damaged Areas Act, 1952 (No. XV)

The Act provides for development of damaged areas in Punjab. The Government may declare any local area or part of local area as damaged area. An improvement Trust established under Punjab Town Improvement Trust Act, 1922 may frame a scheme or schemes for the development of damaged areas. The schemes may include demolishing of buildings, relaying out of any land, alteration of streets, creating open spaces in interest of the residents, raising, lowering or reclamation of land, construction of drainage, water-supply etc (section 4). Land may be acquired through application to the collector and proper compensation shall be paid for the land. Whoever contravenes with the provisions

of the Act and obstructs the acquisition of the land shall be punishable with an imprisonment up to two years or liable to a fine not exceeding 1000 rupees or with both.

4.1.43 The Punjab Land Utilization Authority Ordinance, 1981 (No. VI)

An Ordinance establishes Land Utilization Authority in the province of Punjab. The authority may take temporary control of certain culturable wasteland for execution of approved projects. The authority may take over for limited period not exceeding ten years the control and management of uncultivated state land not covered by any scheme, or the land of any person, including that of a charitable trust, a corporate body etc (section 7). The Authority may make schemes for any land which has not been used for two years and which is capable of being cultivated (section 8). The Authority has the power to give loans to individuals who desire to cultivate their land (section 14-A).

4.1.44 The Punjab Public-Private Partnership for Infrastructure Act, 2010 (No. IX)

The Act regulates the infrastructural projects implemented through Public Private Partnerships (PPP) (section 2). The list of infrastructure sector for which the projects can be made is given in schedule I, which includes education facilities, health facilities, housing, industrial estates, roads, and power generation facilities, etc(schedule I read with section 2).

One of the essentials for considering any proposals for the government agency responsible for a project to be carried out under the PPP is the EIA report under PEPA. The government agency while considering a bid has to make the EIA an essential part of consideration to grant a partnership agreement and subsequent loans. (More details on para 3.6.15)

4.2 AGRICULTURE AND LIVESTOCK

Legislation governing the agriculture sector aims to facilitate farming and related Activities. No general legislation exists to establish a framework governing agricultural Activities in the province. The laws do not provide policy guidelines for environmentally friendly agricultural practices or prescribe measures to mitigate the environmental impacts of agricultural inputs and Activities. The laws contain no provisions that are specifically related to improving or protecting the environment, and provide no incentives for farmers to employ environmentally friendly agricultural processes or techniques.

4.2.1 Punjab Local Government Ordinance, 2001 (No. XIII)

Certain Activities in the agriculture sector have devolved to local government level (section 14, read with the first schedule, part A). The “district agriculture office” handles matters related to agriculture (extension), soil fertility and conservation, on-farm water management, and livestock (first schedule, part C). In city districts, moreover, the provincial government may establish an office for “environment control”, including the control of soil pollution (section 35, read with the first schedule, part D). For the purposes of the PLGO, land is defined to include land that is fallow or is under cultivation (section 2(xiv)).

Local governments may prohibit the cultivation of any crop considered to be “dangerous to the public health”(section 195, read with the sixth schedule, item 19). In addition, they may determine species considered to be agricultural pests and provide for their destruction (ibid). They may also reclaim low-

lying areas (sixth schedule, item 97). The local government may prepare and implement schemes for prevention of land pollution (section 195, read with the sixth schedule, item 48)

General powers of local governments include prohibiting of keeping cattle, establishing and operating cattle and poultry farms, impounding trespassing animals and regulating offensive and dangerous articles (section 195, read with the sixth schedule, items 2, 4, 6, 10 & 44). They may also establish and operate veterinary hospitals, and take measures to prevent the spread of contagious diseases among animals (sixth schedule, item 5).

Farm produce market committees are set up by the zila council (section 39(m)) while the tehsil municipal administration controls land use, including agricultural use (section 54(1)(d)). The tehsil council may levy fees for cattle fairs and agricultural shows (section 67(i), read with the second schedule, part III).

The maximum penalty under the PLGO is three years' imprisonment and/or a fine of 15,000 rupees, in addition to a fine of 1,000 rupees for each day that the offence continues to be committed, for cultivating agricultural produce by using sewage, or using manure that is injurious to public health or offensive to the neighborhood (sections 141–143 and 147, read with the fourth schedule, part I, items 11 and 15). Lesser penalties apply for allowing an irrigation channel to become polluted with sewage or "other offensive matter", failing to keep cultivated lands free of plastic bags or other "non perishable materials", failing to clear away vegetation declared to be "injurious to health or offensive to the neighborhood", and a range of matters related to trespass and damage caused by cattle and other animals (section 141(2)(c), read with the eighth schedule, items 3, 5, 6, 16, 22, 25 and 41). These offences are punishable with an immediate fine but may also incur imprisonment for up to six months and/or a fine of 5,000 rupees in the case of repeated offenders.

Local councils may frame by-laws governing agricultural development, farm produce markets, the use of sewer water for farming, and the prevention of soil pollution (section 192(2), read with the fifth schedule, part II).

Citizen community boards may be established under PLGO to establish farmers' cooperatives (sections 98(1)).

4.2.2 Punjab District Government Rules of Business, 2001

The grouped district agriculture office is responsible for soil fertility and conservation, farm water management, livestock, and agriculture extension (schedule II, item 2). Specific functions in this area include the implementation of a "crop production strategy" and agriculture laws (schedule II, items 2(i)(c) and 2(i)(g)), the prevention of animal and poultry disease (item 2(ii)(a)), implementing measures to prevent soil erosion (item 2(iv)), and preparing "site specific fertilizer recommendations" (item 2(v)).

4.2.3 Pakistan Environment Protection Act, 1997 (No. XXXIV)

The Act provides for regulation of "agricultural waste". It prohibits discharge of "waste" which is in excess of national environment quality standards (NEQS- section (xxix)) or ambient water and land standards established by the environment protection agency (section 6 (1) (g)). Definition of "waste" (section 2 (x1v)) includes agricultural waste and "agricultural waste" is defined as "water from farm and agricultural activities including poultry, cattle farming, animal husbandry residue from the use of fertilizers, pesticides and other farm chemicals" (section 2 (ii)). So far NEQS are only established for liquid standards for municipal and industrial activities and gaseous emissions from industries and

motor vehicles. Further, no land or ambient standards provided by PEPA have yet been set by the environment protection agencies.

PEPA also regulates “hazardous substances” through licenses (section 14). “Hazardous substance” is defined as any substance except for pesticides that by reason of its chemical activity, or toxic character, etc, adversely effects the environment (section 2 (xviii)). “Adverse environmental impact” is also defined in the Act and includes “damage to human health and safety” and damage to biodiversity (section 2 (i)). Under PEPA the environment protection agency may regulate fertilizers and other agricultural chemicals, harmful for the human health or the environment, other than pesticides that are specifically excluded from its jurisdiction.

The ambient water and land standards are still not established, however, the environment agencies have the power to establish water standards for agricultural use, etc.

Prohibition to discharge industrial and municipal liquid effluents in excess to NEQS may also benefit agricultural practices, human health and soil conservation and fertility, etc.

Lastly the environmental impact assessments are required in case of any change in land use or water use (section 12, read with 2 (xi) & (xxxv))

4.2.4 Pakistan Environmental Protection Agency(Review of IEE/EIA) Regulations, 2000 SRO 339(1)/2000 dated 13 June 2000

The regulations¹⁹ require that an IEE is undertaken prior to the establishment of large-scale poultry and livestock farms and agricultural packaging and warehousing operations (schedule I, part A read with regulation 3).

4.2.5 The Punjab Agricultural Pests Ordinance, 1959 (No. XXVIII)

The Ordinance is to eradicate agricultural pests in the province of Punjab. The provincial government is empowered to notify the areas where the Ordinance shall apply. When the provincial government notifies any area to be affected area by any agricultural pests, and it appears that immediate action is necessary, the provincial government may take necessary remedial and preventive measures and may recover the costs from the occupier (section 9).

The provincial government may prohibit use of such agricultural methods that help the spread of agricultural pests through notifications (section 3). These instructions can be general or specific for any particular crop (section 3). Further, the provincial government may also prohibit the transport and sale of any infested/infected crops (section 3). The provincial government is empowered to notify inspectors to carry out the purposes of the Ordinance and their powers are also provided (section 5 & 6). List of agricultural pests regulated is given in the schedule of the Ordinance (section 2 (b) read with schedule). Infested/infected crops are defined as crops affected by any agricultural pests.

Further every occupier of land where any crop is cultivated is required to carry out the “preventive measures” that are “prescribed” by rules made under the Ordinance (section 4). “Occupier” is defined as the person in Actual possession of land, his manager or anyone authorized to represent the occupier; land holder on lease; tenant; or pattadar (section 2 (g)).

¹⁹ General summary at footnote 15

The powers of the inspectors include seizure and destruction of infected/infested crops and giving directions to the occupier not to sell or dispose of collect, or move the seized crops (section 6). The inspector is also empowered to look into whether preventive measures prescribed by the rules are followed by the occupier and to give notice to the occupier if such measures are not carried out. The Ordinance allows the occupier to appeal against the notice of the inspector within 7 days of the notice to the executive district officer (agriculture). In case the occupier fails to adhere to the notice, or the decision of the appeal the inspector may himself carry out the preventive measures at the cost of the occupier (section 7 & 8).

Penalty for contravention of section 3 and 4 is fine up to 50,000 rupees and not less than 25,000 rupees and for every subsequent offence the penalty is imprisonment not less than 3 months and up to 6 months and/or fine not less than 50,000 rupees and up to 100,000 rupees (section 10). For all other contraventions of the Ordinance or the rules made there under, the penalty is fine of up to 50,000 rupees and not less than 25,000 rupees (section 10).

The provincial government is empowered to make rules and amend the schedule (section 12 & 15)

4.2.6 West Pakistan Agricultural Pests Rules, 1960

These rules were framed under section 15 of the West Pakistan Agricultural Pests Ordinance, 1959. They prescribe specific “preventive measures” with respect to various crops (sections 4–9) and lay down procedures for crop inspections (section 10). Crops specified in the rules include rice, maize, cotton, sugarcane, and fruit-bearing plants or trees.

4.2.7 Agricultural Pesticides Ordinance, 1971 (No. II)

This federal Ordinance regulates the import, manufacture, formulation, distribution, sale and use of pesticides. The subject was technically a residuary matter under the Constitution of 1962, where the federal government retained the right to legislate on such matters under specified conditions (Article 131(2)). Accordingly, the preamble to this Ordinance states that it was promulgated in “the national interest of Pakistan in relation to the achievement of uniformity”.

Only pesticides that have been registered with the federal government may be imported or sold (section 4). One of the conditions for registration is that the chemical in question, when used according to the manufacturer’s instructions, should not cause damage to any vegetation other than weeds (section 5). The definition of the term ‘weed’ as “any plant which grows where not wanted” (section 3(s)) is so broad as to be counterproductive.

The Ordinance establishes a technical advisory committee, makes provisions for the inspection of pesticides and the employment of analysts, and sets up pesticides laboratories (sections 12–15). It contains no provisions to control or monitor the use of pesticides over extended periods of time, or to determine the long-term impact of pesticides on the environment, although it does contain a provision to protect human and animal health. Section 5(4)(d) states that a chemical, when used according to the manufacturer’s instructions, should not be “injurious to vegetation, except weeds, or to human or animal health”.

Maximum penalties under this Ordinance are a fine of 5,000 rupees or imprisonment for a term of two years (section 23). The federal government may delegate its powers to provincial governments or to government officials (section 29).

4.2.8 Punjab Essential Articles (Control) Act, 1973 (No. XVII)

Under the Act, the provincial government, so far as it appears to it to be necessary or expedient for maintaining or increasing supplies of any essential article, or for securing its equitable distribution and availability, or for controlling and fixing the prices of an essential article may, by notified order, provide for regulating or prohibiting the production, acquisition, treatment, keeping, storage, movement, transport, supply, distribution, availability at fair price, disposal, use or consumption thereof, and trade and commerce therein (section 3). "Essential articles" include fertilizers (section 2 (c) read with schedule).

Punishment for contravention under the Act is imprisonment for a term that may extend to three years and/or with fine that shall not be less than the value of the essential articles in respect of which the order has been contravened (section 6). Offences under the Act shall be cognizable and non-bailable (section 10).

Under PLGO the CDG/district government is responsible for the enforcement of this Act (section 141 (6) read with tenth schedule item 5).

4.2.9 The Punjab Fertilizers (Control) Order, 1973

The order is passed under the Punjab Essential Articles (Control) Act, 1973. Primarily it is a law to facilitate the availability of fertilizers for the users. It regulates trade and sale of fertilizers and provides for who shall be eligible to carry on the business of fertilizers, price of fertilizers, disposal of fertilizers, description and quantity reporting requirements, restriction on movement of fertilizers, etc.

The order provides no regulation for the protection of the environment. A provision that can be indirectly helpful for environmental concerns is the requirement of providing description of fertilizers to the relevant authority (item 5).

Under PLGO the CDG/district government is responsible for the enforcement of this Act (section 141 (6) read with tenth schedule item 6).

4.2.10 The Foodstuffs and Fertilizers (Cancellation of Authorizations and Dealership) Ordinance, 1978 (No. XXI)

Under this Ordinance, the provincial government is empowered to terminate any dealership, granted to any person, under the Punjab Fertilizers (Control) Order, 1973 (section 3). Termination of dealership requires no notice and can be done notwithstanding anything contained in any other law for the time being in force or in any contract, agreement, order or notification. Further, no compensation is payable for the termination of any dealership (section 3).

4.2.11 Punjab Soil Reclamation Act, 1952 (No. XXI)

The Act is for the speedy reclamation and improvement of the areas damaged by thur and sem and for preventing further damage and for maximizing agricultural production (preamble).

"Reclamation" under the Act is defined as rendering thur and sem lands free from excessive salts and water respectively so as to make them fit for normal cropping (section 2 (xviii)). "Thur" is defined as salt

efflorescence at the surface of the land rendering the surface white, ash coloured, black or brown, or not discoloured but presenting an oily appearance (section 2(xxvi)). "Sem" is defined as the rise of sub-soil water-table so high that the water Actually oozes out of the land or the land remains constantly damp (section 2 (xxii)).

The Act provides for establishing a Punjab Land and Water Development Board for carrying out the purposes of the Act. The board comprise of a chairman appointed by the provincial government; Secretaries of departments of Finance, Irrigation, Agriculture, Co-operation, Basic Democracies, and Local Government; chairman Punjab WAPDA; and chairman Punjab Agricultural Development Corporation (section 3 & 4).

The board may on its own motion or on the application of any owner or any person interested in land within a local area frame or require a department or any other agency to frame, a scheme for reclamation of the local area or part thereof or for prevention of the spread of thur or sem (section 17). "Local area" means area notified by the provincial government for the application of the Act (section 2 (xiv) read with section 27). Under such schemes the board is empowered to do number of Acts including: breaking up, cultivation, afforestation or plantation of lands, and the raising, lowering or reclamation of any land for the production of foodgrains, fruits, etc; draining of villages and land and providing drain systems; providing for fisheries, poultry farms, live-stock farms, etc; installation, management and maintenance of tube-wells and lifting and disposal of underground waters by other means; doing all Acts intended to promote the health, well being and prosperity of the residents of a local area, including the soil conservation and preservation from injury or pollution of rivers and other sources and means of water-supply; advances to the owners, occupiers or tenants of land comprised in the scheme for breaking up and cultivation of land, construction of watercourses, digging drains, laying ,sinking of wells, etc; replacement of canal water-supply by tube-well or open well; carrying out of lining of channels in consultation with the Irrigation Department; and carrying out of research work relating to soil reclamation through any department where the facilities exist or can be provided for (section 17).

Notwithstanding anything contained in the Canal and Drainage Act, 1873, under the afore mentioned schemes, the board may also provide for: the improvement, alteration, extension or curtailment of any watercourse; the transfer of any area from one source of irrigation to an other; the temporary increase or decrease of water allowance to any area; the alteration, amendment or cancellation of any order already in force regarding the distribution of water on any water-course or the mutual rights or liabilities in respect of the use, construction or maintenance of a water-course; the prohibition of growing of any crops or laying down any specific crop rotation; the application of type and quantity of manuring; and the construction of any field drains and drainage works (section 17 (xx)).

Once a scheme has been framed, the board is responsible for informing all the relevant stakeholders. The provincial government grants approval of schemes objected by any one (sections 18-21). As soon as a scheme for a local area or part thereof is sanctioned as notified, the use of underground waters in that area except the water used for domestic purposes or for watering livestock shall come under control of the board (section 26).

For carrying the schemes under the Act, the board may direct: leveling, terracing and raising embankments of fields; afforestation; execution of earthworks in fields or ravines; construction of surface field drains or sub-surface drains; training of streams; field research; permitting sitting of tube-wells and boring and use of water there from in place of that of canal; sowing of such crops with specific rotation to protect the land from the deteriorating Action of salts or water, sub-soil or otherwise or for the reclamation of such area; direct the growing of a particular kind or type of crops, trees, bushes or grasses in a particular area; and integration of surface and sub-surface irrigation supplies; (section 28)

Further, the board may regulate, restrict or prohibit: clearing or breaking up of land for cultivation; quarrying of stone and the burning of lime or charcoal and extraction of salts; grazing, herding, parking

and retention of cattle; felling, girdling, lopping, tapping or burning of any tree or timber; and kindling, keeping or carrying of any fire (section 28).

It may also undertake the breaking of land, planting of trees, construction of water-courses and do all necessary Acts to bring land vested in the board under cultivation; make arrangements for the marketing of the produce and manufactures of the local area; and promote and undertake research on any matter in furtherance of the objects of this Act (section 28).

The Act provides for penalty for disobedience and states that where under the Act or under a notice, summons or order, the public or any person fails to do what is required, he shall be liable to a fine not exceeding 500 rupees for every such failure, and in the case of a continuing breach, to a further fine which may extend to 50 rupees for every day after the date of the last conviction during which the offender is proved to have persisted in the breach provided such failure is not an offence punishable under any other section of this Act or any other law for the time being in force (section 55). The Act further provides penalty for removing machinery (50 rupees fine- section 62); penalty for obstructing land reclamation procedure (200 rupees fine or 2 months imprisonment- section 63); and penalty for unauthorized cultivation, felling or destroying standing trees, and construction of unauthorized water channels (section 65).

The Act also provides that "when all schemes sanctioned under this Act have been executed or have been so far executed as to render the continued existence of the board, in the opinion of the government, unnecessary, or when in the opinion of the government it is expedient that the board shall cease to exist, the government may by notification declare that the board shall stand dissolved" (section 79).

4.2.12 The Punjab Rice (Restrictions on Cultivation) Ordinance, 1959 (LVIII)

The Ordinance gives powers to BOR, Punjab, to regulate cultivation of rice in the province, in order to check the increase of water logging, salinity, seepage and other damages of cultivation of rice (section 3 read with the preamble).

Any contravention of the Ordinance or the rules/directions made there under are punishable with fine which may extend ten times the land revenue assessment chargeable for the crop and/or simple imprisonment up to 6 months (section 4). Punishment can be imposed only on a complaint of any revenue officer.

4.2.13 Sugar-Cane Act, 1934 (No. XV)

This federal law regulates the price of sugarcane intended for use in sugar mills (section 3). All powers under this Act lie with provincial governments (section 7), which may make rules exempting factories from the provisions of this law (section 8). The maximum penalty under this law is 2000 rupees fine (section 7).

4.2.14 Sugar Factories Control Act, 1950 (No. 1)

Primarily the Act is about ensuring the quality and supply of sugarcane to sugar factories.

4.2.14 The Punjab Irrigation and Drainage Authority Act, 1997 (XI)

PIDA created under the Act is empowered to exercise all the powers under the Soil Reclamation Act, 1952 (section 5 (3)).

Further, it is also empowered to formulate, implement, and regularly update policies, studies and research programs to solve the problem of water logging and salinity and to develop irrigated agriculture in the province (section 5 (28)).

4.2.15 The On-Farm Water Management and Water Users Association Ordinance, 1981 (No. V)

The Ordinance is to provide for on-farm water management, conservation and optimum utilization of irrigation water sources and formation of water users' associations in the province of Punjab (Preamble).

Basically the Ordinance is about reconstruction, maintenance, or improvement of watercourses. The field officer is to pass orders of performing such works directing all the irrigators jointly responsible for carrying out the construction work or making use of the watercourse. Every irrigator responsible for such works on watercourses shall execute his share of work and shall be responsible for costs accordingly. If the persons responsible for carrying out the works fail to do the same, the field officer may take necessary steps for carrying the works. Where the irrigators responsible for working on the watercourse have formed and registered as an association under the Ordinance, the field officer provide an opportunity to such association to carry out the job and in case it fails to do the same, the field officer may take necessary steps to get the work done at the cost of the irrigators (section 3).

In the Ordinance "Watercourse" means any channel which is supplied with water from a canal but which is not maintained at the cost of government). "Irrigator" is any person for the time being directly deriving benefit by such irrigation and includes a landowner, tenant or lessee of such land. "Field officer" is defined as the district officer on-farm water management or any other officer empowered as such by government. "Association" is a water users association under the Ordinance (section 2). The Ordinance also provides for formation, registration and cancellation of registration of associations (section 6 & 10).

4.2.16 Seed Act, 1976 (No. XXIX)

This federal Act regulates the production and sale of seeds, and establishes various bodies to oversee and manage the seed industry. Although the subject is technically a residuary matter under the Constitution (Article 142(c)), the federal government was in this case empowered to frame the law by means of resolutions under Article 144 of the Constitution that were passed by all four provinces. Provincial assemblies retain the right to amend or repeal this Act.

The provisions of this law apply to food crops, edible oil, fodder and cotton seeds (section 2(p)). The National Seed Council is responsible for policy and overall supervision of the seed industry, including arrangements for the maintenance of the genetic potential of seeds and the development of seed production farms (section 4). The Federal Seed Certification Agency carries out field inspections, sampling and testing, and provides technical advice (section 6). The National Registration Agency assesses seed varieties, maintains a list of "registered" varieties and provides information about seed varieties (section 8).

The federal government specifies the varieties of seeds approved for production, sets germination and purity standards, and regulates the labeling of certified seeds (section 10). Only registered varieties that conform to these standards may be sold or distributed (section 11). Seed producers,

distributors and sellers must obtain a certificate from the government (section 13). Seed analysts are authorized to inspect production farms (section 17) while inspectors and certification officers are awarded wide powers to inspect packaged seeds (sections 19 and 20).

The federal government may make rules to carry out the purposes of this Act (section 29) and delegate its powers to a subordinate officer or authority, or to provincial governments (section 28). The law requires provincial governments to establish provincial seed councils to carry out functions assigned to them by the federal government (section 9).

4.2.17 The Punjab Seeds and Fruit Plants Ordinance, 1965 (No. XIII)

The Ordinance is to provide for better production and distribution of seeds and fruit plants of high quality in the province of Punjab (preamble).

The Ordinance provides that the provincial government may notify: the local areas where certified seeds, fruit plants and nurseries may be raised; species of seeds and fruit plants which may be raised by a registered grower in such areas; the standard which a seed, fruit plant and nursery shall attain for being certified under the Act (section 3). "Fruit plant", "seed" and "nursery" are defined in the Ordinance (section 2)

Further the Ordinance provides that any person desirous of raising certified seeds, fruit plants and the nursery on commercial basis may apply to the competent authority for registration under the Ordinance. If approved by the competent authority the competent authority shall issue to such person a registration certificate in the prescribed form specifying the seeds, the fruit plants and the nursery thereof which he shall be entitled to raise and he shall become a registered grower under the Ordinance (section 4). "Competent authority" means the person authorized by the provincial government to exercise the powers and duties under the Ordinance (section 2 (ii)). The Ordinance also provides for rights and obligations of the registered grower (section 5)

On the application by a registered grower, the competent authority shall inspect his crop of seeds, godowns of seeds, progeny garden, fruit plants and the nursery and if satisfied that the seeds, fruit plants and nursery raised by the registered grower have attained the standard notified under section 3, the competent authority shall certify such seeds, fruit plants and nursery as seeds, fruit plants and nursery, as the case may be, of high quality (section 6). The Ordinance also provides for the sale and distribution of certified seeds, fruit plants and nursery plants (section 7).

Under the Ordinance, if a registered grower fails to grow seeds and fruit plants of high quality or nursery thereof, the competent authority may, after giving notice to the registered grower and giving him an opportunity of being heard, cancel the registration. If a registered grower maintains a nursery that is below the standard notified under section 3, the competent authority may, after giving an opportunity of hearing, seize the nursery and confiscate it. If a registered grower contravenes any of the provisions of the Ordinance, he shall also be liable, on conviction before a magistrate of the first class to a fine not exceeding 1000 rupees. Whoever, not being a registered grower, raises a nursery of fruit plants of any quality on commercial basis shall be liable on conviction before a magistrate of the first class to a fine not exceeding 1000 rupees and, where the offence is continued after conviction, to a further fine of 50 rupees for each day during which the offence is continued (section 8).

4.2.18 The Punjab Seed Corporation Act, 1976 (No. X)

The Act provide for the establishment in the province of the Punjab, a corporation for the production, procurement, processing, marketing and distribution of seeds (section 3). The administration and management of the corporation and its affairs shall vest in a board to be constituted by the provincial

government (section 4)

Main functions of the corporation include: procurement and import of pre-basic seed; production and proper multiplication of basic seed; multiplication, procurement, processing, bagging and storage of certified seed; adequate marketing of certified seed through both the public and private sector; export of the certified seed when possible after meeting the national requirements; taking over and managing the Punjab Agricultural Development Supplies Corporation Seed Farms as directed by the government; making suitable arrangements for the multiplication of seeds on private farms under its supervision; making suitable arrangements for the certification of seed; taking all measures to promote the establishment of the seed industry in the province; rendering technical advice and other services to its registered growers; and contributing towards the cost of any studies, services, experiment or technical research connected with the functions of the corporation and undertaken or done by any other person, agency or body. The Government may entrust any other functions that it may consider necessary to the corporation (section 15).

The provincial government may make rules for carrying out the purposes of the Act and the board may make regulations subject to the Act and rules made there under (section 24 & 25)

4.2.19 Cattle-Trespass Act 1871(No. I)

This federal Act imposes penalties for damage to crops or public property caused by cattle. The term "cattle" is defined to include "elephants, camels, buffaloes, horses, mares, geldings, ponies, colts, fillies, mules, asses, pigs, rams, ewes, sheep, lambs, goats, and kids" (section 3). Although the law extends to the entire country, provincial governments have the power to exclude certain areas from its ambit (section 1). All powers under this Act lie with provincial governments, which may delegate their functions to a local authority or magistrate (section 31). Maximum penalties under this law are imprisonment for a term of six months and/or a fine of 500 rupees (section 24).

Under the provisions of the PLGO, union administrations are responsible for the enforcement of this Act (section 141(6), read with the tenth schedule, item 11).

4.2.20 The Punjab Goats (Restriction) Ordinance, 1959 (No. XLII)

Under the Ordinance, the provincial government may declare unlawful keeping, grazing or pasturing of goats on any land (section 3). Further, the provincial government may regulate the slaughter of goats including the proportion of the goats to the sheep that may be slaughtered in a slaughterhouse on any day (section 5).

Penalty for any of the contraventions is 6 months imprisonment and/or 500 rupees fine along with forfeiting of the goat (section 6)

4.2.21 The Punjab Animal Compound Feed and feed Stuff Ordinance, 2002 (No. LXVIII)

The Ordinance is to regulate the manufacturing and marketing of animals' compound feed and feedstuff in the Province of Punjab (preamble). "Animal" is defined as any species of poultry or livestock (section 2 (c)). The Ordinance gives a list of ingredients that can be included in the feed and the manufacturer can use any of such ingredients (section 3).

Manufacturing of compound feed and feedstuff can be done only under a license (section 4). When

selling the compound feed and feedstuff, there is a requirement to pack and label it in the prescribed manner. All the feed is required to conform to prescribed specifications and standards (section 7). There is a requirement to display on the bags the brand name, date of manufacture and nutritive composition of the feed (section 6 & 7).

The Ordinance prohibits the manufacturing, sale, etc of feed that is adulterated or misbranded (section 8). "Adulterated" feed means not conforming to the declaration made by the manufacturer or not conforming to prescribed standards (section 2 (b)). "Misbranded means misuse of registered trade name (section 2 (u)).

Penalties for manufacturing/selling feed without license, or misbranding is punishable with imprisonment up to 6 months and/or fine up to one hundred thousand rupees (section 18). Penalty for manufacturing or selling adulterated feed is imprisonment up to 3 months and/or fine up to 50,000 rupees (section 18).

4.2.22 The Punjab Animals Slaughter Control Act, 1963 (No. III)

The Act regulates the slaughter of useful animals (section3). "Animals" include bullock, bull, cow, buffalo, buffalo-bull, goat and sheep of any age (section 2). The term "useful animal" is defined as a female sheep or goat] below the age of one year and six months; a female sheep or goat] of the age exceeding one year and six months but not exceeding four years, which is pregnant or fit for breeding purposes;any female animal, other than sheep, or goat below three years of age; any female animal, other than sheep, or goatwhich is pregnant or in milk or fit for breeding purposes;any female animal, other than sheep or goat between three to ten years of age, which is fit for draught purposes; and any male sheep or goat below the age of two months (section 2).

4.2.23 The Punjab Livestock, Dairy and Poultry Development Bank Act, 1974 (No. III)

The Act provides for the establishment of a Livestock, Dairy and Poultry Development Board in the province of Punjab to establish, manage, control and run livestock, dairy, poultry and other allied projects in the public sector (preamble). Under the Act, the board is empowered to establish companies or to take measures itself to establish, manage and run livestock farms, stud farms, poultry farms, dairy farms, dairy plants including milk collection and chilling centers, quality testing laboratories for feed/livestock products, feed mills, slaughter houses, poultry processing, deep freezing and storing plants, quality testing, whole-sale and retail marketing and agencies of products of Livestock, Dairy and Poultry Development Projects on general or special order as government may give from time to time (section 13 read with the schedule).

4.2.24 The Punjab Milk Board Ordinance, 1963 (No. XXXVIII)

The Ordinance is to regulate the production and marketing of milk and milk products in certain areas of the province of Punjab and provides for establishing milk boards in such areas to carry out the purposes of the Ordinance (preamble read with section 3). One of the main functions of the board is to ensure that an adequate supply of milk and milk products of good quality is available to the consumers of milk and milk products in the local area and for that purpose to prepare and execute schemes for regulating production, marketing and distribution of milk and milk products (section 14).

4.2.25 The Punjab Agricultural Development and Supplies Corporation Act, 1973 (No. XXI)

The Act establishes an Agricultural Development and Supplies Corporation for the purpose of increasing agricultural production in the province of Punjab (preamble). The corporation succeeded the business, projects, undertakings and properties of the defunct West Pakistan Agricultural Development Corporation to the extent such business, projects, undertakings and properties stand transferred to the province of the Punjab on the dissolution of the West Pakistan Agricultural Development Corporation in pursuance of the West Pakistan Agricultural Development Corporation (Dissolution) Order, 1972 (P.O. No.5 of 1972).

Main powers of the corporation include: production, procurement, transport, storage and distribution to agriculturists and Agriculture Department of Government, seeds, fertilizers, plant protection equipment, pesticides, weedicides and agricultural machinery including tractors and tube wells, etc; on direction of the provincial government, take over and manage multiplication farms and fruit nurseries owned and managed by provincial government; make suitable arrangements of multiplication of certified seed on private farms; make suitable arrangements for certification of seed in such manner as may be prescribed; assist, encourage and promote the establishment of seed producing concerns; assist, encourage and promote the manufacture of improved agricultural machinery; assist, encourage and promote the establishment of industries for formulating or manufacturing of insecticides, pesticides or fungicides (section 18). Further, the corporation shall be responsible for preparing and submitting seed laws to government for promulgation; giving effect to seed laws; preparing and submitting schemes for distribution of fertilizers and pesticides to government for purposes of approval and publication; and giving effect to such approved schemes (section 18).

Under the Act, the provincial government has the power to make rules and the corporation has the power to make regulations for carrying the purposes of the Act (section 25 & 26)

4.2.26 Loans for Agricultural Purposes Act 1973 (No. XLII)

This federal Act regulates the procedure for acquiring agricultural credit from public- and private-sector banks (section 4). The federal government may make rules to carry out the purposes of this Act and delegate its powers to provincial governments (section 5).

4.2.27 West Pakistan Agricultural Bank (Recovery of Dues) Ordinance, 1959 (WP No. VII)

The Ordinance is basically to facilitate the agricultural bank established under the Agricultural Bank Act, 1957 in the recovery of its dues (preamble read with section 2).

The Ordinance allows the agriculturist or co-operative society defined in the Agricultural Bank Act, 1957 to pledge, mortgage, hypothecate or assign to the agricultural bank any movable or immovable property, in order to secure a loan advanced or to be advanced by the bank under the said Act. The bank is competent to recover its dues by disposal of any property pledged, mortgaged, hypothecated or assigned as aforesaid and nothing contained in any other law shall affect the rights or powers of the bank under the said Act (section 2).

4.2.28 The Punjab Agricultural Development Finance Corporation (Recovery of Arrears) Act, 1958 (No. XVIII)

The Act is to provide facilities to the Agricultural Development Finance Corporation established under the Agricultural Development Finance Corporation Act, 1952, for recovering its dues and provides for the agricultural concerns defined in the Agricultural Development Finance Corporation Act, 1952, to pledge, mortgage, hypothecate or assign to the Agricultural Development Finance Corporation any movable or immovable property, in order to secure a loan advanced or to be advanced by the said corporation under

the Agricultural Development Finance Corporation Act, 1952 (preamble read with section 2)

4.2.29 The Punjab Agriculturists' Loans Act, 1958 (No. XVII)

Under the Act, the provincial government may make rules as to: loans to be made to owners and occupiers of arable land for the relief of distress, purchase of land, cattle and seed and other agricultural purposes; and sale of seed on credit to owners and occupiers of agricultural land (section 2).

4.2.30 The Land Improvement Loans Act, 1883 (No. XIX)

The Act is to consolidate the law relating to loans of money for agricultural improvements by the government of Punjab. It extends to the whole of Punjab. "Improvement" means any work which adds to the letting value of land, and includes: the construction of wells, tanks and other works for the storage, supply or distribution of water for the purposes of agriculture, or for the use of men and cattle employed in agriculture; the preparation of land for irrigation; the drainage, reclamation from rivers or other waters, or protection from floods or from erosion or other damage by water, of land used for agricultural purposes or waste-land which is culturable; the reclamation, clearance, enclosure or permanent improvement of land for agricultural purposes; the renewal or reconstruction of any of the foregoing works, or alterations therein or additions thereto; and such other works as the BOR may, from time to time declare to be improvements for the purposes of the Act (section 4).

4.2.31 Agricultural Development Bank Ordinance 1961 (No. IV)

This federal law provides for the establishment of the Agricultural Development Bank of Pakistan and contains procedures governing the bank's operations, as well as a few provisions related to the purpose for which loans are issued and matters such as loan recovery. In issuing credit, the bank is to give preference to the needs of small agriculturists (section 21). The bank now operates under a new name, Zarai Taraqati Bank Limited. Its board of directors includes provincial representatives (section 9). Advisory committees established under this law operate at the provincial level (section 17), and both the federal and provincial government may guarantee loans (section 19).

It may also compel farmers to carry out "preventive measures" to eradicate pests or prevent their spread (section 4). The law contains no provisions to protect against the possible adverse effects of pesticide use, such as monitoring their impact on the environment over a prolonged period.

Violating government orders under sections 3 and 4 is punishable with a fine of 500 rupees for a first offence, and a fine of 1,000 rupees and/or three months' imprisonment for subsequent offences (section 10). The provincial government has the power to make rules under this Ordinance (section 15).

4.2.32 The Punjab Agricultural Research Board Act, 1997 (No. XIV)

The Act provides for the establishment of Punjab agricultural research board by the provincial government (preamble & section 2). The board has the power to take all such measures as it deems necessary for the promotion, development, and conduct of agricultural research in Punjab (section 3). Under the Act, "agricultural research" means research in respect of all subjects and Activities related to crops, plants, livestock & dairy development, poultry, fisheries, forestry, wildlife, ecology, range management, agricultural engineering, water management, irrigation and such other Activities and subjects as the government may declare as "agricultural research" (section 3).

The Act gives the composition of the board (section 4) and also provides that affairs of the board shall be conducted under the supervision and control of the provincial government (section 5)

4.2.33 The Punjab Land Utilization Authority Ordinance, 1981 (No. VI)

The Ordinance provides for establishing a Land Utilization Authority empowered to take over temporarily the control and management of certain culturable wasteland for the purposes of cultivation and proper utilization in the province of Punjab. The authority is empowered to survey and assess potentials of any such land, prepare schemes and projects for its proper utilization, execute approved projects and monitor their effective implementation to achieve the objectives, and also to motivate land owners to develop their culturable waste-land by providing credit facilities to them (preamble & section 7).

The authority is empowered to manage uncultivated state land not covered by any scheme, or the land of any person, including that of a charitable trust, a corporate body, a local authority, who, despite notice, fails to cultivate and/or develop it to the satisfaction of the authority within such period as may be laid down by the authority, and the uncultivated land of any person who volunteers to hand over the control and management of his land to the authority (section 7). For the management of any land taken over by the authority, it can undertake or arrange the implementation of the projects or schemes for the improvement, development, cultivation or proper utilization of such land, including soil and water conservation measures, installation of tube-wells, leveling and cultivation of such land, etc (section 7).

The Ordinance also lays down the procedure for takeovers by the authority (sections 8-14). Further the authority may grant loans to the landowners ready to undertake the development of their culturable wasteland for bringing the same under cultivation or for the improvement of such land. "Improvement" means any work which adds to the letting value of land and includes: installation of tube-wells or the construction of wells, tanks and other works for the storage, supply or distribution of water for the purposes of agriculture, or for the use of men and cattle employed in agriculture; preparation of land for irrigation; drainage, reclamation from rivers or other waters, or protection from floods or from erosion or other damage by water, or land used for agricultural purposes or waste land which is culturable; reclamation, clearance, enclosure or permanent improvement of land for agricultural purposes; etc (section 14-A). The Ordinance also provides a mechanism for the recovery of such loans (section 14-B).

The Ordinance also provides that the authority shall not be prevented from advancing loans through co-operative societies registered under the Co-operative Societies Act, 1923.

4.2.34 Pakistan Bio-safety Rules 2005 (SRO (I) 336(I)/2005 dated 21 April 2005)

These rules, framed under section 31 of PEPA 1997, regulate the manufacture, use, import, export and sale of GMOs for commercial use and research purposes (rule 2).

The National Bio-safety Committee, established under rule 4, performs a wide range of regulatory functions. These include establishing standards and procedures for the labeling of GMOs, ensuring compliance with national bio-safety guidelines, certifying laboratories, and carrying out inspections of research facilities (rule 5). The committee has the power to restrict or prohibit the import, export, sale, purchase or trade in any "living modified organism" that poses or may pose a threat to "public health, safety or [the] environment" (rule 5(c)). It is also required to inform institutions engaged in "genetic manipulation work" about developments in the field of bio-safety in order to avoid exposing "laboratory personnel, the community or the environment to undue risks" (rule 5(l)).

The rules provide for the establishment of a Technical Advisory Committee (rule 6) to “review and control” bio-safety measures adopted in large-scale research institutions and industrial facilities, and to provide technical feedback and guidance to both the bio-safety committee as well as commercial and research institutions (rule 7). The advisory committee monitors the release of GMOs into the environment, and oversees field applications and experimental field trials (rule 7(d)). It may prepare an emergency plan to handle a “major accident” but is not required to do so (rule 24).

Responsibility for reporting accidents “which may be harmful to the environment, nature or health or involve any danger thereto” lies with the institutions and individuals involved, whether or not their operations are licensed (rule 23). How such a requirement is to be enforced, particularly in the case of unlicensed or illegal activities, is not specified.

The “release” of GMOs, whether deliberate or unintentional, is not permitted under the rules (rule 20(1)). This protection clause is, however, weakened by the fact that the bio-safety committee is allowed to grant exemptions in “special cases” (rule 20(2)). Nor are field trials explicitly prohibited (rule 13(2)).

Under the rules, institutions working in the field of biotechnology are required to set up bio-safety committees (rule 8) and appoint biosafety officers (rule 10). Institutional committees perform a wide range of supervisory and advisory functions including risk assessment, the preparation of emergency response plans, and measures for the “appropriate” storage and movement of “regulated material” and “waste” (rule 9).

Risk assessment and field trials are to be carried out in accordance with the Cartagena Protocol on Bio-safety (2000) and Pakistan’s National Bio-safety Guidelines (rule 13). The same requirements apply to the import and export of GMOs (rule 17).

The import, export, sale, purchase or trade of GMOs can only be carried out with a license from the federal EPA (rule 11). But “production” activities involving GMOs, including “development, testing and experiments”, require the “consent” of the bio-safety committee (rule 19). Similarly, food prepared from GMOs and ingredients or additives containing GMOs may be produced, sold, imported or used with the “approval” of the bio-safety committee (rule 22).

Licenses, approved by the federal EPA, are issued for a maximum of four years and may subsequently be renewed for two years at a time (rule 15(2)). Licenses may be cancelled in cases where new information becomes available about the “harmful effects” of the GMOs in question, or where such GMOs cause damage to “the environment, nature or health” that could not have been foreseen at the time that the license was issued (ibid.).

4.2.35 The Punjab Agriculture Produce Market Ordinance, 1978 (No. XXIII)

The Ordinance provides for the better regulation of purchase and sale of agricultural produce (preamble). For that purpose it provides for the establishment of markets. A detailed list of commodities is given under the term “agricultural produce” and any other commodity may be added in the definition through notifications (section 2).

The provincial government has the power to exercising control over the purchase and sale of any agricultural produce in any area that shall be called notified market area, through a notification (section 3 & 4). The Ordinance further provides for establishing market committees for every notified market area by the provincial government (section 7).

Under PLGO the CDG/district government is responsible for the enforcement of this Act (section 141 (6) read with tenth schedule, item 8)

4.2.36 The Punjab National Calamities (Prevention and Relief) Act, 1958 (No. XXXIII)

The Act provides that whenever the province of Punjab or any part thereof is affected or threatened by flood, famine, locust or any other pest, hailstorm, fire, epidemic or any other calamity which, in the opinion of provincial government warrants Action under the Act, the government may, by notification, declare the whole or any part of the province, as the case may be, as calamity-affected area (section 3).

Under the Act, the provincial government may appoint a relief commissioner for the province. The government may confer on the relief commissioner the powers of a magistrate of the First Class under section 144 of the Code of Criminal Procedure, 1898; and powers under such other laws as government may consider necessary for carrying out the purposes of the Act (section 3-A).

The Relief Commissioner shall, with respect to the calamity-affected area, take such steps as he thinks necessary in order to maintain order, prevent, check or control the calamity or reduce the extent and severity thereof, or to provide immediate relief to the victims of the calamity in the calamity-affected area (section 4).

4.2.37 The Murree-Kahuta Development authority Act, 1986; The Bahawalpur Development Authority Act, 1991; The Dera Ghazi Khan development Authority Act, 1991;

Authorities created under these enactments are empowered to prepare, implement and enforce schemes for development of agriculture and irrigation facilities.

4.2.38 The Cholistan Development Authority Act, 1976 (No. XIV)

The Act establishes an authority for the speedy development and better administration of Cholistan area of Bahawalpur Division (preamble). Functions of the authority include breaking up and cultivation of land for the production of food-grains, fruits, vegetables, and fodder; providing mean of irrigation; work on ground water for irrigation; livestock, dairy, sheep, and poultry farms; promoting the health of the residents of Cholistan and their cattle heads and establishment of civil and veterinary hospitals and dispensaries; advancing loans to the owners, occupiers or tenants of land for breaking up and cultivation of lands, purchase of cattle and of agricultural implements and machinery, seed and fodder, cattle farm, and cattle sheds, and for any other purpose allied or subsidiary to agriculture (section 15).

4.3 EXTRACTIVE INDUSTRY—MINING, PETROLEUM

Under the Constitution exploitation of minerals other than oil, natural gas and raw materials for the nuclear industry is a provincial subject. The Provincial laws In Punjab relating to mining and processing minerals are scanty, not holistic, and hardly cater for environmental concerns such as safe disposal of waste, soil conservation, etc. At the most they are establishing statutory bodies for mineral development, prohibiting sand, gravel and limestone mining in certain areas and under the PLGO the district government is given few relevant powers such as the authority to put a stop to quarrying operations, including removal of stone, sand, earth or other material from the soil if such activity poses a nuisance or is considered to be dangerous to the residents.

The Punjab Industries (Control on Establishment and Enlargement) Ordinance, 1963 requires for approval of the provincial government for setting up or enlarging industrial undertaking and the government can reject such application if it is prejudicial to the national interest, or injurious to the health of or a source of nuisance for the residents of the local area for such undertaking. Although the law does not provide detailed mechanisms for screening industries, lacks in providing procedures and certain terms are not defined, still if used properly it can be of some benefit for the environmental concerns.

At the federal level, mining laws specify the respective jurisdiction of the federal and provincial governments, and provide for administrative matters, labour safety, and some environmental protections. Mining projects do, however, fall under the ambit of PEPA and, as such, are required to undergo a prior EIA. PEPA also regulates emissions and waste from industrial concerns and hazardous substances.

4.3.1 Punjab Land Revenue Act, 1967 (No. XVII)²⁰

This law provides for the preparation and maintenance of records-of-rights, the assessment and collection of land revenue, and a number of related matters. According to the provisions of this Act, all mines and minerals are government property (section 49). All quarries also vest with the government unless ownership is expressly provided for in the record-of-rights completed on or before 18 November 1871 (section 50(1)). For records prepared after that date, these interests vest with the landowners concerned unless government ownership is expressly provided (section 50(2)). Third parties whose rights are affected in such matters are entitled to compensation (section 51).

4.3.2 Punjab Industries (Control on Establishment and Enlargement) Ordinance, 1963

The Act provides that whoever wants to establish or enlarge an industrial undertaking would require a written permission by the provincial government (section 3). It further provides that provincial government cannot reject such application unless the government is satisfied that the grant of permission to such person will be prejudicial to the national interest, or injurious to the health of or a source of nuisance for, the residents of the local area in which the industrial undertaking is proposed to be set up or to be enlarged is situated (section 3).

4.3.3 Punjab Mineral Development Corporation Act, 1975 (No. XXXI)

The Act provides for the establishment of Punjab Mineral Development Corporation for the promotion of mineral development in the province (section 3 read with preamble).

The main function of the corporation is to prepare schemes for the development, surveying, prospecting, exploring, mining, processing, industrial exploitation and purchase and sale of minerals including their import and export and for the improvement of communications, water supply, power and such other ancillary matters as may be conducive to the attainment of these purposes in the areas selected by the corporation for any such development and submit the same to government for approval (section 18).

4.3.4 Punjab Minerals (Cancellation of Sand Leases in Restricted Areas) Ordinance, 1984

²⁰ The west Pakistan Act continued in force in Punjab (Article 19, Province of West Pakistan (Dissolution) Order (P.O. I of 1970)

The Ordinance empowers the provincial government to cancel mining leases of ordinary sand within the restricted area and prohibits future sand leases in the restricted area (section 3 & 5). Restricted area is defined as the entire width of the river Ravi for a distance of two miles upstream and two miles downstream from the shahdara railway bridge, and any other area notified by government as a restricted area within a radius of 1500 ft. from any part of: a flood bund along a river or a water channel or of a spur projecting into a river; any irrigational work; a defense installation; any other public work; an historical monument or work of archaeological importance; a residential or commercial locality; and reserved forest (section 2).

4.3.5 Punjab Minor Mineral (Cancellation of Leases) Act, 1977 (No. VII)

The Act terminates all leases of minor minerals granted by any officer or authority, other than the deputy commissioner with immediate effect (section 3). "Minor minerals" means ordinary sand, ordinary stone and gravel and includes the limestone aggregate (section 2)

4.3.6 Punjab Local Government Ordinance, 2001 (No. XIII)

Although the subject of extractive industry has not been devolved to the district level, local governments have limited powers with respect to certain Activities related to the sector.

General powers of local governments to regulate the "improper" use of land include the authority to put a stop to quarrying operations, including the "removal of stone, sand, earth or other material from the soil" in any area if such Activity poses a nuisance, is likely to create a nuisance, or is considered to be dangerous to the residents of the area (section 195, read with the sixth schedule, item 23). In addition, local governments are empowered to regulate "dangerous and offensive" trades by issuing licenses (Sixth Schedule, item 44). Operations considered to be dangerous or offensive are listed in the annex to the Ordinance and include the burning or grinding of limestone or "metal stone", marble cutting and polishing, and casting of heavy metal such as iron, lead, copper and brass (annex, items 13, 17 and 22). Under the provisions of the PLGO, written permission is required from the local authorities before "digging" can be carried out in public land (sixth schedule, item 22).

Local governments may also prepare and implement schemes to prevent pollution, including dust or other substances emitted from stone crushing machines (section 195, read with the sixth schedule, item 48). Local councils may frame by-laws to regulate the excavation of "earth, stone or other material" (section 192(2), read with the fifth schedule, item 35).

Quarrying or blasting in a manner that is dangerous to those passing by or living or working in the vicinity is punishable with a maximum penalty of three years' imprisonment and/or a fine of 15,000 rupees, in addition to a fine of 1,000 rupees for every day that the offence continues to be committed (section 141(2)(a), read with the fourth schedule, part I, item 28). Excavating earth, stone or any other material within a specified distance from a residential area, and "digging" on public land without permission from the relevant authorities, are punishable with an immediate fine but repeat offenders may also incur imprisonment for up to six months and/or a fine of 5,000 rupees (section 141(2)(c), read with the eighth schedule, items 11 and 45).

4.3.7 The Bahawalpur Development Authority Act, 1991; The Dera Ghazi Khan development Authority Act, 1991; The Cholistan Development Authority Act, 1976

The development authorities created under these laws are empowered to prepare, implement and enforce schemes for development of mineral resources.

4.3.8 Regulation of Mines and Oil Fields and Mineral Development (Government Control) Act, 1948 (No. XXI)

This federal Act specifies the rule-making jurisdiction and powers of the federal and provincial governments for matters related to the regulation of mines, oil fields and mineral deposits. The federal government makes rules related to the development of nuclear substances, oil fields and gas fields while provincial governments make rules related to other minerals and their extraction (section 5). Rule-making power includes subjects such as exploration and prospecting licenses, the payment of royalties and license fees, refining ores and mineral oil, and the storage and distribution of mined materials (section 2). All powers under this law lie with the “appropriate government”—the federal government in the case of radioactive minerals, oil and gas, and the provincial governments for all other mines and minerals (section 6).

4.3.9 Pakistan Mining Concession Rules, 1960

The rules are framed under Regulation of Mines and Oil Fields and Mineral Development (Government Control) Act, 1948 and provide for limited environmental protection. They prohibit cutting/injuring of trees reserved in the leased area (rule 59) and prohibit the construction of buildings and surface operation by the lessee upon any public place, village site or public road (rule 60). The rules also require the lessee to pay compensation in case of damage to the mineral property due to unscientific working, negligence, etc (rule 70). Operations in reserved/protected forests are not completely banned under the rules, however mining in the reserved/protected forests is subject to conditions imposed by the central government (rule 72).

4.3.10 Mines Act, 1923 (No. IV)

This federal law, which is largely administrative in nature, regulates mining operations and mine management, and contains provisions regarding the health, safety and working conditions of mine labour. The power to make rules lies with the “appropriate government” (section 29), defined as the federal government in the case of mines extracting radioactive material, oil, gas and flammable substances, and the provincial government for all other mines.

4.3.11 Land Acquisition (Mines) Act, 1885 (No. XVIII)

This federal law, which is to be “read with and taken as part of” the Land Acquisition Act 1894 (section 17), regulates the acquisition of land for the purpose of mining. Land is to be acquired in accordance with the Land Acquisition Act 1894. Provincial governments are empowered to extend the ambit of this law to any of the areas within their jurisdiction (section 1(3)). All powers under this Act lie with provincial governments.

4.3.12 Pakistan Environment Protection Act, 1997 (No. XXXIV)

PEPA 1997 requires parties desiring to commence a project to submit an EIA or IEE to the federal EPA (section 12). A project is defined to include mining, prospecting and quarrying (section 2(xxxv)(d)). At the same time, however, the federal EPA may issue an environmental protection order in cases where extraction processes are causing or likely to cause an adverse environmental effect (section 16).

The penalty for non-compliance with the provisions governing discharges and emissions (section 11), and environmental protection orders (section 16) is a fine that may extend to 1 million rupees for a first offence (section 17(1)). For non-compliance with provisions governing the handling of hazardous

substances (section 14), fines may extend to 100,000 rupees (section 17(2)). Penalties for repeat offenders may include closure or confiscation of the factory, machinery, equipment or substance; an order to restore the environment at the violator's own cost; and an order to pay compensation for any loss, bodily injury or damage to health or property caused by the violation, in addition to imprisonment for up to two years (section 17(5)).

4.3.13 Pakistan Environmental Protection Agency (Review of IEE/EIA) Regulations, 2000 SRO 339(I)/2000 dated 13 June 2000

Under these regulations²¹, mining and mineral processing projects are required to undergo a prior EIA or IEE, depending on the scale of the operation. Mining and processing operations involving iron, non-ferrous metals, copper, coal, sulphur, gold and precious stones must undergo a prior EIA. Smelting plants costing 50 million rupees or more, and steel rolling operations also require an EIA (schedule II, part C). Smaller-scale smelting plants are required to submit an IEE (schedule I part D).

The IEE regime applies to the commercial extraction of sand, gravel, limestone, clay and other minerals not mentioned in schedule II, and costing less than 100 million rupees (schedule I, part D). Operations involving crushing, grinding and separation are also subject to an IEE.

4.4 NON-EXTRACTIVE INDUSTRY, COMMERCIAL OPERATIONS

Provincial laws governing this sector contain no provisions concerning the disposal of industrial waste nor do they provide for sustainable use of natural resources used as raw material or otherwise. Specified industrial and commercial activities are, however, subject to the restrictions imposed by PEPA such as the requirement to conduct EIA or regulation of industrial waste and emissions. At the provincial and local level, industrial and commercial operations are also governed by local government and development authority laws which aim, with varying degrees of coverage, to regulate the location of industrial units, particularly those involved in processes or products considered to be dangerous, flammable or hazardous.

4.4.1 Punjab Local Government Ordinance, 2001 (No. XIII)

Regulation of non-extractive industry as a whole has not been devolved to the district. Local governments do, however, have limited powers with respect to certain aspects of specified industrial operations.

General powers of local governments include the authority to issue licenses for "dangerous and offensive" trades (section 195, read with the sixth schedule, item 44), which are listed in the annex to the Ordinance. Operations considered to be dangerous and/or offensive include sugar refining, electroplating, welding, metal casting, tin factories, marble and glass cutting and polishing, as well as units dealing in chemicals and processes requiring the use of power looms (section 195, read with the sixth schedule). Tanning and processing animal hides, skins and animal parts is included in the list, along with a wide range of manufacturing processes involving, for example, ammunition, explosive substances, chemical compounds, coloured cloth and yarn, oils, safes, trunks, cement pipes, tar, turpentine, coconut fiber, spirit, bricks, and earthenware utensils (annex).

Local governments may direct industrial concerns to provide for the proper disposal of effluent and

²¹ General summary at footnote 15

waste (section 195, read with the sixth schedule, items 45(4) and 46). They may also take measures to control pollution, including emissions from factories and kilns (sixth schedule, item 48).

The tehsil municipal administration is responsible for land use and zoning, including zoning for industry (section 54(1)(d)). The tehsil municipal administration is also responsible for the collection and "sanitary disposal" of industrial waste (section 54(1)(h)), and may levy fees for industrial exhibitions (section 54(l), read with second schedule, part III). Exemptions from application of rules relating to land use, building control, etc do not extend to zoning of industrial and commercial areas (section 54 (1) 2, 3 proviso).

A district office for enterprise promotion is to be established (section 14, read with the first schedule, part B), as part of the "grouped" finance and planning office (part C, item (v)). In city districts, meanwhile, the provincial government may set up a "grouped" office of enterprise and investment promotion, responsible for industrial estates and "technological parks" (section 35, read with the first schedule, part D, item (ii)) as well as a separate office to administer matters related to "industrial and hospital hazardous and toxic waste treatment and disposal" (part D, item (iii)(g)).

The PLGO contains provisions that may be used to regulate the siting of industrial and commercial operations, and to control the discharge of industrial waste. Maximum penalties, amounting to three years' imprisonment and/or a fine of 15,000 rupees, in addition to a fine of 1,000 rupees for each day the offence continues to be committed, apply in the case of the following offences: violating prohibitions specified in the master plan or site development schemes; discharging dangerous chemicals, or hazardous or offensive materials into drains, sewers, public water courses or onto public land; failing to adequately dispose of industrial and commercial effluent and waste; and dyeing or tanning animal skins within a specified distance from residential or commercial areas (section 141(2)(a), read with the fourth schedule, part I, items 8, 9, 12, 16, 21, 25 and 30). It is also an offence to manufacture, store or trade in dangerous chemicals, and flammable, hazardous or "offensive" articles or materials without a license from the appropriate authorities (item 19). Lesser penalties apply for establishing a brick or lime kiln within a specified distance from residential areas, and stocking or collecting flammable materials or fuels adjacent to commercial or residential buildings (section 141(2)(b), read with the fourth schedule, part II, items 39 and 41). Other offences under the PLGO, which are subject to an immediate fine but may also incur imprisonment for up to six months and/or a fine of 5,000 rupees in the case of a repeated offence, cover a wide range of matters concerning the disposal of "offensive matter", cleanliness and waste disposal in industrial and commercial premises, and damaging or polluting the "physical environment" within or outside private or public premises in a manner that endangers public health (section 141(2)(c), read with the eighth schedule, items 5 and 24–26).

Local councils may frame by-laws to govern a range of industrial Activities including "dangerous and offensive" trades, and dyeing or tanning animal skins (section 191(2), read with the fifth schedule, part II, items 17 and 33). By-laws may also cover more general subjects such as pollution control, licensing and the prevention of nuisance (fifth schedule, items 16, 21, 25 and 41), all of which may be applied to industrial Activities.

4.4.2 Punjab District Government Rules of Business, 2001

Under the rules, the district finance and planning office is responsible for the promotion of cottage industry, small business and medium-scale enterprise. Specific functions in this connection include organizing industrial exhibitions, conducting surveys, and developing industrial estates and "technological parks" (rule 3(2), read with schedule II, item 5(iii)). The district works and services office assists parties proposing to establish new projects in submitting environmental assessment reports, and must ensure the "implementation of environmental protection and preservation measures" in all development projects (schedule II, item 12(vi) (d)).

4.4.3 The Lahore Development Authority Act, 1975 (No. XXX)

The authority established under the Act is empowered to undertake improvements of the environment within its jurisdiction and to check, eliminate and relocate the sources of environmental pollution from industrial waste (section 20).

4.4.4 The Punjab Development of Cities Act, 1976 (No. XIX)

The authorities established under the Act are empowered to undertake improvements of the environment within their jurisdiction and to check, eliminate and relocate the sources of environmental pollution from industrial waste (section 19).

4.4.5 The Murree- Kahuta Development Authority Act, 1986 (No. XXVI)

The Act provides for establishment of an authority for the development of Murree and Kahuta Tehsils of Rawalpindi, the authority shall have the power to prepare, implement and enforce schemes for development of industry (section 5(2)(a)).

4.4.6 The Bahawalpur Development Authority Act, 1991 (No. XI)

The authority established under the above enactment may exercise such powers and take such measures as may be necessary for carrying out the purposes of the Act. Under section 5 (2) (a), the authority may prepare, implement and enforce schemes for development of industry.

4.4.7 The Dera Ghazi Khan Development Authority Act, 1991 (No. VI)

The Act provides for the establishment of Dera Ghazi Khan Development Authority for the development of the areas comprising the Revenue Division of Dera Ghazi Khan. Under section 5 (2) (a), the authority may prepare, implement and enforce schemes for development of industry.

4.4.8 Pakistan Environment Protection Act, 1997 (No. XXXIV)

Industrial Activity is defined in PEPA as “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 purposes” (section 2(xxii)). The wide scope provided by the definition for regulating industrial Activity is reflected in the operative provisions of the law, particularly the prohibition on certain emissions along with provisions for levying pollution charges (section 11); IEE/EIA (section 12); licensing (sections 14 and 15); and environmental protection orders (section 16).

A project is defined to include construction, operation, alteration, expansion, repair, decommissioning or abandonment of factories or other installations (sections 2(xxxv)(c) and 2(xxxv)(f)). PEPA requires parties desiring to commence a project to submit an EIA or IEE to the federal EPA (section 12). Meanwhile, the federal EPA may issue an environmental protection order in cases where discharges, emissions, waste disposal or the handling of hazardous substances are causing or likely to cause an

adverse environmental effect (section 16).

The penalty for violating provisions governing discharges and emissions, and environmental protection orders, is a fine that may extend to 1 million rupees for a first offence (section 17(1)). For non-compliance with provisions governing the handling of hazardous substances (section 14), fines may extend to 100,000 rupees (section 17(2)). In addition to imprisonment for up to two years, penalties for repeat offenders may include closure and confiscation of the factory, machinery and equipment; an order to restore the environment at the violator's own cost; and an order to pay compensation for any loss, bodily injury or damage to health or property caused by the violation (section 17(5)).

4.4.9 Hospital Waste Management Rules, 2005 (SRO 1013(1)/2005 dated 3 August 2005)

These rules, framed under section 31 of PEPA 1997, make hospitals responsible for the "proper management" and disposal of waste (section 3). Several categories of waste are specified in the rules, including chemical (section 2(1)(a)), "genotoxic" (section 2(1)(c)), infectious (section 2(1)(h)) and radioactive (section 2(1)(n)).

Every hospital is required to set up a waste management team (section 4) which prepares, implements and monitors a waste management plan (sections 4 and 15). Hospitals are defined broadly to include clinics, laboratories, pharmacies and a wide range of health care, research and veterinary institutions and centers (section 2(1)(f)). The remaining provisions of the rules deal with the responsibilities of hospital officials; matters related to waste segregation, storage, transportation and disposal; and measures to be taken in case of accidents or "spillages". The federal government may exempt any class of hospitals from any or all of the provisions of these Rules (section 25).

4.4.10 Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2000 (SRO 339(I)/2000 dated 13 June 2000)

Under these Regulations, manufacturing and processing projects are required to undergo prior IEE or EIA. Relatively small-scale industries and commercial operations, which require a prior IEE, are listed in Schedule I, part C. Larger-scale manufacturing and processing operations requiring a prior EIA are listed in Schedule II, part B.

4.4.11 National Environmental Quality Standards (SRO 742(I)/93 dated 29 August 1993)

This order was issued under the Pakistan Environmental Protection Ordinance 1983 (No. XXXVII). Although the 1983 Ordinance is repealed, these standards remain in force.

The NEQS specify maximum limits for various types of effluent and emissions, including liquid industrial effluent (section 2, read with annex I) and industrial gaseous emissions (section 2, read with annex II). The NEQS have been revised and amended periodically, and substantively so in the year 2000²².

²² SRO 549(I)/2000 dated 8 August 2000

4.4.12 The Punjab Industries (Control On Establishment And Enlargement) Ordinance, 1963 (No. IV)

The Act provides that whoever wants to establish or enlarge an industrial undertaking would require a written permission by the provincial government (section 3). It further provides that provincial government cannot reject such application unless it is satisfied that the grant of permission to such person will be prejudicial to the national interest, or injurious to the health of or a source of nuisance for, the residents of the local area in which the industrial undertaking is proposed to be set up or to be enlarged is situated (section 3).

“Industrial undertaking” is defined as an undertaking pertaining to an industry (including any industry ancillary thereto) carried on or to be carried on, in any local area, at a place or premises, including precincts thereof, wherein twenty or more workers without the aid of power, or ten or more workers with the aid of power, were working on any day during the twelve months preceding the date of coming into operation of sections 3 to 12 in the local area concerned or are working and shall work for the manufacture or processing of goods or commodities (section 2).

4.4.13 Punjab Small Industries Corporation Act, 1973 (No. XV)

The Act establishes a Small Industries Corporation in the province of Punjab. The corporation shall take such measures as it deems fit to render assistance in the establishment and development of small, cottage and other industries. The corporation may, in order to promote and carry out the purposes of this Act give loans in cash, or in kind or in the form of buildings, developed plots of lands in the small industries estates or machinery and equipment on lease or on hire-purchase basis, to borrowers for the purposes of small, cottage and other industries

The corporation shall also be responsible for preparing and submitting schemes to government for the development of cottage, small and other industries including schemes for research and mechanization of such industries (section 27 (a)). It shall also take appropriate measures for integration of small industries with medium and large industries. Though there is nothing specific in the text about the powers of the corporation with reference to environmental protection it does mention that the corporation shall undertake such other functions, steps or measures that the government may direct.

4.4.14 The Punjab State Aid to Industries Act, 1935 (No. V)

An Act to encourage the development of industries in Punjab by the grant of state aid and to improve and regulate the granting of state aid for industrial purposes. The forms of state aid which may be given may include: loans; the grant, sale or lease of land, raw material, fire-wood, water or any other property vested in the provincial government; the payment of a subsidy; supply of machinery on the hire-purchase system; guarantee of a minimum return on the whole or part of the capital of a joint stock company invested in an industry (section 17).

State aid may be given to a new or nascent industry, an industry to be newly established in an area where such industries are undeveloped, a cottage industry, village industry, or an industry that needs revival, or development by modern methods (section 18)

The law does not provide for any pre-conditions regarding environmental protection, or encouraging environmentally sustainable industries while approving the state aid.

4.4.15 The Punjab Public-Private Partnership for Infrastructure Act, 2010 (No. IX)

The Act regulates the infrastructural projects implemented through Public Private Partnerships (PPP)

(section 2). The list of infrastructure sector for which the projects can be made is given in schedule I, which includes industrial estates (schedule I read with section 2).

One of the essentials for considering any proposals for the government agency responsible for a project to be carried out under the PPP is the EIA report under PEPA. The government agency while considering a bid has to make the EIA an essential part of consideration to grant a partnership agreement and subsequent loans. (More details on para 3.6.15)

4.4.16 Factories Act, 1934 (No. XXV)

This law governs the employment of labour, working hours, working conditions and facilities to be provided in the workplace. The Act deals primarily with matters related to labour relations but contains a detailed chapter on the health and safety of workers (chapter III, sections 13–33). The law requires that factories be kept clean and that “effluvia arising from any drain, privy or other nuisance” be removed at regular intervals (section 13). Further, it provides for effective arrangements in every factory for disposal of waste and effluent from manufacturing processes. These and other health and safety stipulations apply only to workers within the premises of a factory. Small penalties are also provided for the offenders. The Act does not mention the disposal of waste generated during the manufacturing process or requires measures to mitigate the impact of such waste on the environment. All powers under this act, including the power to make rules, lie with provincial governments (section 59).

4.4.17 Punjab Factories Rules, 1978

These rules, made under the Factories Act, 1934 govern the employment of factory labour, providing for the health and safety of workers. They contain detailed provisions regarding facilities and safety equipment to be provided to workers.

4.4.18 Sugar Factories Control Act, 1950 (NWFP No. XXII)

This NWFP Act was adapted first for all of West Pakistan, and subsequently amended and adapted for the province of Punjab. It regulates the supply of sugarcane to sugar factories (section 14), the price at which it may be purchased (section 16), and other related issues. The provincial government may designate “reserved” areas (section 10), establish a Sugar Factories Control Board (section 3) and appoint inspectors (section 7). Basically it is an Act to facilitate supply of sugarcane to sugar factories.

4.4.19 The Punjab Cotton Control Ordinance, 1966 (W.P. Ordinance no XX)²³

The Ordinance is to amend and consolidate the law relating to control over the production, processing and sale of cotton, and other matters incidental thereto (preamble). It constitutes cotton control board, advisory committees (section 3) and empowers the provincial government to appoint inspectors (section 5). It requires licenses for cotton ginning, cotton pressing and cottonseed oil factories (section 7). The Ordinance defines these factories (section 2).

4.4.20 Boilers Act, 1923 (No. V)

²³ Substituted by the Punjab Laws (Adaptation Order) 1974 for West Pakistan

This federal law consolidates and amends the law relating to steam boilers exceeding a capacity of five gallons, and requires that all boilers be registered (section 6). The law does not apply to boilers on board a ship or mechanically propelled vessel, boilers belonging to the Pakistan Navy, or boilers less than 20 gallons in capacity if they are used by hospitals for sterilizing equipment (section 3). The provincial government has the power to make rules (section 29) while the Boilers Board constituted under this Act may make regulations (section 28). Although most powers under this law lie with the provincial government, the federal government retains the power to appoint members of the board (section 27-A) and may grant exemptions to certain classes of boilers operated by the railways (section 3(2)).

4.4.21 The Land Acquisition Act, 1894 (No. I)

The Act provides for acquisition of land needed for public purposes and for companies and for determining the amount of compensation to be made on account of such acquisition. For the purposes of the Act, Industrial concern shall be deemed to be a company for certain purposes (Section 38-A).

4.4.22 Provincial Sustainable Development Fund (Utilization) Rules, 2003 (SRO 460(I)/2003 dated 29 May 2003)

These rules, issued under section 31 of PEPA, provide for matters related to the utilization of moneys from the provincial sustainable development fund, to be established in each province (section 9 of PEPA). The fund consists of grants or loans from the federal government, aid and donations from foreign governments and national or international donors, and contributions from private-sector organizations.

Procedures are specified in the rules for the filing and appraisal of project proposals and for procedures to be followed once financial assistance has been sanctioned. Criteria are also specified for projects that are eligible for funding. Projects should be designed to make a significant contribution to the prevention of pollution, the promotion of sustainable development or environmental protection. In sanctioning assistance, priority is given to specified types of projects including those designed to mitigate the adverse environmental effects of industrial units.

4.4.23 Environmental Samples Rules, 2001 (SRO 527(I)/2001 dated March 2001)

The rules, framed under PEPA allow authorized officers to enter and inspect premises (rule 4) in order to take samples of 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 (rule 7(1)). Procedures for taking, storing and transporting samples are prescribed.

4.4.24 National Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2001 (SRO 528(I)/2001 dated April 2001)

The rules, framed under PEPA place certain obligations on "industrial units" to monitor and report to the federal agency of their emissions and effluents discharged (rule 3). Industrial units are defined as any legal entity carrying on industrial activity (rule 2 (10 (f))).

4.4.25 Pollution Charge for Industry (Calculation and Collection) Rules, 2001

(SRO (I)/2001 dated 01 July 2001)

The rules, framed under PEPA prescribe the method for calculating and collecting industrial pollution charge imposed under section 11 of PEPA.

4.5 TAXATION

Specific tax laws enacted by the province provide for levies on water, hotels, professions and trades, vehicles and urban immovable property, as well as taxes and cesses on agriculture. The province also periodically enacts Finance Acts and Ordinances to supplement federal tax laws, or to levy or revise provincial taxes. At the local level, district governments are also empowered to collect a variety of taxes and fees on a wide range of services and Activities.

Under existing law, importance has not been given to taxation on agriculture and industry employing products or processes that are harmful to the environment. Nor are tax cuts offered as an incentive to promote agriculture and industry that is environmentally friendly. There are no provisions to curb the use of fossil fuels or to promote the use of energy sources that are less of a burden on the environment. Rather, the taxation regime tends to favour the expansion and development of industry without paying attention to the environment or the effect of industrial expansion on natural resources.

Like federal tax laws, provincial laws do not provide for taxing users of natural resources in the form of general state taxes. Nor is a tax levied on the volume of resources extracted, or the volume of contaminated material discharged into the environment. There are no incentives linked to the sustainable use of natural resources, the minimization of pollution or other environment-friendly practices. Nor does existing laws tap the potential of using taxation as a tool to control pollution or encourage sustainable natural resource management, which may be achieved by providing tax breaks and other incentives for environmentally friendly industries.

While there are no taxes levied directly to address environmental issues, taxes are imposed on various sectors that have a direct or potential impact on the environment or natural resources. Taxes on industry, agriculture, transport and many similar sectors impose levies without taking into account the environmental impact of these operations or sectors. For example, every type and class of motor vehicle is taxed, based on various factors within each class such as number of passengers, size of engine, and whether or not the vehicle is air-conditioned. Even with this precedent for a detailed and nuanced tax structure, no levies have been imposed on vehicles that generate higher levels of emissions, or use highly polluting fuels such as diesel. Similarly, vehicles running on compressed natural gas and other relatively less polluting fuels are not afforded tax breaks. The same holds true in the case of taxes on industry, agriculture, electricity and power, where the potential to control emissions and pollution through taxes has not been explored.

The province also imposes cesses and levies geared towards a specific area or purpose, as in the case of the Punjab Historical Mosques and Shrines Fund Cess Ordinance 1960. No similar, narrowly focused laws have been enacted to raise funds for environmental conservation.

4.5.1 Punjab Sales Tax Ordinance, 2000 (No. II)

The Punjab Sales Tax Ordinance 2000 levies a tax on the services rendered or provided in Punjab at the rate of 16%. However, it excludes from tax any advertisement, which on TV and radio sponsored by a government agency for health, education or by the Population Welfare Division in respect of Sathi

or public service messages by the WWF and UNICEF. The scope of these exemptions can easily be increased to allow for tax-free advertisement campaigns for environmentally friendly products and services.

4.5.2 Punjab Cotton Control (Validation of Levy of Fees) Ordinance, 1971 (Ord. XIX)

This Ordinance was promulgated to validate the levy, charging, collection and realization of fees from the owners of cotton factories run by diesel. Since diesel is more harmful to the environment, this tax facilitates the objectives of environmental protection.

4.5.3 Punjab Local Government Ordinance 2001 (Ord. XIII)

Schedule 8 of PLGO provides that the tehsil nazim can issue tickets for damaging or polluting public or private premises.

4.5.4 Punjab Motor Vehicles Taxation Act, 1958 (Act XXXII)

This Act deals with the imposition of tax on the use of motor vehicles. Section 13 of the Act allows the government by rule or an order to exempt any person or class of persons from liability to pay whole or part of the tax in respect of any motor vehicle or class of motor vehicles from liability to pay the motor vehicle tax as specified in the Act. This allows the government to issue notifications regarding specific classification of cars which have low carbon emissions from taxation which may include, but is not limited to, electric, hybrid or blue efficiency low carbon emissions diesel cars.

4.5.5 Punjab Entertainment Duties Act, 1958 (Act X)

The purpose of this Act is to consolidate the law relating the levy of duty in respect of admissions to entertainment in Punjab. Section 8 of the Act exempts from liability to pay entertainment duty on any entertainment, the proceeds of which entertainment will be devoted to charitable, educational and scientific purposes amongst others. Sub section 2 further allows the government by notification to exempt any class of entertainment from paying entertainment duty. The government can issue a notification for any entertainment, the purpose of which is to educate or raise awareness about environmental issues, be exempt from entertainment duty.

4.5.6 Punjab Duty on Excessive Wastage of Spirits in Distilleries (Validation) Ordinance, 1969 (WP No. XVIII)

The Ordinance was enacted to validate the recovery and levy of duty on any distillery for excessive wastage of spirits. It prescribes that an officer of the BOR can introduce a scale of the amount of spirits that can be used by a particular distillery and that duty shall be payable on any spirit that has been wasted in excess of the prescribed scale by the distillery. This allows reduction of wastage by distilleries and gives an incentive to them to use efficient and environmentally friendly machinery to reduce duty on wasted spirits.

4.5.7 Punjab Historical Mosques and Shrines Fund Cess Ordinance, 1960 (Ord. V)

This law establishes a fund to finance the repair and maintenance of historical mosques, and to meet other related expenditure (section 4). A cess is imposed on all Muslims liable to pay land revenue or urban immovable property tax (section 3), and the monies recovered are paid into the fund. The provincial government may frame rules to govern repair and maintenance schemes, and procedural matters (section 6).

4.5.8 Water Tax

In Punjab, just as in the rest of the country, water tax for consumers is a municipal subject. The Province does not legislate on the amount of tax that can be imposed on water use. Taxation on water use both in commercial and residential areas is a municipal subject. The amount of tax that each respective municipality imposes on water varies from area to area. In heavily congested localities, the tax bracket may be from anywhere between rupees 200-400 a month per kanal of space while in others which are less densely populated, the tax may be as minimal as 1000 rupees per annum. The tax band does not depend on the amount of water actually being used. Due to such low tax numbers, water is largely misused since the tax does not reflect the scarcity of water available to cities and villages leading to misuse and wastage of water. Even for agriculture use, the water tax (or Abiana) is so minimal, that it cannot prove as a deterrence for excessive use and wastage of water.

4.6 INVESTMENT—DOMESTIC AND FOREIGN

In Punjab, there are three provincial sector-specific laws on the subject of investment. Federal law focuses on attracting domestic and foreign investment but does not provide incentives to encourage investors who undertake projects based on sound environmental principles.

4.6.1 Punjab State Aid to Industries Act, 1935 (Act V)

The purpose of this Act is to improve and regulate the giving of state aid for industrial purposes, where the industry in question is any industrial business or enterprise conducted or undertaken either by an individual or by a company, association or body of individuals, whether incorporated or not (section 2 (5)). Furthermore, cottage and village industry are also eligible to receive state aid under this Act, therefore implying that a vast range of businesses can approach the state keeping in view the procedure laid down under section 19.

Forms of state aid which may be given are the grant of a loan, the grant, sale or lease of land, raw material, fire-wood, water or any other property vested in the provincial government or the payment of a subsidy in the case of a cottage or village industry for any purpose and in the case of any other industry for the conduct of research or purchase of machinery, along with the supply of machinery on a hire-purchase system and the guarantee by the government of a minimum return on whole or part of the capital of a joint stock company invested in an industry. Thus, does the Act cover a wide range of businesses, which are eligible to receive state aid, the instruments of aid are also far and many catering to each individual need of an industry.

Since the Act is general in its meaning and content, it can be used to aid industries delving into environmentally friendly production methods and such industries may even be eligible for several forms of state aid under section 18 in specific areas to develop the current methods of production.

4.6.2 Punjab Small Industries Corporation Act, 1973 (Act XV)

The Act provides for loans to be given to small industries through the channel of The Punjab Small Industries Corporation. The corporation has in its powers to issue loans to small industries and in doing so section 27 allows them to issue loans for developmental purposes. Although it is not specifically stated, one of the basis on which to obtain a soft loan can be inferred from the wordings of section 27 to be to invest in environmentally friendly development methods.

4.6.3 Land Improvement Loans Act, 1833 (Act XIX)

This federal law allows government loans to be disbursed for the “improvement” of agricultural land. The term ‘improvement’ is defined as “any work which adds to the letting value of land”, and includes works related to water storage and distribution, irrigation, drainage, reclamation and flood protection (section 4(2)). At the same time, however, the law provides for a broader definition by allowing other Activities to be declared as improvements for the purposes of this Act (section 4(2) (f)).

As such, although the law does not provide incentives for the use of environmentally friendly “improvement” works, this possibility is not entirely excluded. Besides individuals, such loans may also be offered to village communities or other collectives (section 9). All powers under this Act lie with provincial governments.

4.6.4 Punjab Public-Private Partnership for Infrastructure Act 2010 (Act IX)

The Act is meant to expand the provision of infrastructure services and improve their reliability and quality to improve efficiency and introduction of modern technologies amongst others (preamble).

One of the essentials for considering any proposals for the government agency responsible for a project to be carried out under the PPP is the EIA report under PEPA. The government agency while considering a bid has to make the EIA an essential part of consideration to grant a partnership agreement and subsequent loans.

4.7 TRANSPORT

Provincial legislation governing the transport sector focuses on consolidating the law related to motor vehicles. Laws outline roadsafety measures, and establish various transport boards, corporations and authorities to regulate vehicles and traffic. Existing law does not provide formeasures tomitigate the impact oftransport-related Activitieson natural resources and the environment.

4.7.1 Punjab Local Government Ordinance, 2001 (No. XIII)

The subject of transport falls under the administrative authority of the district government under PLGO (first schedule, part A, item xxxi). The sector is to be managed as part of the “grouped” “works and services office” that is also responsible for district roads (first schedule, part C, item xii). In addition, CDG may establish a public transport office to deal with matters related to mass transit, passenger and freight [cargo] transit terminals, traffic planning, engineering, and parking (first schedule, part D, item (i)).

Under the PLGO, municipal services are defined to include “intra-city or intra- or inter-town or tehsil network of [...] expressways, bridges, flyovers, public roads [and] streets” as well as footpaths, pavements and traffic signals (section 2(xxii)). Within the district, tehsil municipal administration manage roads and streets that fall within their jurisdiction (section 54(1)(h)(v)) and village councils manage roads and streets within their jurisdictions (Section 96(2)(e)). The tehsil municipal administration is responsible for traffic planning and engineering as well as transport “stations, stops, stands and terminals” (section 54(1)(h)(vi)). The tehsil municipal administration also controls land use and zoning for matters related to passenger and freight transport and transit stations (section 54(1)(d)).

Local governments may regulate the operation of public vehicles and public ferries, and frame bylaws for traffic control (sixth schedule, items 91–93). Zila councils are authorized to levy tolls on roads, bridges and ferries maintained by district government (Second Schedule, part I, item 9).

Maximum penalties specified in the PLGO, amounting to three years’ imprisonment and/or a fine of 15,000 rupees in addition to a fine of 1,000 rupees for every day that the offence continues to be committed, apply in the case of offences related to vehicle parking (section 141(2)(a), read with the fourth schedule, part I, items 23 and 26). Lesser penalties apply for setting up bus and taxi stands illegally (fourth schedule, part II, item 37), and for keeping pigeons or other birds in a manner that causes a danger to air traffic (section 141(2)(c), read with the eighth schedule, item 44). The PLGO overrides provisions of other laws in force (section 3).

4.7.2 Punjab District Government Rules of Business, 2001

Under the rules, the district transport office operates as part of the grouped works and services office (rule 3(1), read with schedule I, item 11). Under the rules, the district transport office is responsible for implementing and enforcing the Provincial Motor Vehicles Ordinance 1965 and the Motor Vehicles Rules 1969 as well as the operative sections of the Motor Vehicles Act 1939 (rule 3(2), read with schedule II, item 11(iv)).

The district roads and buildings office, which is also part of the grouped works and services office, is responsible for the construction and maintenance of roads and bridges, the collection of tolls, and “administration” of the West Pakistan Highways Ordinance within the district (rule 3(2), read with schedule II, item 11(ii)).

4.7.3 Pakistan Environment Protection Act, 1997 (No. XXXIV)

PEPA prohibits the operation of motor vehicles that emit air pollutants or noise in excess of levels determined in the NEQS. For the purpose of this law, motor vehicles are defined to include land vehicles, chassis and trailers but not vehicles running on fixed rails (section 2(xxvii)). The provisions of PEPA apply only to land vehicles.

The NEQS set limits on smoke, carbon monoxide and noise pollution from new and used vehicles. Limits for carbon monoxide are 4.5–6 per cent, exceeding international standards of 2–3 per cent. Nitrogen oxides, sulphur oxides, lead and benzene emissions are not mentioned. For noise emissions, the limit is 85 decibels 7.5 meters from the source (SRO 742(I)/93 dated 24 August 1993, Annex III).

The Federal EPA establishes standards for the quality of ambient air, water and land. While different standards may be set for emissions from various sources and for different areas and conditions, if such standards are less stringent than the NEQS, prior approval must be obtained from the Pakistan Environmental Protection Council (section 6(1)(g)).

Section 11 prohibits emissions of air pollutants or noise in excess of the NEQS or, where applicable, standards established under section 6(1)(g), and allows the federal government to levy a pollution charge on parties violating these standards. With respect to motor vehicles, the Federal EPA may direct any motor vehicle or class of vehicles to install pollution control devices or other equipment, undergo testing or maintenance, or use particular fuels, and such vehicles will not be permitted to

PEPA requires an EIA for construction or use of roads or transport system (section 12 read with section 2(xxxv)).

Contravention of or failure to comply with the provisions of this law is punishable with a maximum fine of 1 million rupees, and an additional fine of up to 100,000 rupees for each day that the infraction continues (section 17(1)). Offences related to emissions from motor vehicles, meanwhile, carry the maximum penalty of a 100,000 rupees fine, with an additional fine of 1,000 rupees for each day that the infraction continues (section 17(2)). Repeat violations may lead to imprisonment for up to two years (section 17(5)). Environmental magistrates have the jurisdiction to try all motor vehicle offences under PEPA(section 24).

4.7.4 National Environmental Quality Standards(SRO 742(I)/93 dated 29 August 1993)

The NEQS specify maximum limits for exhaust and noise pollution from motor vehicles (item 2, read with Annex I). These standards have been revised and amended from time to time, and substantively in the year 2000.

4.7.5 Pakistan Environmental Protection Agency(Review of IEE/EIA) Regulations, 2000²⁴ (SRO 339(I)/2000 dated 13 June 2000)

The regulations require specified types of transport projects to undergo a prior EIA. Relatively small-scale highway construction projects, and port and harbour development schemes catering to smaller ships, require a prior IEE (schedule I, part E). Airports, railways, large-scale highways, and ports and harbours serving larger ships must submit prior EIA (schedule II, part D).

4.7.6 Provincial Motor Vehicles Ordinance, 1965 (WP No. XIX)

This law governs the licensing, registration and ownership of vehicles. Some provisions specifically deal with vehicular pollution. The provincial government may make rules governing emissions of “smoke, visible vapour, spooks, ashes, grit or oil” (section 74(2)(h)) and the “reduction of noise emitted by or caused by vehicles” (section 74(2)(i)). The Ordinance contains no other provisions related to managing the environmental impact of motor vehicles.

Under the local government regime, the district government has responsibility for implementing and enforcing this law (Punjab District Government Rules of Business, 2001, section 3(2), read with schedule II, item 11(iv) (b)).

4.7.7 Traffic Offences (Special Courts) Ordinance, 1981 (No. XXXIX)

This federal law establishes special courts to deal with traffic offences as defined in the Provincial Motor

²⁴ General summary at footnote 15

Vehicles Ordinance 1963. All powers under this Ordinance lie with provincial governments.

Special courts are to be set up by the provincial government (section 3) and all offences under the 1965 Ordinance are to be heard exclusively by these courts (section 4). The provincial government may make rules to carry out the purposes of this Ordinance (section 7).

4.7.8 Punjab Highways Ordinance, 1959 (WP No. XXXII)

This Ordinance is for consolidation and amendment of the laws relating to highways in the province of Punjab. It provides for the designation of highway authorities to administer one or more highways, or part of a highway (section 3(1)). In the absence of designated authorities, local authorities perform these functions (section 3(2)). A highway authority is responsible for highway construction, repair and alteration, and may use "for any purpose appropriate to its functions" land, forming part of a highway but not required for the passage of vehicles (section 5). Authorities may carry out works on a highway and are required to pay "reasonable compensation" for any damage caused to land or buildings as a result of such Activities (section 7(1)).

The law places restrictions on various types of development Activities in the vicinity of highways (sections 8, 9 and 11) and allows highway authorities to prescribe specifications for building and development in such areas (sections 16 and 17). Highway authorities may acquire land by mutual agreement with its owners or by means of the Land Acquisition Act 1894. Highway Authority may prohibit any vehicle or animal on a highway for public safety or convenience (section 15).

Chapter V of the Ordinance, related to the responsibilities of highway users, requires drivers to obey traffic rules (section 19). Drivers must also ensure that they do not endanger human life or drive in a manner that is "likely to cause hurt to any other person" (section 21 and 22).

Chapter VI deals with penalties and its procedure, penalty extends to three months and fine up to 500 rupees (sections 24 and 25)

The government may make rules under this Ordinance to cover a wide range of matters including the regulation of grazing in highway land (section 29(2) (e)), and the prevention of "nuisances" caused by the discharge of "sewage water", the dumping of material that is "offensive or injurious to health" and conducting "dangerous or offensive trades" on or in the vicinity of a highway (section 29(2) (b)).

Under the local government regime, the district government is responsible for the "administration" of this Ordinance (Punjab District Government Rules of Business, 2001, section 3(2), read with schedule II, item 11(ii)).

4.7.9 Punjab Highway Authority Act, 1989 (No. V)

The purpose of the Act is to maintain a unified system of motorways, super highways and highways in the province of Punjab. The Act establishes the "Punjab Highway Authority" for the construction, development, improvement and maintenance of motorways, super highways, highways and other projects. The terms motorways, super highway and highway are not defined, however, they include all culverts, bridges, side drains, land within the boundaries of right of way and all fences, posts and trees within the right of way (section 2(11)). The authority shall prepare for the approval of the government comprehensive master plans for motorways, super highways etc. and prepare schemes for land use, zoning and land reservation, transport, communications & works, irrigation and utilization of natural resources etc. (section 5). The authority may require a government agency within whose jurisdiction any particular aspect of development scheme lies to execute the same with consultation with the

authority (section 10). The authority may execute scheme, which have not been carried out by the relevant government agencies (section 11). In the event of any conflict or inconsistency between the Act and any other law this Act shall prevail to the extent of the conflict.

4.7.10 Motor Vehicles Act, 1939 (No. IV)

This federal law originally governed the ownership and operation of motor vehicles. It regulated licensing and registration, public transport, the construction and maintenance of motor vehicles, traffic, insurance, and the jurisdiction and authority of various government functionaries. Since 1965, however, these matters have been governed by provincial motor vehicle laws and Chapters I to VI of the 1939 Act have been repealed in their entirety. The remaining provisions relate to motor vehicles temporarily leaving or visiting Pakistan (section 92); insurance against third party risks (section 94); the obligations of insurers (section 96); the adjudication of offences relating to insurance (section 99); and other insurance-related matters. The power to make rules lies with the federal government (sections 92 and 111).

Under local government regime, the district government is responsible for implementing and enforcing the operative provisions of chapters VII and VIII of this Act (Punjab District Government Rules of Business, 2001, section 3(2), read with schedule II, item 11(iv) (a)).

4.7.11 Inland Mechanically Propelled Vessels Act, 1917 (No. I)

This law provides for a wide range of matters related to the regulation of mechanically propelled vessels, defined as “every description of vessel ordinarily plying on inland waters and propelled wholly or in part by steam, electricity or other mechanical power” (section 2(1)). For the purposes of this Act, inland water refers to “any canal, river, lake or other navigable water” (section 2(2)). This law protects vessels but not the water used for navigation.

The substantive provisions of this Act deal with procedures related to the issuing of various certificates and licenses. Vessels to which this law applies must obtain a “certificate of survey” and a “certificate of registry” (section 3) while masters and engineers of such vessels are required to obtain certificates of “competency” (section 20). Any incident involving “material damage” to a vessel or resulting in “loss of life” must be reported to the police (section 32). The provincial government may appoint a special court to investigate the incident (section 33). If it is found that the incident was caused by incompetence, a “wrongful Actor default”, or as a result of “any gross Act of drunkenness, tyranny or other misconduct”, all certificates and licenses may be cancelled (section 45). It should be noted that while “material damage” in the context of these sections applies only to vessels, the phrase ‘loss of life’ is not explicitly restricted to human life. Explosions on board a vessel may also be investigated (section 44).

“Dangerous goods” may be carried on board a vessel as long as the owner or master of the vessel has been given “notice”, and the package has been “distinctly” marked (section 50). Goods deemed to be dangerous for the purposes of this law are to be notified by the provincial government (section 49).

Besides making rules to provide for procedural matters, the provincial government may frame rules to protect vessels from explosion, fire and “other accidents” (section 52(1)), and to regulate the navigation of vessels in order to prevent “danger” to the banks of navigable channels as well as “any property” abutting such channels (section 52(2)(j)). For the purposes of this section, the term ‘danger’ has not been defined.

All powers under this Act lie with the provincial government, except for special licensing and registration agreements or exemptions that the “central” government may grant for reasons of

reciprocity with other counties (section 19R).

4.7.12 Railways Act, 1890 (No. IX)

This federal law contains detailed provisions governing the construction, maintenance and operation of railways (chapters III–VI). It regulates the employment of railway staff (chapter VIA), sets out the general responsibilities of railway authorities (chapter VII) and specifies the liability of railway authorities in case of an accident causing loss of life or property (chapter VIII).

Both federal and provincial governments have powers and responsibilities under this Act. Railway authorities may not carry out works on property belonging to the provincial government without its approval (section 8A). Similarly, it is up to the provincial government to “sanction” the exercise of certain specified powers by the “railway company” with respect to building and operating ancillary facilities (section 51). Railway companies may frame “schemes” (section 51-A (1)), which are approved by the federal government (section 51-A (2)), but the provincial government has the power to override such approval (section 51-A (5)).

The provincial government informs the railway administration about crossings, bridges, drains and other works required for the “accommodation of the owners and occupiers of lands adjoining the railway” (section 11(1)); decides if the railway administration can defray costs (section 11(3)); and may complete unfinished or delayed projects and recover costs from the railway administration (section 11(4)). The provincial government may also ask the railway administration to carry out additional works (section 12).

The provincial government has the power to grant exemptions from the provisions of this Act with respect to the matters specified in sections 8A, 11 and 51, while the federal government may grant exemptions with respect to the remaining provisions of this Act (section 147). Other powers under this law remain with the federal government, which may delegate its powers in specified matters (sections 25(1) and 71E (1)). The Act specifies in detail the matters for which rule-making is authorized (section 47).

4.7.13 The Punjab Bus Stands and Traffic Control (Lahore) Ordinance, 1963 (WP No. XIX)

The Ordinance is to provide for measures to remove and prevent traffic congestion and regulates movement of vehicular traffic within the Lahore municipal corporation. It regulates bus and truck stands and maintenance and construction of bus stands. The applicability of this law is questionable since it has not been amended in light of LDA Act, 1975 and the Local Government Ordinance, 2001.

4.7.14 The Punjab Bus Stands and Traffic Control (Gujranwala) Ordinance, 1963 (WP No. XX)

The Ordinance is to provide for measures to remove and prevent traffic congestion and regulate movement of vehicular traffic within the Gujranwala municipal corporation.

4.7.15 Carriers Act, 1865 (No. III)

This federal law regulates the liability of common carriers in case of damage to or loss of property as a result of negligence or criminal conduct on the part of carriers or their agents. A common carrier is

defined as “a person, other than the government, engaged in the business of transporting for hire property from place to place, by land or inland navigation” (section 2). The damage liability of carriers is limited to goods, and the law does not envisage any liability for damage to the environment. Both the federal and provincial governments have the power to notify the goods or classes of goods to which this law applies (section 11).

4.7.16 Pakistan Penal Code, 1860 (No. XLV)

Under section 278 of the PPC, the punishment for “making [the] atmosphere noxious to health” is a maximum fine of 500 rupees. In addition, certain sections of Chapter XIV on public health and safety concerning “public nuisance” may be interpreted to include air and noise pollution from vehicles, as well as emissions (sections 268, 278, 290 and 291).

4.7.17 The Punjab Public-Private Partnership for Infrastructure Act, 2010 (No. IX)

The Act regulates the infrastructural projects implemented through Public Private Partnerships (PPP) (section 2). The list of infrastructure sector for which the projects can be made is given in schedule I, which includes roads and urban transport including mass transit and bus terminal (schedule I read with section 2).

One of the essentials for considering any proposals for the government agency responsible for a project to be carried out under the PPP is the EIA report under PEPA. The government agency while considering a bid has to make the EIA an essential part of consideration to grant a partnership agreement and subsequent loans. (More details on para 3.6.15)

4.8 ENERGY AND HYDROELECTRIC POWER

At the federal level, energy is one sector where recent legislation includes provisions for environmental protection. The same cannot be said for provincial laws. In addition, the provincial government periodically issues notifications to amend various laws and rules for the sector. Although the sector is heavily regulated to the extent of making special provisions for emergency situations, there is no specific legislation concerning renewable energy or cleaner methods of power generation, nor are these matters mentioned in existing laws.

4.8.1 Pakistan Environment Protection Agency (Review of IEE/ EIA) Regulations, 2000 (SRO 339 (I)/2001)

The regulations²⁵ require that specified types of energy generation and dam construction projects undergo prior environmental assessment. Schedule I lists the types of projects related to energy (part B), and water and dams (part F), that must undergo a prior IEE while schedule II lists the types of projects related to energy (part A), and water and dams (part E), that require a prior EIA.

4.8.2 The Punjab Electricity (Emergency Powers) (Control of Supply) Act, 1949 (No. XVII)

²⁵ General summary at footnote 15

This Act was brought in to control the supply, consumption, distribution and use of electrical energy. Under section 3 of the Punjab Electricity (Emergency Powers) (Control of Supply) Act, 1949, Punjab government is authorized to direct any supplier of electricity (in writing) to restrict or discontinue electricity supply to any consumer or class of consumers. This can be useful to protect the environment since the quota of electricity required for heavy electrical complexes and various classes of electricity can be curtailed forcing the industries to adopt energy efficient practices both for production and general services.

4.8.3 The Pakistan Water and Power Development Authority Act, 1958 (No. XXXI)

This is a federal Act to provide for the unified and coordinated development of water and power resources of the country. Under section 13 of this Act, the (then) newly formed WAPDA was given the authority to direct private owners of land to carry out measures for training of streams as well as to undertake anti-erosion operations, including conservation of forests as well as re-forestation.

4.8.4 Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (No. XI)

This federal law regulates the generation, transmission and distribution of electric power. It establishes the National Electric Power Regulatory Authority (Section 3), which holds exclusive responsibility for regulating the provision of electricity (section 7(1)). While the chair of the authority is a federal appointee, its four members are representatives from each of the provinces (section 3).

The Act requires licensing for the generation (section 15), transmission (sections 16–19) and distribution (sections 20–23) of electrical power. Licenseholders are required to follow performance standards, including “safety, health and environmental protection instructions issued by the authority or any government agency” (section 21(2) (f)). The authority must encourage the development of industry standards and uniform codes of conduct for generation, transmission and distribution facilities, including for construction practices and standards (section 35). The provinces are required to establish “offices of inspection” to ensure compliance with these provisions (section 38).

Under the law, provincial governments may construct power houses and grid stations, lay transmission lines for use within the province, and determine the tariff for distribution of electricity within the province (section 7(4)).

The law empowers the Authority to make rules for the safe and effective supply of electric power, and to ensure that operations are carried out in a manner that does minimal damage to the environment (section 46(2) (j)). The Authority may also make regulations in accordance with the Act and any rules (section 47). The provinces are not awarded rule-making powers but may determine penalties for violations related to metering, billing and tariffs, while provincial inspection offices may “establish procedures” related to these matters (section 38(1)).

4.8.5 Electricity Control Ordinance, 1965 (No. XXVIII)

This federal Ordinance allows the federal government to impose restrictions on the production, distribution and use of electricity during an emergency. The federal government may, however, delegate any or all of its powers under this law to provincial governments or to a

subordinate officer or authority (section 7).

Although the provisions of this Ordinance overlap with those of the federal Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997, which has overriding power, no specific instrument repealing the 1965 Ordinance could be identified.

4.8.6 Electricity Act, 1910 (No. IX)

Together with the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997, this federal law regulates the supply and use of electricity. Provisions of the 1997 Act override any conflicting provisions in the 1910 Act and all other laws for this sector. Although most powers under the 1910 Act lie with provincial governments, most such provisions are in turn overridden by the 1997 Act.

The 1910 law was amended most recently in 1998 and 1999. The Electricity (Amendment) Ordinance 1998 substantially increases penalties and fines for offences. These punitive measures are, however, aimed at curbing power theft and ensuring the smooth supply of electricity.

4.8.7 The Electricity Act (Punjab Amendment) Ordinance, 1971 (No. XXIX)

Under the Electricity Act (Punjab Amendment) Ordinance 1971, the Electricity Act of 1910 was amended and section 39 was substituted and as a consequence whoever dishonestly consumes or uses any energy shall be deemed to have committed theft as defined in the PPC. This not only protects the interests of the government, but it also safeguards against excessive and wasteful usage of energy, which would otherwise directly impact the environment due to the effects of overconsumption.

The penalty for this offence may extend to one-year imprisonment and/or fine, which may be up to 5000 rupees.

4.8.8 The Punjab Public-Private Partnership for Infrastructure Act, 2010 (Act IX)

The Act regulates the infrastructural projects implemented through Public Private Partnerships (PPP) (section 2). The list of infrastructure sector for which the projects can be made is given in schedule I, which includes power generation facilities (schedule I read with section 2).

One of the essentials for considering any proposals for the government agency responsible for a project to be carried out under the PPP is the EIA report under PEPA. The government agency while considering a bid has to make the EIA an essential part of consideration to grant a partnership agreement and subsequent loans. (More details in para 3.6.15)

4.9 TOURISM

The provincial tourism laws are insufficient and almost non-existent. They appear in passing in the powers and functions of the various provincial development authorities. However they fail to set any standards or provide for any guidelines to develop the tourism industry. Although provincial legislations do not take into account the impact of tourism industry on the environment, PEPA regulates these Activities.

4.9.1 Pakistan Environmental Protection Agency(Review of IEE/EIA) Regulations, 2000²⁶ (SRO 339(I)/2000 dated 13 June 2000)

The regulations require tourism projects to undergo a prior environmental assessment. Projects involving the provisions of public facilities and urban development projects related to tourism are required to submit an IEE (schedule I part I). Large– scale tourism development projects with total costs more than 50 million rupees, meanwhile require an EIA (schedule II art H).

4.9.2 The Lahore Development Authority Act, 1975

The authority established under the Act has powers to implement and enforce schemes for environmental improvements, housing, urban renewal including slums improvement and re-development, solid waste disposal, transportation and traffic, health and education facilities and preservation of objects or places of historical, archaeological, scientific, cultural and recreational importance. The authority may take any steps or adopt any measures for the face lifting and beautification of the area within its jurisdiction (section 11 (3) (i) & (ii)).

4.9.3 The Cholistan Development Authority Act, 1976 (No. XIV)

The authority established under the Act may undertake any works including promotion of tourism (section 15 (q)).

4.9.4 The Punjab Development of Cities Act, 1976 (No. XIX)

The Punjab Development of Cities Act was developed to establish a comprehensive system of planning and development in order to improve the quality of life in the cities of Punjab. The Act provides for implementation and enforcement of schemes for environmental improvements, housing, urban renewal including slums improvement and re-development, solid waste disposal, transportation and traffic, health and education facilities and preservation of objects or places of historical, archaeological, scientific, cultural and recreational importance. The authority may take any steps or adopt any measures for the face lifting and beautification of the area (section 7 (2) (vi) & (vii)).

4.9.5 The Murree-Kahuta Development Authority Act, 1986 (No. XXVI)

The authority established for the development of Murree and Kahuta Tehsils of Rawalpindi shall have the power to prepare, implement and enforce schemes for the promotion of tourism (section 5(2)(a)).

4.9.6 The Bahawalpur Development Authority Act, 1991 (No. VI)

The authority established under the Act may prepare, implement and enforce schemes for promotion of tourism (section 5 (2) (a)).

4.9.7 The Dera Ghazi Khan Development Authority Act, 1991 (No. II)

The authority established under the Act may prepare, implement and enforce schemes for promotion of tourism (section 5 (2) (a)).

²⁶ General summary at footnote 15

4.9.8 The New Murree Development Authority Act, 2004 (No. I)

The Act is to establish an authority in the public interest for planning, development and management of a new township near Murree and to make provisions for matters connected therewith and ancillary thereto. Though the Act does not talk about promotion of tourism clearly but the authority has powers to: prepare, implement and enforce schemes for environmental improvements, housing, water supply, sewerage, drainage, solid waste disposal, transportation and traffic, health and education facilities and preservation of objects or places of historical, archaeological, scientific, cultural and recreational importance; take any steps or adopt any measures for the beautification of the area (section 7 (3)(a)(b)).

4.10 IMPORT AND EXPORT

Since legislation for the import and export sector, including export quality standards, falls under the exclusive jurisdiction of the federal government, there are no provincial laws on the subject. The only Federal Law, which contains provisions to discourage the import of goods that damage the environment is PEPA, but even the scope of PEPA is limited, although statutory orders do specify ceilings on the quantities of certain types of harmful chemicals and compounds, including ozone-depleting substances, that may be imported. There are no provisions requiring data on imported goods that would permit a determination of their potential effect on the environment.

A major loophole in regulatory regime concerns endangered species. While the export of species protected under CITES is prohibited, the same restrictions are not placed on the import of endangered species.

4.10.1 Pakistan Environment Protection Act, 1997 (No. XXXIV)

Section 13 of PEPA prohibits the import of hazardous waste in the country. It also regulates import of hazardous substances through licensing system (section 14). "Hazardous waste" is defined as waste which is or which contains hazardous substance or which may be prescribed as hazardous waste and includes hospital and nuclear waste (section 2 (xix)). "Hazardous substance" is defined as substance prescribed as hazardous substance, and a substance that is by reason of its toxic, radioactive or explosive nature likely to cause adverse environmental effect (section 2 (xviii)). The definition specifically excludes pesticides from the application of PEPA.

4.10.2 Punjab Prohibition on Manufacture Sale Use and Import of Polythene Bags (Black or any other Polythene Bag below Fifteen Microns Thickness) Ordinance, 2002 (No. IX)

As the name implies, this Ordinance prohibits the import of polythene bags below fifteen-micron thickness. This prohibition is in place due to the negative environmental impact of polythene bags since they are non-biodegradable. If anyone is found to be in contravention of this prohibition, they shall be punished with imprisonment for a term, which may extend to three months and/or with fine, which may extend to 50,000 rupees. Such prosecution will take place under the procedure provided in the PEPA.

4.10.3 Import Trade and Procedures Order, 2000

This order, issued by the federal government under section 3 of the Exports Control Act, 1950 provides for procedural matters dealing with the basis under which imports are to be carried out. It limits the import of Ozone Depleting Substances in line with policies laid down by the Ministry of Commerce in consultation with the Environmental Division.

4.10.4 Export Policy and Procedures Order, 2000

This order, issued by the federal government under the Imports and Exports (Control) Act 1950, provides for procedural matters related to exports and contains provisions related to specific items intended for export (section 5, read with schedules I, II and III). Wildlife species listed in CITES Appendix I and II, and “all animals, mammals, reptiles and endemic birds” protected under provincial wildlife laws, may not be exported (section 5(1), read with schedule I, item 2). The National Council for Conservation of Wildlife (NCCW) is, however, authorized to issue a “no-objection certificate”, permitting such export for the purposes of research or in the case of “trophies from community managed conservation areas” (ibid.). Other items that may not be exported include wood, timber, charcoal and firewood (Schedule I, items 3 and 4).

Petroleum and petroleum products may be exported, but only through public-sector agencies (section 5(1), read with schedule II, item 1). Other items, such as food grains, metals, and radioactive materials, equipment used to produce nuclear energy, poppy seeds and wild boars may be exported under specified conditions (section 5(1), read with schedule III, items 1–4, 7, 8, 10 and 13).

4.10.5 Pakistan Bio-Safety Rules, 2005

These rules are framed under section 31 of PEPA to regulate the manufacture, use, import, export and sale of GMOs, whether for commercial use or research purposes (section 2). It requires for a license from the federal EPA to import or export “living modified organisms. The same condition applies to the import or export of foods, additives or ingredients consisting of GMOs.

GMOs are to be identified according to the requirements set out in article 18 of the Cartagena Protocol on Bio-safety (2000), “as set forth in the bio-safety guidelines”. In addition, all imports and exports are to be carried out in accordance with the National Plant Quarantine Regulations, “aligned with” the International Plant Protection Convention (1961).

4.10.6 Agricultural Pesticides Ordinance, 1971 (Ord. II)

This Act was introduced to regulate the import, manufacture, formulation, sale, distribution and use of pesticides. Section 9 says that if any pesticide imported into Pakistan is found to be adulterated or incorrectly or misleadingly tagged, labeled or named, or if its sale in any way contravenes any of the provisions of this Ordinance, the federal government may, by notification in the official Gazette, prohibit the further import of the pesticide into Pakistan.

4.10.7 Pakistan Plant Quarantine Act 1976

This Federal Act lays down that the Federal Government may by notification prohibit the import of certain plants which may be infected or may prohibits the movement of any article or class of articles likely to cause infection to any crop or plant, or of any pest generally or any class of pests. The definition of the word ‘import’ include bringing or taking by sea, land or air across and customs frontier as defined by the Federal Government and includes transportation by any means from a one Province

to another or from one place to another within a Province. Any person found contravening the provisions of this Act, i.e. importing something as which by notification under Section 3 of the Act has been prohibited to be imported would along with confiscation and penalty for transport be liable for a fine of 500 rupees on the first offence and a six-month imprisonment term. The subsequent rules framed under this Act list down certain types of vegetables rubbers and fruits from areas, which have certain known pest infections to be prohibited for import. Furthermore, any plant which may carry a new type of infection and pest may be limited in its quantity of import by the federal government and such import will only be allowed through the Karachi Harbor or the Karachi airport.

4.11 PHYTOSANITARY AND QUARANTINE

There are provincial laws dealing with human, plant and animal health and food safety in Punjab. PLGO regulates adulterated food and drinkable item, spread of diseases in animals, pests in plants and port quarantine. Various bodies have been established that work for the development of livestock and poultry and dairy animals. Feed of poultry and livestock is also being regulated through a system of licenses and standards of feed are being set. Agricultural pets are also being regulated through a provincial enactment.

4.11.1 The Punjab Local Government Ordinance, 2001 (XIII)

The PLGO does not define or provide for phytosanitary or quarantine measures. However there are some relevant provisions.

The concerned local government shall adopt measures to prevent infectious diseases and to restrain infection within its local area. The concerned local government shall establish and maintain one or more hospitals for the reception and treatment of persons suffering from infectious diseases (section 195 read with the sixth schedule (76))

The concerned local government can give orders of either destruction or confinement of any dog or other animal that is suffering from rabies (section 195 read with the sixth schedule 9). The concerned council may make byelaws for defining dangerous animals and the circumstances under which animals not otherwise dangerous shall be deemed to be dangerous. The byelaws may provide for the detention, destruction or disposal of such animals (section 195 read with the sixth schedule item 3). Further the concerned council may make by-laws determining the pests of trees and plants and order their destruction (section 195 read with sixth schedule item 19). Concerned local governments are empowered to regulate noxious vegetation and prohibit cultivation of any crop that is considered dangerous to public health (section 195 read with sixth schedule item 19).

The concerned local government may make by-laws for keeping the slaughter houses clean, supply of fresh water, manner of slaughtering the animals and disposal and destruction of animals unfit for human consumption (section 195 read with sixth schedule item 59). Further the concerned council may make by-laws for seizure and disposal of any animal, poultry or fish intended for food which is diseased or any article of food or drink which is noxious (section 195 read with sixth schedule item 60). Local government is empowered to inspect and seize any animal or article intended for human food, drink or medicine that is diseased, adulterated or unfit for human consumption (section 195 read with sixth schedule item 63).

Under the Ordinance, setting at large any animal affected with rabies or any other infectious disease is punishable with a fine that may extend to 200 rupees. Neglect by owner or occupier of land to clear away vegetation declared injurious to health by the local government is punishable with 500 rupees fine. Neglect in safe storage of eatable and drinkable item is punishable with 500 rupees and in case of large restaurants 3000 rupees. Feeding animals' filth or refuse that are kept for dairy or meat purposes is punishable with fine of 1000 rupees (section 141(2) (c) read with eight schedule, items 1, 3, 7 & 31).

Supplying or marketing contaminated water for human consumption, cultivation of crops for supply to public using manure or irrigation with sewer water, adulteration of food and drinking items, manufacturing, trade, of eatable or drinkable item unsafe for human consumption is punishable with imprisonment up to 3 years and/or fine up to 15,000 rupees (section 141(2) (a) read with fourth schedule, part I, items 10, 11, 13 &14). Preparation and sale of articles of food and drink by anyone suffering from any contagious disease is punishable with imprisonment up to 6 months and/or fine up to 5000 rupees (section 141(2) (b) read with fourth schedule, part II, items item 33).

4.11.2 The Punjab District Government Rules of Business, 2001

Under these rules, agriculture group office looks at plant protection and prevention of poultry and animal diseases. Health office looks at prevention and control of infectious diseases; treatment of patients bitten by rabid animals; adulteration of food; port quarantine; etc. (rule 3 (2), read with schedule II)

4.11.3 The Punjab Food Authority Act, 2011

The Act is to protect public health and to provide for the safety and standards of food. It establishes the Punjab Food Authority to carry out the purposes of the Act (preamble read with section 3 & 4). The authority is empowered to regulate and monitor the food business in order to ensure provision of safe food. Further, the authority may: formulate standards, procedures, processes and guidelines in relation to any aspect of food including food business, food labeling, food additive, and specify appropriate enforcement systems; specify procedures and guidelines for setting up and accreditation of food laboratories; formulate method of sampling, analysis of samples and reporting of results; specify licensing, prohibition orders, or prosecution; provide scientific advice and technical support to the government in matters relating to food; collect and analyze relevant scientific and technical data relating to food; establish a system of network of food operators and consumers to facilitate food safety and quality control; organize training programs in food safety and standards; promote general awareness as to food safety and standards; and certify food for export (section 7).

The Act also provides for scientific panels (section 9), public analysts (section 11) and food safety officers (section 12 & 13) to be appointed by the authority. It further provides for license or registration for food businesses (section 15). The food safety officer may restrain any food business from carrying on if he is satisfied that the health risk condition exists with respect to such food business, after serving a notice on the food operator (section 18). The food authority may establish a food laboratory for purposes of carrying out analysis of samples of any food or food related equipments or utensils (section 21).

Sale of any adulterated food or food which is not in compliance with the provisions of the Act is punishable with imprisonment for a term which may extend to six months and fine which may extend to one million rupees (section 22). Manufacturing, storage, sale, distribution, import or export of any food which is not of standard or misbranded is punishable with imprisonment for a term which may extend to six months and fine which may extend to one million rupees (section 23).

A food operator, who manufactures for sale, stores, sells, distributes, imports or exports any unsafe food, shall be liable, where the unsafe food does not result in injury to any person, to imprisonment for a term which may extend to six months and fine which may extend to two hundred thousand rupees; where such unsafe food results in injury to any person, to imprisonment for a term which may extend to three years and fine which may extend to one million rupees; or where such unsafe food results in death of a person, to imprisonment for a term which may extend to imprisonment for life and fine which shall not be less than two million rupees (section 24).

Packing, labeling of any food that does not comply with the prescribed standards is punishable with

imprisonment for a term that may extend to six months and fine that may extend to one million rupees (section 26). False misleading or deceptive labeling of food as regards its character, nature, value, substance, quality, composition, merit or safety, strength, purity, weight, origin, age or proportion is punishable with imprisonment for a term which may extend to six months and fine which may extend to one million rupees (section 26).

Any person, who manufactures or processes or keeps any food under unhygienic or unsanitary conditions, shall be liable to imprisonment for a term that may extend to six months and fine that may extend to one million rupees (section 28). If a person, who commits an offence, prescribed under the rules, for which no penalty has been provided in the Act, shall be liable to imprisonment for a term that may extend to three months and fine that may extend to five hundred thousand rupees (section 29). If a food operator manufactures, sells, offers for sale, stores or distributes or imports any food without the prescribed registration or license, he shall be liable to imprisonment for a term which may extend to one year and fine which may extend to five hundred thousand rupees (section 32).

If any person, after having been previously convicted of an offence under the Act, commits any offence under the Act, he shall be liable to: twice the punishment of imprisonment and fine, which is provided for the offence under the Act; and a further fine which may extend to two hundred thousand rupees and; his license shall be cancelled (section 34).

The Act repeals Punjab Pure Food Ordinance, 1960, however, existing licenses and orders issued under the repealed Ordinance will remain in force until expired/cancelled/withdrawn, as far as they are not in conflict with this Act. Further rules and standards notified under the repealed Ordinance shall also continue to remain in force if not inconsistent with the Act (section 58). The Act also repeals Punjab Food Safety and Standards Authority Ordinance, 2011.

4.11.4 The Punjab Livestock, Dairy and Poultry Development Bank Act, 1974

The Act provides for the establishment of a Livestock, Dairy and Poultry Development Board in the province of Punjab to establish, manage, control and run livestock, dairy, poultry and other allied projects in the public sector (preamble). Under the Act, the board is empowered to establish companies or to take measures itself to establish, manage and run livestock farms, stud farms, poultry farms, dairy farms, dairy plants including milk collection and chilling centers, quality testing laboratories for feed/livestock products, feed mills, slaughter houses, poultry processing, deep freezing and storing plants, quality testing, whole-sale and retail marketing and agencies of products of Livestock, Dairy and Poultry Development Projects on general or special order as Government may give from time to time (section 13 read with the schedule).

4.11.5 The Punjab Milk Board Ordinance, 1963

The Ordinance is to regulate the production and marketing of milk and milk products in certain areas of the province of Punjab and provides for establishing milk boards in such areas to carry out the purposes of the Ordinance (preamble read with section 3). One of the main functions of the board is to ensure that an adequate supply of milk and milk products of good quality is available to the consumers of milk and milk products in the local area and for that purpose to prepare and execute schemes for regulating production, marketing and distribution of milk and milk products (section 14).

4.11.6 The West Pakistan Epidemic Diseases Act, 1958

This Act extends to the whole of Pakistan (section 1). It empowers the provincial governments to take special measures to prevent the spread of "dangerous epidemic disease" if the government thinks that

ordinary provisions of the law are insufficient for the purpose. The special measures under the Act may include but are not restricted to inspecting travelers and segregating persons found to be infected (section 2). Disobeying orders issued under this Act are punishable under section 188 of the PPC (section 3).

4.11.7 The Public Health (Emergency Provisions) Ordinance, 1944

This federal law deals with emergencies during which urgent measures are required to protect public health or prevent the spread of infectious disease. The appropriate government—the federal government in relation to port authorities, the federal government or cantonment local government in relation to cantonments, and the provincial government for all other authorities (section 2(a))—may order a local authority to take the necessary measures to protect public health (section 3). The law also empowers the appropriate government to direct a local authority to supply water to any area during an emergency (section 7). The appropriate government may make rules, by-laws and regulations (sections 10 and 11), and issue “directions” in order to carry out the purposes of this Ordinance (section 8). The law deals primarily with administrative rather than substantive issues.

4.11.8 The Punjab Health Foundation Act, 1992 (No. XI)

The Act provides for the establishment of the Punjab Health Foundation to promote and finance the development of the health sector in the province of Punjab and matters incidental and supplemental thereto. The foundation is empowered to take all measures which it deems necessary for the promotion, development and financing of health services in the private sector (section 10).

4.11.9 The Punjab Healthcare Commission Act, 2010 (No. XVI)

The government may establish a commission to be called the Punjab Healthcare Commission for carrying out the purposes of the Act (section 3). The commission shall perform such functions and exercise such powers as may be required to improve the quality of healthcare services and clinical governance and to ban quackery (sec 4). The commission under this Act must provide for adequate healthcare standards, accreditation and quality assurance and for this purpose it may time to time make and amend rules.

4.11.10 The West Pakistan Prohibition of Opium Smoking Ordinance (W.P. No. II)

The Ordinance prohibits opium smoking and provides that no person shall manufacture, possess or smoke opium, or possess any apparatus that can be used for the manufacture of opium, or any pipe or utensil for smoking opium (section 3).

Penalties provided for opium smoking are simple or rigorous imprisonment for a term that may extend to two years and/or with fine, which may extend to two thousand rupees (section 4).

4.11.11 Pakistan Penal Code, 1860

Under the PPC, non-compliance with quarantine rules is a punishable offence (section 271)

4.11.12 Glanders and Farcy Act 1899 (No. XIII)

This federal law allows steps to be taken to control the spread of communicable disease among domestic animals. The term 'disease' is defined to mean glanders, farcy or any other "dangerous epidemic disease" (section 2(1)). Although the provisions of this law apply to horses, camels, asses and mules (section 2(2)); the precautionary measures specified also prevent wild animals from becoming infected. The law does not cover avian diseases, nor do its provisions apply to any diseases afflicting other types of animals.

Government inspectors appointed under this law (section 4) are authorized to enter and search fields, buildings and "other place[s]" in order to determine whether infected animals are being kept on the premises (section 5). Inspectors may seize animals suspected of carrying disease (section 6) and must have all such animals examined by a veterinary practitioner (section 7). Animals found to be diseased are to be destroyed (section 8) and the premises, on which they were kept, along with the surrounding area, must be disinfected (section 9). Animals that have come into contact with diseased animals may not be removed from the premises except "in good faith for the purpose of preventing infection" or after obtaining a license from the authorities (section 11). The law also requires owners of diseased animals to inform the authorities (section 10).

The maximum penalty for violating the provisions of sections 9 and 11 is imprisonment for a term of one month and/or a fine of 50 rupees (section 13). All powers under this law lie with the provincial government, which may also make rules to carry out the purposes of this Act (section 14). For this Act to come into effect, the provincial government must issue a notification applying the law to "any local area" (section 3).

4.11.13 The Punjab Animal Compound Feed and feed Stuff Ordinance, 2002

The Ordinance is to regulate the manufacturing and marketing of animals' compound feed and feedstuff in the Province of Punjab (preamble). "Animal" is defined as any species of poultry or livestock (section 2 (c)). The Ordinance gives a list of ingredients that can be included in the feed and the manufacturer can use any of such ingredients (section 3).

Manufacturing of compound feed and feedstuff can be done only under a license (section 4). When selling the compound feed and feedstuff, there is a requirement to pack and label it in the prescribed manner. All the feed is required to conform to prescribed specifications and standards (section 7). There is a requirement to display on the bags the brand name, date of manufacture and nutritive composition of the feed (section 6 & 7).

The Ordinance prohibits the manufacturing, sale, etc of feed that is adulterated or misbranded (section 8). "Adulterated" feed means not conforming to the declaration made by the manufacturer or not conforming to prescribed standards (section 2 (b)). "Misbranded means misuse of registered trade name (section 2 (u)).

Penalties for manufacturing/selling feed without license, or misbranding is punishable with imprisonment up to 6 months and/or fine up to one hundred thousand rupees (section 18). Penalty for manufacturing/selling, adulterated feed is imprisonment up to 3 months and/or fine up to 50,000 rupees (section 18).

4.11.14 The Punjab Agricultural Pests Ordinance, 1959 (XXVIII)

The Ordinance is to eradicate agricultural pests in the province of Punjab. When the provincial government notifies any area to be affected area by any agricultural pests, and it appears that immediate Action is necessary, the provincial government may take necessary remedial and preventive measures and may recover the costs from the occupier (section 9).

The provincial government may prohibit use of such agricultural methods that help the spread of agricultural pests through notifications (section 3). Further, the provincial government may also prohibit the transport and sale of any infested/infected crops (section 3). List of agricultural pests regulated is given in the schedule of the Ordinance (section 2 (b) read with schedule). Infested/infected crops are defined as crops affected by any agricultural pests.

Further every occupier of land where any crop is cultivated is required to carry out the “preventive measures” that are “prescribed” by rules made under the Ordinance (section 4). “Occupier” is defined as the person in Actual possession of land, his manager or anyone authorized to represent the occupier; land holder on lease; tenant; or pattadar (section 2 (g)).

The powers of the inspectors include seizure and destruction of infected/infested crops and giving directions to the occupier not to sell or dispose of collect, or move the seized crops (section 6). The inspector is also empowered to look into whether preventive measures prescribed by the rules are followed by the occupier and to give notice to the occupier if such measures are not carried out.

Penalty for contravention of section 3 and 4 is fine up to 50,000 rupees and not less than 25,000 rupees and for every subsequent offence the penalty is imprisonment not less than 3 months and up to 6 months and/or fine not less than 50,000 rupees and up to 100,000 rupees (section 10). For all other contraventions of the Ordinance or the rules made there under, the penalty is fine of up to 50,000 rupees and not less than 25,000 rupees (section 10).

The provincial government is empowered to make rules and amend the schedule (section 12 & 15)

4.11.15 West Pakistan Agricultural Pests Rules 1960

These rules were framed under section 15 of the West Pakistan Agricultural Pests Ordinance 1959. They prescribe specific “preventive measures” with respect to various crops (sections 4–9) and lay down procedures for crop inspections (section 10). Crops specified in the Rules include rice, maize, cotton, sugarcane, and fruit-bearing plants or trees.

4.11.16 Seed Act 1976 (No. XXIX)

This federal Act regulates the production and sale of seeds, and establishes various bodies to oversee and manage the seed industry

The provisions of this law apply to food crops, edible oil, fodder and cotton-seeds (section 2(p)). The National Seed Council is responsible for policy and overall supervision of the seed industry, including arrangements for the maintenance of the genetic potential of seeds and the development of seed production farms (section 4). The Federal Seed Certification Agency carries out field inspections, sampling and testing, and provides technical advice (section 6). The National Registration Agency assesses seed varieties, maintains a list of “registered” varieties and provides information about seed varieties (section 8).

The federal government specifies the varieties of seeds approved for production, sets germination and purity standards, and regulates the labeling of certified seeds (section 10). Only registered

varieties that conform to these standards may be sold or distributed (section 11). Seed producers, distributors and sellers must obtain a certificate from the government (section 13). Seed analysts are authorized to inspect production farms (section 17) while inspectors and certification officers are awarded wide powers to inspect packaged seeds (sections 19 and 20).

The federal government may make rules to carry out the purposes of this Act (section 29) and delegate its powers to a subordinate officer or authority, or to provincial governments (section 28). The law requires provincial governments to establish provincial seed councils to carry out functions assigned to them by the federal government (section 9).

4.11.17 The Punjab Seeds and Fruit Plants Ordinance, 1965 (No. XIII)

The Ordinance is to provide for better production and distribution of seeds and fruit plants of high quality in the province of Punjab (preamble).

The Act provides that the provincial government may notify: the local areas where certified seeds, fruit plants and nurseries may be raised; species of seeds and fruit plants which may be raised by a registered grower in such areas; the standard which a seed, fruit plant and nursery shall attain for being certified under the Act (section 3). "Fruit plant", "seed" and "nursery" are defined in the Ordinance (section 2)

Further the Act provides that any person desirous of raising certified seeds, fruit plants and the nursery on commercial basis may apply to the competent authority for registration under the Ordinance. On the application by a registered grower, the competent authority shall inspect his crop of seeds, go-downs of seeds, progeny garden, fruit plants and the nursery and if satisfied that the seeds, fruit plants and nursery raised by the registered grower have attained the standard notified under section 3, the competent authority shall certify such seeds, fruit plants and nursery as seeds, fruit plants and nursery, as the case may be, of high quality (section 6). The Ordinance also provides for the sale and distribution of certified seeds, fruit plants and nursery plants (section 7).

Under the Ordinance, if a registered grower fails to grow seeds and fruit plants of high quality or nursery thereof, the competent authority may, after giving notice to the registered grower and giving him an opportunity of being heard, cancel the registration. If a registered grower maintains a nursery that is below the standard notified under section 3, the competent authority may, after giving an opportunity of hearing, seize the nursery and confiscate it. If a registered grower contravenes any of the provisions of the Ordinance, he shall also be liable, on conviction before a magistrate of the first class to a fine not exceeding 1000 rupees. Whoever, not being a registered grower, raises a nursery of fruit plants of any quality on commercial basis shall be liable on conviction before a magistrate of the first class to a fine not exceeding 1000 rupees and, where the offence is continued after conviction, to a further fine of 50 rupees for each day during which the offence is continued (section 8).

4.11.18 The Punjab Seed Corporation Act, 1976 (No. X)

The Act provide for the establishment in the province of the Punjab, a corporation for the production, procurement, processing, marketing and distribution of seeds (section 3). The administration and management of the corporation and its affairs shall vest in a board to be constituted by the provincial government (section 4)

Main functions of the corporation include: procurement and import of pre-basic seed; production and proper multiplication of basic seed; multiplication, procurement, processing, bagging and storage of certified seed; adequate marketing of certified seed through both the public and private sector; export of the certified seed when possible after meeting the national requirements; taking over and managing

the Punjab Agricultural Development Supplies Corporation Seed Farms as directed by the Government; making suitable arrangements for the multiplication of seeds on private farms under its supervision; making suitable arrangements for the certification of seed; taking all measures to promote the establishment of the seed industry in the province; rendering technical advice and other services to its registered growers; and contributing towards the cost of any studies, services, experiment or technical research connected with the functions of the corporation and undertaken or done by any other person, agency or body. The government may entrust any other functions that it may consider necessary to the corporation (section 15).

The provincial government may make rules for carrying out the purposes of the Act and the board may make regulations subject to the Act and rules made there under (section 24 & 25).

4.11.19 Pakistan Bio-safety Rules, 2005 (SRO (I) 336(I)/2005 dated 21 April 2005)

These rules, framed under section 31 of PEPA, regulate the manufacture, use, import, export and sale of GMOs for commercial use and research purposes (rule 2).

The National Bio-safety Committee, established under rule 4, performs a wide range of regulatory functions. These include establishing standards and procedures for the labeling of GMOs, ensuring compliance with national bio-safety guidelines, certifying laboratories, and carrying out inspections of research facilities (rule 5). The committee has the power to restrict or prohibit the import, export, sale, purchase or trade in any "living modified organism" that poses or may pose a threat to "public health, safety or [the] environment" (rule 5(c)). It is also required to inform institutions engaged in "genetic manipulation work" about developments in the field of bio-safety in order to avoid exposing "laboratory personnel, the community or the environment to undue risks" (rule 5(l)).

The rules provide for the establishment of a Technical Advisory Committee (rule 6) to "review and control" bio-safety measures adopted in large-scale research institutions and industrial facilities, and to provide technical feedback and guidance to both the bio-safety committee as well as commercial and research institutions (rule 7). The advisory committee monitors the release of GMOs into the environment, and oversees field applications and experimental field trials (rule 7(d)). It may prepare an emergency plan to handle a "major accident" but is not required to do so (rule 24).

Responsibility for reporting accidents "which may be harmful to the environment, nature or health or involve any danger thereto" lies with the institutions and individuals involved, whether or not their operations are licensed (rule 23). How such a requirement is to be enforced, particularly in the case of unlicensed or illegal activities, is not specified.

The "release" of GMOs, whether deliberate or unintentional, is not permitted under the rules (rule 20(1)). This protection clause is, however, weakened by the fact that the bio-safety committee is allowed to grant exemptions in "special cases" (rule 20(2)). Nor are field trials explicitly prohibited (rule 13(2)).

Under the rules, institutions working in the field of biotechnology are required to set up bio-safety committees (rule 8) and appoint bio-safety officers (rule 10). Institutional committees perform a wide range of supervisory and advisory functions including risk assessment, the preparation of emergency response plans, and measures for the "appropriate" storage and movement of "regulated material" and "waste" (rule 9).

Risk assessment and field trials are to be carried out in accordance with the Cartagena Protocol on Bio-safety (2000) and Pakistan's National Bio-safety Guidelines (rule 13). The same requirements apply to the import and export of GMOs (rule 17).

The import, export, sale, purchase or trade of GMOs can only be carried out with a license from the federal EPA (rule 11). But “production” Activities involving GMOs, including “development, testing and experiments”, require the “consent” of the bio-safety committee (rule 19). Similarly, food prepared from GMOs and ingredients or additives containing GMOs may be produced, sold, imported or used with the “approval” of the bio-safety committee (rule 22).

Licenses, approved by the federal EPA, are issued for a maximum of four years and may subsequently be renewed for two years at a time (rule 15(2)). Licenses may be cancelled in cases where new information becomes available about the “harmful effects” of the GMOs in question, or where such GMOs cause damage to “the environment, nature or health” that could not have been foreseen at the time that the license was issued (ibid.).

4.11.20 The Punjab Agricultural Research Board Act, 1997 (XIV)

The Act provides for the establishment of Punjab Agricultural Research Board by the provincial government (preamble & section 2). The Board has the power to take all such measures as it deems necessary for the promotion, development, and conduct of agricultural research in Punjab (section 3). Under the Act, “agricultural research” means research in respect of all subjects and Activities related to crops, plants, livestock & dairy development, poultry, fisheries, forestry, wildlife, ecology, range management, agricultural engineering, water management, irrigation and such other Activities and subjects as the Government may declare as “agricultural research” (section 3).

4.11.21 The Punjab Agricultural Development and Supplies Corporation Act, 1973 (No. XXI)

The Act establishes an Agricultural Development and Supplies Corporation for the purpose of increasing agricultural production in the province of Punjab (preamble)

Main powers of the corporation include: production, procurement, transport, storage and distribution to agriculturists and Agriculture Department of Government, seeds, fertilizers, plant protection equipment, pesticides, weedicides and agricultural machinery including tractors and tube wells, etc; on direction of the provincial government, take over and manage multiplication farms and fruit nurseries owned and managed by provincial government; make suitable arrangements of multiplication of certified seed on private farms; make suitable arrangements for certification of seed in such manner as may be prescribed; assist, encourage and promote the establishment of seed producing concerns; assist, encourage and promote the manufacture of improved agricultural machinery; assist, encourage and promote the establishment of industries for formulating or manufacturing of insecticides, pesticides or fungicides (section 18). Further, the corporation shall be responsible for preparing and submitting Seed Laws to Government for promulgation; giving effect to Seed Laws; preparing and submitting schemes for distribution of fertilizers and pesticides to Government for purposes of approval and publication; and giving effect to such approved schemes (section 18).

Under the Act, the provincial government has the power to make rules and the corporation has the power to make regulations for carrying the purposes of the Act (section 25 & 26)

4.11.22 Pakistan Plant Quarantine Act, 1976

This federal law extends to the whole of Pakistan and the federal government is empowered to prohibit, restrict or otherwise regulate the import of any article or class of articles likely to cause infection to any crop or plant, or of any pest generally or any class of pests (section 3). “Import is defined as bringing into Pakistan by sea land or air and includes transportation from one province to another or from one place to another within a province (section 2 (c)). The

Act does not define “article” however the “infection” is defined as infection by any insect, fungus or other pest injurious to a crop or plant (section 2 (d)). “Crop”, “pest” and “plant” are also defined. Contraventions are punished with 500 rupees fine and for a second time offender the punishment is imprisonment up to 6 months and /or fine up to 2000 rupees (section 6). These penalties are irrespective to the penalties provided under the Customs Act, 1969.

The federal government may delegate to a provincial government, or to any officers or authority of such government, any of its powers under this Act insofar as it relates to intra-provincial or inter-provincial movement of articles (section 9).

4.12 INTRA-PROVINCIAL TRADE

Provincial legal instruments governing this sector regulate transportation, supply and distribution of wheat, food grains, cotton and other articles considered to be essential, and provide price control mechanisms. Essential articles have been defined to include a variety of goods as well as natural resources such as coal and certain varieties of timber.

Foodstuff control laws, meanwhile, allow the government to regulate or prohibit any class of commercial or financial transaction relating to food, which in its opinion is or is likely to be detrimental to public interest. These provisions could be used to regulate the sale and use of genetically modified food ingredients.

4.12.1 Punjab Foodstuffs Control Act 1958 (Act XX)

The Act regulates the supply, distribution and movement of and trade and commerce in foodstuffs. Foodstuffs are defined under Section 2(a) to include wheat, wheat aata, maida, rawa, suji, rice, paddy, sugar and any such commodity that the Punjab government may want to include in this list. Section 3 of the Act in its body allows the government the power to regulate through a licensing regime the storage, movement, transport, supply, distribution, disposal, acquisition, consumption, trade and commerce. The restrictions are meant to ensure supply, equitable distribution and availability at a fair price. Section 3, sub-section 2(c) along with other things allows the government to license the disposal of any and all foodstuffs. The government can ensure that environmentally friendly practices are carried out for disposal of expired, unhealthy or foodstuffs deemed detrimental to the public interest under section 3(2) (f). Implementation under this Act allows extensive powers to the Government to penalize the offences under Section 3. The authority responsible for ensuring implementation under this Act can, under section 6, punish with an imprisonment of up to three years, or a fine, or both along with seizure and forfeiture to the government of vehicles, vessels and aircraft, as well as property in respect of any contraventions found under this Act.

Under the local government regime SDG/district government is responsible for the enforcement of this Act (section 141 (6) read with tenth schedule item 1)

4.12.2 Punjab Essential Articles (Control) Act 1973 (Act XVII)

This Act regulates the production, supply and distribution along with trade and commerce with respect to certain essential items, defined in section 2(c) as those articles listed in the Schedule. Classes of goods to which this law applies includes coal, wood, iron, cement, newsprint and newspaper as well as

ink, cycles, cigarettes and a host of other essential commodities. Under this Act, the Government is authorized to regulate or permit production of any commodity deemed to be 'essential'. These permits under Section 3 (2) (a) can be used to control production mechanism of essential items ensure production in an environmentally friendly and sustainable matter as well as prohibiting from sale (Section 3(2) (b)) any item which the government may find detrimental to the public interest (Section 3(2) (f)) along with gathering statistics and data to regulate or prohibit any essential item. The law also deals with offences, including offences committed by corporations or individuals making false statements (sections 8 and 9) as well as punishments under Section 6 which may amount to 3 years imprisonment as well as a fine equivalent to the amount in questions deemed to be contravened under this Act.

4.12.3 Pakistan Plant Quarantine Act, 1976

This Federal Act lays down that the Federal Government may by notification prohibit the import of certain plants which may be infected or may prohibits the movement of any article or class of articles likely to cause infection to any crop or plant, or of any pest generally or any class of pests. The definition of the word 'import' include bringing or taking by sea, land or air across and customs frontier as defined by the Federal Government and includes transportation by any means from a one Province to another or from one place to another within a Province. Any person found contravening the provisions of this Act, i.e. importing something as which by notification under Section 3 of the Act has been prohibited to be imported would along with confiscation and penalty for transport be liable for a fine of 500 rupees on the first offence and a six month imprisonment term. The subsequent rules framed under this Act list down certain types of vegetables rubbers and fruits from areas, which have certain known pest infections to be prohibited for import. Furthermore, any plant which may carry a new type of infection and pest may be limited in its quantity of import by the federal government and such import will only be allowed through the Karachi Harbor or the Karachi airport.

4.13 RESEARCH INSTITUTIONS

Universities and colleges in the province of Punjab offer a diverse variety of courses in environmental law. Some in medicinal concentrations while others in the field of economics and management. Not all courses are available at any one college and a specific concentration in environmental law is offered only at 1 institution.

4.13.1 Pakistan Environment Protection Agency under PEPA

PEPA assigns the responsibility to the federal agency to set up systems to conduct and to promote research into pollution prevention and control (section 6)

4.13.2 Punjab Economic Research Institution Ordinance, 1980 (No. X)

The Act provides for the establishment of the Punjab Economic Research Institute. It is empowered to: conduct and promote research seminars, conferences, demonstrations and experiments in the fields of economics, demography and socio-economic problems relating thereto; provide information and advice regarding modern research techniques and methodology in economics and related social disciplines; (section 4-1 (i) and (ii)).

4.13.2 The Forman Christian College Lahore Act, 2004 (No. XXIII)

The foreman college under the Act offers an environmental sciences program that includes B.Sc (honors) environmental sciences and faculty research in environmental sciences in two concentrations i.e. Biological Sciences and physical sciences.

4.13.3 The Government College University Lahore Ordinance, 2002 (No. XLVIII)

The GC University offers B. Sc (honors), M. Phil. and Ph.D. degrees in environmental sciences. The university also hosts a sustainable development study centre, established in March 2007, which is currently focusing on research Activities encompassing sustainable livelihoods and environmental management and community development in Pakistan with a special focus on the problems of environmental degradation and related issues.

4.13.4 The Government College University Faisalabad Ordinance, 2002 (No. LXX)

The Government College University in Faisalabad has a department of environmental sciences. The faculty of the department includes highly qualified teachers who are involved in several research projects. At present, the department is offering several academic programs in the subject of environmental sciences which include B.S. (4-Year), M.Sc. (2-Year), M.S. / M Phil. (2-Year) and Ph.D.

4.13.5 The Lahore College for Women University Ordinance, 2002 (No. XLIX)

The Lahore College for Women, University, Lahore offers a BS Degree in environmental science, a MS degree in applied environment sciences (MS – AES) and a Ph.D. in environmental sciences.

4.13.6 The Lahore School of Economic Act, 1997 (No. II)

The Lahore School of Economics, established under the Act in 1997, has a centre for policy and environmental studies. It also offers a BBA (honors) degree with a major in finance and a minor in environmental policy.

4.13.7 The National College of Business Administration and Economics Lahore Ordinance, 2002

The National College of Business Administration And Economics offers a Bachelors, Masters, an M.Phil. and a Ph.D. in environmental management. This program is based on the study of waste materials, pollution prevention Activities associated with water, air, and soil, and the development and implementation of effective environmental management systems

4.13.8 The Punjab Kinnaird College for Women Lahore Ordinance, 2002 (No. LXXV)

The Kinnaird College offers 4 year degree program leading to BA/BS (honors)/BBA/BF degree in environmental sciences. The college also offers an M. Phil. program and an M.S. program in environmental sciences.

4.13.9 The University of Gujrat Act, 2004 (No. IX)

The University of Gujrat has established a centre for population, urban and environment studies, to conduct research in multiple areas. The centre will provide a platform for the university's faculty to pursue research and teaching devoted to the understanding of population, urban and environmental concerns.

4.13.10 Lahore University of Management Sciences

The Lahore University of Management Sciences, offers an elective course in environmental law in the final year of its BA - LLB program. The course provides an overview of the national and international legislations on environment and enables the students to understand various environmental concerns and the laws developed in those areas. Along with a course devoted to environmental law and regulation in Pakistan, multiple courses are offered on philosophy and politics surrounding the global ecological climate.

4.13.11 The University of Punjab Act, 1973 (No. IX)

The University of Punjab is the country's leading university, offering a very broad program of studies at the degree, diploma, postgraduate, M. Phil. and Ph.D. levels. The University has a college of earth & environmental sciences and offers M.Sc. and a B.Sc. (honors) in environmental science along with M. Phil. and a Ph. D. in environmental sciences.

The Punjab University also has a state of the art department of zoology that was established in 1921. The Department is a discipline of natural sciences and meets the needs of training persons in a vast basic and interdisciplinary framework concerning animal sciences. The university also has an institute of agricultural sciences where they study the control of plant diseases which is essential to the efficient production of food for the growing population, as well as for the production of fiber, lumber and pharmaceuticals.

4.13.12 Pir Mehr Ali Shah Arid Agricultural University Rawalpindi Act, 1995 (No. V)

The university has a department of environmental sciences and offers M. Phil. M. Sc. and Ph.D. degree programs in environmental sciences. The degree programs would provide a broad foundation of science-based skills, equipping students for careers in the full range of environmental professions, particularly in areas relating to environmental protection and management. Furthermore, curriculum for various degrees in environmental sciences has been developed according to the national and international requirements in order to train students for better environmental management understanding the inter-relationship between sustainable economic development and environmental protection.

4.14 DRUGS, PHARMACEUTICALS

Although provincial governments share a duty to legislate on matters related to drugs and pharmaceuticals, the sector is primarily regulated by federal law.

4.14.1 Drug Act, 1976 (No. XXXI)

The federal government enjoys wide ranging power to regulate, the import export, manufacture and distribution of pharmaceutical drugs. For the purpose of this law, drugs are defined to include, substances used for the “destruction or repulsion” of vermin, insects, rodents or “other organisms” that cause carry or transmit disease in “human beings or animals” it may also include pesticides that may pose a public “health hazard” (section 3(g) (III) and (iv)).

Under this federal law, the provincial governments are assigned specific responsibilities. Provincial governments are responsible for regulating the sale of drugs (section 6). They are required to set up a quality control board (section 11) and a drug-testing laboratory (section 15). Provincial governments may appoint analysts (sec 16) and inspectors (section 17), set up provincial drug courts (section 31), and constitute a provincial appellate authority (section 9-A).

While the federal government is responsible for matters related to the registration of drugs, the provinces are to show compliance in such matters (section 7). The federal government may issue directions to provincial governments regarding other matters (section 13) and delegate to the provinces any or all of its powers (section 44 - A (1)). Provinces may in turn sub-delegate their powers (section 44 -A (2)).

Only the federal government can grant exemptions under the law (section 36), but both the federal and the provincial governments may frame rules to govern the various aspects of drug regulation (section 43 & 44).

4.14.2 Punjab Drug Rules, 1988

These rules are formulated under section 44 of the Drug Act, 1976. They supersede the Drug Rules of 1958. They prescribe the licensing to sell drugs (section 15) and the procedure thereof (section 16). The rules have provisions for the cancellation and suspension of licenses.

4.14.3 Drug (Licensing and Advertizing) Rules, 1976

Made under the Drug Act, 1976, these rules apply to the whole of Punjab. They establish a board and require it to monitor the quality of all drugs sold and to keep a watch on the performance of all manufacturers and the drug sale license. There shall be different types of licenses to manufacture drugs for which different applications and fees are applicable (section 3, 4 and 5).

If a licensee does not comply with any of the conditions of a license or violates any of the provisions of the Ordinance it may be cancelled or suspended (section 12). Chapter 3 of the rules has detailed provisions for the registration of the licenses and the procedure thereof. Chapter 4 of the drug rules provides for advertising of drugs, etc.

4.14.4 Punjab Essential Articles (Control) Act, 1973 (No. XVII)

Under the Act, the provincial government, so far as it appears to it to be necessary or expedient for maintaining or increasing supplies of any essential article, or for securing its equitable distribution and

availability, or for controlling and fixing the prices of an essential article may, by notified order, provide for regulating or prohibiting the production, acquisition, treatment, keeping, storage, movement, transport, supply, distribution, availability at fair price, disposal, use or consumption thereof, and trade and commerce therein (section 3). "Essential articles" include Imported drugs and medicines and Indigenous drugs and medicines other than unani, homeopathic or ayurvedic and those compounded by dispensing chemists; surgical instruments and appliances; X-Ray films and X-Ray apparatus and electro-medical equipment; glucose; and 35mm, raw films and X-Ray films (section 2 (c) read with schedule).

Punishment for contravention under the Act is imprisonment for a term that may extend to three years and/or with fine that shall not be less than the value of the essential articles in respect of which the order has been contravened (section 6). Offences under the Act shall be cognizable and non-bailable (section 10).

4.15 OTHER LEGAL INSTRUMENTS

The subjects reviewed in this section potentially affect natural resource management but do not fall into any of the categories mentioned above.

4.15.1 Punjab Local Government Ordinance, 2001 (No. XIII)

Under the PLGO, district governments are responsible for environmental protection and the control of pollution. In city districts, the zila council approves plans for "environment control" and "ecological balances", and oversees the implementation of rules and by-laws on "environment" (sections 40(a) & 40(b)). At the district level, the tehsil municipal administration is permitted to grant exemptions from local by-laws as long as these exemptions are not related to "matters concerning environmental protection" (section 54 (1)). Union nazims are required to submit to the relevant authorities reports on a number of matters including "environmental and health hazards" (section 80(f) (iii)). Local councils may frame by-laws governing the "prevention of air, water, noise, and soil pollution" and the "pollution of air, water or soil" (sections 191(2) and 192(2), read with the fifth schedule, part II, items 25 and 41). The provincial government, for its part, may "provide guidelines and render advice" to district governments in order to promote "environmental security" (section 127(3)).

Indeed, the subject of "environment" has been decentralized and is to be administered by the district works and services office (sections 14 and 35, read with the first schedule, parts A and C), which is responsible for assisting in the implementation of PEPA and the rules and regulations framed under the PEPA. In city districts, moreover, the provincial government may setup a district municipal office for "integrated development and management" of a number of sectors, one of which is environmental control and includes the "control of air, water, and soil pollution in accordance with federal and provincial laws and standards" (sections 14 and 35, read with the first schedule, part D).

Despite awarding local governments these wide-ranging responsibilities, the PLGO neglects to provide a specific definition for the term 'environment', which appears only in the context of municipal services (section 2(xxii)). While PEPA defines the term in its broadest sense, for the purposes of the PLGO the application of the term appears to be somewhat narrower. The general powers of local governments are spelled out in the sixth schedule to the Ordinance where, under the heading of environmental protection, a single item, "environmental pollution", is listed (section 195, read with the sixth schedule, item 48). Specific powers mentioned here are related to air and water pollution, and the pollution of "land". Elsewhere in the same schedule, local governments may require builders to make provisions for "matters affecting the [...] environmental aspects of the buildings and its relationship to

the surrounding buildings or areas ” (sixth schedule, item 27(1) (j)). There is, however, nothing in the text of the PLGO to exclude application of PEPA’s broader definition.

The PLGO fails to provide for taxes to be levied for the purpose of environmental protection (see the second schedule). Certain environmentally harmful Activities are, however, mentioned in the detailed schedule of offences but do not carry penalties severe enough to serve as an effective deterrent. Discharging industrial, commercial or other waste, dangerous chemicals, and hazardous or “offensive” materials into drains and water bodies or onto public land is an offence punishable with a maximum penalty of three years’ imprisonment and/or a fine of 15,000 rupees, in addition to a fine of 1,000 rupees for each day that the offence continues to be committed (section 141(2) (a), read with the fourth schedule, part I). Similar penalties apply for the unauthorized manufacture and sale of explosive materials or “any dangerous chemical, inflammable, hazardous or offensive article or material” (fourth schedule, part I).

Other offences under the PLGO, which are subject to an immediate fine but may also incur imprisonment for up to six months and/or a fine of 5,000 rupees in the case of a repeated offence, cover a wider range of matters concerning public health and safety (section 141(2) (c), read with the eighth schedule, items 5, 24, 25 and 29). Offences related to the “physical environment” are also framed in the context of public health. “Damaging or polluting” the environment in a manner that endangers public health invites a fine of 2,000 rupees in the case of public premises and 500 rupees for private premises, with higher fines and/or imprisonment for repeat offenders (eighth schedule, item 26).

4.15.2 The Punjab Juvenile Smoking Ordinance, 1959 (No. XII)

Under the Ordinance whoever sells or gives or attempts to sell or give a tobacco to a juvenile, whether for his own use or not, shall be punished in the case of a first offence with fine which may extend to 200 rupees and in the case of a second offence, in addition to suspension of his license with fine which may extend to 200 rupees and in the case of a third or subsequent offence, in addition to cancellation of his license, with imprisonment which may extend to six months or with fine which may extend to 5000 rupees (section 3).

4.15.3 The Punjab Prohibition of Expressing Matters on walls Act, 1995 (No. II)

The Act provides that whoever affixes or causes to be affixed any poster, bill, notice, placard or other paper or means of advertisement on a wall or writes on any wall with chalk or paint or in any other manner whatsoever or expresses or describes any matter on any wall in any manner whatsoever with the intention to attract public attention to that matter shall be punished with imprisonment for a term which may extend to six months and/or with fine which may extend to 5,000 rupees. It shall not be an offence under this section, if the owner or possessor of the wall expresses any particulars relating to himself or his business thereon (section 2).

4.15.4 The Punjab Prohibition of Smoking in Cinema Houses Ordinance, 1960 (No. IV)

Under the Ordinance smoking during any performance, demonstration or exhibition, in any part of a cinema house reserved for the audience or the spectators, is punishable with fine that may extend to 100 rupees (section 3).

Any police officer, not below the rank of sub-Inspector, may arrest without warrant any person who in his presence commits an offence punishable under section 3, but shall release him on his personal

bond for attendance before a magistrate on a specified date (section 4).

4.15.5 The Punjab Prohibition on Manufacturing, Sale, Use and Import of Polythene Bags (Black or any other Polythene Bag below Fifteen Micron Thickness) Ordinance, 2002

The Ordinance provides that no person shall manufacture, sell, use or import black polythene bags or any polythene bag below fifteen micron thickness or offer any kind of eatable and non-eatable goods in any black polythene bag or any polythene bag below fifteen micron thickness (section 3).

Any person, who contravenes the provisions of section 3, shall be punished with imprisonment for a term that may extend to three months and/or with fine that may extend to 50,000 rupees (section 4).

4.15.6 Punjab Regulation and Control of Loudspeakers and Sound Amplifiers Ordinance 1965 (WP No. II)

This Ordinance aims to control noise pollution. It places express prohibitions on the use of loudspeakers in certain instances and qualified restrictions in others.

Restrictions are placed on the use of loudspeakers and amplifiers in the following areas: near a place of worship during prayer times; and in the vicinity of hospitals, educational institutions, offices, courts or public institutions (section 2(1)). In such areas, loudspeakers may not be used in a manner that is likely to disturb the working or use of such places, or in a manner that causes "annoyance or injury" to residents of an area. The Ordinance allows the use of loudspeakers and amplifiers for the purposes of the *azaan* (call to prayer) and *khutba* (sermon) in a "moderate tone" (section 2(2)) but the term has not been defined.

Under the provisions of the PLGO, the district or city district government is responsible for the enforcement of this law (PLGO, section 141(6), read with the Tenth Schedule, item 4).

4.15.7 The Punjab Silk Worms (Regulation and Control) Ordinance, 1972 (No. VI)

The Ordinance provides that no person shall produce, supply, possess or rear silkworms except in accordance with the provisions of this Ordinance and the rules. The government may, on application made to it and on payment of such price as may be fixed and on such terms and conditions as may be prescribed, supply silkworms to any person (section 3).

Whoever contravenes any of the provisions of the Ordinance or the rules shall, on conviction before a magistrate, be punished with imprisonment of either description for a term which may extend to six months and/or with fine which may extend to five hundred rupees (section 5). The court trying an offence under this Ordinance may order that the silkworms involved in the offence shall be destroyed under the supervision of an officer authorized by government (section 5).

4.15.8 The Punjab Emergency Service Act, 2006 (No. VI)

The Act establishes the Punjab Emergency Service to deal with emergencies (preamble & section 4), and Punjab Emergency Council (section 6). "Emergency" is defined as a serious and potentially

dangerous situation requiring immediate Action such as an accident, hazardous material incident, fire, explosion, natural or manmade disaster (section 2 (g)). Powers and functions of the emergency service and council are provided (sections 5 & 7).

4.15.10 West Pakistan National Calamities (Prevention and Relief) Rules, 1969

These rules, issued under the West Pakistan National Calamities (Prevention and Relief) Act 1958, provide for operational matters related to emergency measures taken under the 1958 Act. The rules require that a flood protection scheme is prepared for every district “normally affected by floods” (section 7), and that “places of safety” are notified (section 9). They spell out the powers of relief commissioners and other officials (sections 3–5), and contain procedures related to flood warnings (section 10) and damage assessment (section 11). In cases where land has been acquired under section 4(2) of the 1958 Act, the rules stipulate that compensation is to be paid according to the market value of the land (section 12(1)) and in accordance with the Land Acquisition Act 1894 (section 12(2)).

4.15.9 Explosive Substances Act, 1908 (No. VI)

This federal law regulates the possession and use of explosive substances, including materials for the manufacture of explosives as well as machinery, tools and materials that can be used to cause an explosion (section 2). Causing an explosion is punishable with a maximum sentence of life in prison, whether or not the event causes any injury to persons or damage to property (section 3). The same maximum penalty applies to making or possessing explosives with intent to cause an explosion (section 4). Although the law does not specify conditions under which it is legal to possess explosive materials, possession of such substances for a purpose that is not “lawful” is an offence (section 5), implying that some form of regulatory mechanism is to be put in place. Powers under this Act lie with provincial governments, which may restrict or allow the courts to proceed with the trial of suspected offenders (section 7). The 1908 law deals exclusively with causing explosions or intent to cause explosions.

4.15.10 Explosives Act, 1884 (No. IV)

This federal law deals with the manufacture, possession, sale, use and transport of explosives. The government may prohibit the manufacture, possession or import of any explosive substance, except with a license (section 5), or ban outright the manufacture, import or possession of any material deemed to be of “so dangerous [a] character that [...] it is expedient for the public safety” to impose such restrictions (section 6). Under this law, the maximum penalty for illegally manufacturing, possessing or importing explosives is 5,000 rupees.

The government may declare any substance deemed particularly dangerous to life or property, owing to its explosive properties, or any of the processes involved in its manufacture to be an explosive within the meaning of this Act (section 17). Such materials may include a wide range of chemical substances that are explosive in nature, although the term ‘dangerous’ itself has not been defined. No regulatory compliance measures are introduced for the handling of hazardous materials.

All powers under this Act lie with the “appropriate government”, defined as the federal government in relation to import and inter-provincial transport, and the provincial government in all other matters

(section 4(7)).

4.15.11 National Environmental Quality Standards (Certification of Environmental Laboratories) Regulations, 2000 (SRO 258(1)/2000 dated 10 February 2000)

These Regulations, framed under PEPA prescribe procedures for the certification of laboratories where tests may be conducted on soil, air, water and other samples.

4.15.12 Environmental Tribunal Rules, 1999 (SRO (1)/2001 dated 10 March 2000)

These rules, issued under section 33 of PEPA 1997, allow for the establishment and functioning of environmental tribunals. The rules provide for procedural and operational matters including the qualifications of tribunal members (rule 4). Proceedings of the Tribunal are open to the public, except in certain specified matters (rule 18). Tribunals are required to make "every effort" to dispose of cases with a 60-day period (rule 16).

5. Case Law

5.1 Supreme Court

5.1.1 Suo Moto Case No. 25 of 2009 decided on 15-09-2011

This recent case is the result of a letter, which the Lahore Bachao Tehreek (NGO) wrote to the Chief Justice of Pakistan regarding the Punjab governments' proposed plan on widening the canal road which would lead to the cutting of numerous old trees. The Chief Justice suo moto issued notices to the complainants as well as the government. The complainants amongst other things alleged that the EIA was not carried out properly and given the fact that the provincial EIA is under the same authority as the one that had commissioned the project, there were irregularities in the way the EIA was conducted. Furthermore this project interfered with a citizen's right to life since these trees provide a welfare public park for the people to enjoy under the doctrine of public trust. A mediation committee was constituted and after looking through its recommendations, the Court held that the BRB Canal and the green belt on both sides of the Canal Road (from Jallo Park till Thokar Niaz Beg) is a Public Trust. It shall be treated as Heritage Urban Park forthwith and declared so by an Act to be passed by the Assembly as undertaken by the respondent- provincial government; widening of the road on both sides of the canal bank shall be in accord with the report submitted by the Mediation Committee; necessary corrections/modification of some of the underpasses on the Canal Road shall be carried out as suggested in the report of the Mediation Committee; proper Traffic Management Program shall be made and given effect to; further improvement in public transport system shall be ensured; where needed and as recommended by the Committee, re-engineering of the junctions along the canal bank would be undertaken; the service roads along certain parts of the Canal Road shall be constructed/improved; report of the Mediation Committee shall be implemented as agreed by the respondent- provincial government in letter and spirit; respondent-provincial government and TEPA shall ensure that minimum damage is caused to green belt and every tree cut would be replaced by four trees of the height of 6/7 feet and this replacement when commenced and completed shall be notified through press releases for information of general public, copies of which would be sent to the Registrar of this Court for our perusal; and elaborate measures/steps be taken to ensure that the Canal is kept clean and free of pollution. The steps should inter alia include throwing of litter and discharge of any pollutant in the Canal a penal offence. The Chief Secretary, Government of Punjab shall ensure

that a comprehensive action plan is prepared in this regard by the concerned department and report is submitted to the Registrar of this Court within six weeks of the receipt of this judgment.

5.1.2 SUO MOTO Case No. 10 of 2010 (2011 SCMR 73)

Constitution, Article 9 & 184 (3)

In this case it was alleged that the contamination in Manchar Lake had affected lives of fishermen and most of them had moved to other places and government had failed to protect the lake, lives of fishermen and beauty of the lake. Accordingly notices were issued to the concerned authorities and Chief Secretary, Government of Sindh and Chairman, WAPDA submitted a joint report along with proposed solutions before the SC. The Court observed that serious steps have already been initiated and it is now being realized that fundamental rights of the inhabitants are to be protected and the concerned authorities have initiated appropriate action, no further proceedings are called for. However the Court directed WAPDA and government of Sindh to submit a quarterly report about the progress in the matter before the Court.

5.1.3 Muhammad Shafiq and others v Arif Hameed Mehr and others (PLD 2008 SC 716)

Constitution, Article 184 (3)

Residents of Islamabad complained about the quality of water as well as the general state of environmental pollution in the capital city. The SC remarked that the state of affairs was dismal and warranted attention from everyone involved i.e. the government, the concerned agencies and the respective citizens. However, the Court observed that it could not directly interfere with the affairs; however, it directed the concerned authorities to take notice of the matter and clean up the capital.

5.1.4 Farooq Hamid v L.D.A. (2008 SCMR 483)

Constitution, Article 185 (3)

PEPA, section 12

In this case the issue was construction of multi-storied building without the relevant NOC from the Punjab EPA. The builder contended that in spite of the application for grant of NOC vis-à-vis the environmental impact of the project, no action had been taken by the EPA. EPA could not satisfy the Court for its inaction. EPA argued that it withheld the NOC on the ground that the owner of the building had not provided affidavit regarding any litigation which might be pending with respect to project in question. The Court observed that the EPA failed to explain to SC as to how, if at all, any litigation was pending would be a relevant factor for determining environmental impact of the project in question. The Court observed that concerned authorities should realize their responsibility towards the people and do what the law requires.

5.1.5 Farooq Hamid v L.D.A. (2008 SCMR 468)

Constitution, Article 185 (3)

PEPA, Preamble

In this cast the petitioners filed a suit in the court of Senior Civil Judge against the respondents who had started building a multi-storied shopping-cum-residential plaza right next to their house. The construction had caused a lot of damage i.e. cracks and other consequential damage to the property of the petitioner. It was contended that the respondent had started building it without any legal and bona fide sanction and that the said multi-storied plaza was being constructed also in violation of the mandatory provisions of Regulations Nos.9(iii), 9(iv), 42, 66(d)(iv) and 81 of the Building Regulations of the LDA as also in violation of the provisions of section 12 PEPA. The Court refused to order stoppage of construction and Lahore HC also dismissed the appeal. SC, accepting the petition, looked into the matter and directed LDA and district government to submit a report, putting down steps taken by them, to deal with any emergency situations concerning high-rise buildings, such as fire or any other calamity. The Court directed the provincial government to immediately consider initiating steps for making laws that protect the rights of owners and occupants that share rights in a high-rise building including steps for insurance cover for the owners and for maintenance of common facilities. The Court also observed that such projects require conducting an EIA under PEPA before any plan for construction could be sanctioned.

5.1.6 Sheri-CBE v L.D.A. (2006 SCMR 1202)

Constitution, Article 185 (3)

PEPA, sections 2 & 12

In this case the dispute was with regard to construction of a complex in a residential area over an amenity plot. Contention of the petitioner was that the complex in question involved construction of a huge building with an initial estimated cost-of 1500 million rupees, which involved use of roads in a residential locality by a large number of additional persons and vehicles visiting the complex and which also involved a change in land use, and fell within the purview of a 'Project' as defined by section 2 (xxxv) of PEPA, and in view of provisions of section 12 of PEPA, the very commencement of its construction without filing an IEE with the Federal EPA and without its approval regarding the EIA, was grossly illegal and was even a culpable offence under PEPA. The petition was therefore allowed besides the unusual volume of this leave granting order. The Court however did accept that the matter requires deeper examination.

5.1.7 Suo Moto Case No. 3 of 2006 (PLD 2006 SC 514)

Constitution, Article 184

CDG Karachi planned on converting a public park (since 1893) into a multi-story car-parking plaza in order to meet the traffic congestion in Karachi. In view of the objections taken by the NGOs and the intervention of the SC, the CDG Karachi decided to drop the project. In any case, the SC held that CDG Karachi is restrained to convert the park in future to any other use save in accordance with law. CDG Karachi was also directed to restore the status of the public park and develop the same accordingly.

5.1.8 Maulvi Iqbal Haider V Capital Development Authority (PLD 2006 SC 394)

Constitution, Articles 26, 199 & 184 (3)

Capital Development Authority Ordinance, 1960, sections 12, 19, 20, 21 & 49

Brief facts of the case are that five acres of park land known as a Jubilee Park (a public park) in F/7,

Islamabad was being leased out to a private company called Al Falah Mini Golf for development of a Mini Golf Course by Capital Development Authority (CDA). The Company had the license to operate restaurants or hold promotional events like "*Basant*" festivals and theatrical activities, funfairs and golf tournaments. This contract was not given on the basis of an open tender and the rates quoted were lower than the market rates. It was admitted that the site was earmarked for a public park. However, the park had yet not been developed but the topography of the area has remained intact. The lease agreement was struck down on the grounds of fundamental rights and the respondent was directed to handover the vacant possession of the property to CDA. Furthermore, directions were issued to initiate disciplinary action against the delinquent officers responsible for executing the delay.

5.1.9 Islamuddin V Ghulam Muhammad (PLD 2004 SC 633)

Constitution, Article 185 (3)

Civil Procedure Code, 1908, section 91

PPC, section 268

SC laid down a test while discussing a case of public nuisance that proof of public nuisance would not be judged by the volume of evidence being presented in lieu of the same. Testimony of a few witnesses might be sufficient to prove that the nuisance was injurious to physical comfort of the community. Even a noise made in carrying on of a lawful trade under license, if injurious to physical comfort of the community, would be a public nuisance.

5.1.10 Syed Ali Asghar V Creators (Builders) (2001 SCMR 279)

Constitution, Articles 185 (3) & 199

Karachi Development Authority Order, 1957, articles, 36 & 40

Use of land was changed from what was originally intended. The Court looked at the relevant provisions of law and held that the purpose of land use can be changed if the change was to benefit of the people. No absolute bar exists for the change of use of land for the benefit of people. The leave to appeal against the order of HC refused.

5.1.11 Ardeshir Cowasjee V Karachi Building Control Authority (1999 SCMR 2883)

Constitution, Articles 9, 25 & 199

Karachi Development Authority Order, 1957, articles 40 & 52-A

Karachi Building and Town Planning Regulations, 1979, schedule D, para 3

The appeal was filed against the decision of the Division Bench of Sindh HC, challenging the permission for construction of a high-rise building and conversion of an amenity plot into a commercial plot. The Court held that Karachi Development Authority was not authorized to change the use of any amenity plot without inviting objections and without obtaining the order of the government. The Court further held that since the approval for the construction was in contravention to the provisions of the law and illegal, such illegal action/order could not be treated as irrevocable or closed and past transaction and perpetual rights could not be gained and principle of locus poenitentiae was not attracted in the

circumstances.

The Court also observed that use of park involving enjoyment of life was covered in the word “life” occurring in Article 9 of the Constitution and citizens had the right to ensure that officials do not grant approval of a plan which might be in violation of the relevant laws, in this case Karachi Development Authority Order, 1957 and Karachi Building and Town Planning Regulations, 1979. The Court also looked into the meaning of “sufficient interest” and held that it includes civic or (community) environmental and cultural interest. The Court also examined the “locus standi” under Article 199 of the Constitution and observed that “beach” being an established place of public recreation even a resident of a distant area could have filed the Constitution petition.

5.1.12 Pollution caused by Smoke Emitting Vehicles (1996 SCMR 543)

Constitution, Article 184

The interim order issued by the SC called for measures to streamline the process of checking motor vehicles in Karachi, as a first step towards eliminating air and noise pollution in the city. The order was based on reports from mobile checking carried out in 1992–93, also at the order of the Supreme Court.

5.1.13 Asfand Yar Khan V Chief Commissioner Islamabad Capital Territory, Islamabad (1996 SCMR 1421)

Pakistan Mining Concession Rules, 1960, schedule II, clause 15 & 72

The leave to appeal was filed against the order of the Lahore, HC. The brief facts are that the petitioner challenged termination of a lease for quarrying of limestone before the HC in its Constitutional jurisdiction. The HC on basis of material on record found that termination of lease was justified on the ground that Authorities having demarcated area which was declared to be Margalla Hills as National Park' under S. 21, Islamabad Wildlife (Protection, Preservation, Conservation and Management) Ordinance, 1979, breaking up of earth or digging or removal of stone etc. was prohibited from area in question, therefore, proceedings in the case had been taken in accordance with the provision of law as well as terms and conditions of lease granting letter. The HC further observed that the objection that area leased out to petitioner did not fall within National Park Area being question of fact had been determined twice and had been found to have fallen within territorial limits of National Park Area and that question of fact could not be subject-matter of Constitutional petition. Order of termination of lease was passed under clause 15, Pakistan Mining Concession Rules, 1960, which empowers lessor to determine lease as provided therein. The Court observed that the HC rightly found that in terms of clause (15), Pakistan Mining Concession Rules, 1960, where it was found that area or any part thereof, was not free and was granted to lessee by inadvertence, lessee would release the same unconditionally as and when required to do so. Leave to appeal was refused in the circumstances.

5.1.14 Amanullah Khan v. Chairman Medical Research Council (1995 SCMR 202)

Constitution, 4, 9, 25, 184 (3)

The petition was filed against the cigarette commercials on the television. The petitioner stated that the smoking habit has attained alarming proportions in Pakistan during the past two decades, as the western tobacco companies are unable to sell cigarettes in the western countries so they are now aiming at the developing nations. The petitioner stated that the unsuspecting people of Pakistan are falling prey to their advertising campaign, which has already resulted in catastrophic calamities in the form of cancer and heart disease. SC observed that the petition did not fall within the restricted

jurisdiction enjoyed by it under Article 184 (3) of the Constitution and therefore the same was dismissed.

5.1.15 General Secretary, West Pakistan Salt Miners Labor Union (CBA)Khewra, Jehlum v.The Director, Industries and Mineral Development, Punjab, Lahore (1994 SCMR 2061)

Constitution, Articles 9, 14 & 184 (3)

The petition under Article 184 (3) of the Constitution was filed complaining against the pollution of water supply source to the residents and mine workers of Khewra. It was alleged that the poisonous water coming out of the mines was polluting the water reservoir and was a health hazard. It was further alleged that allotment and grant of lease to the miners in the water catchment area was illegal. SC heard all the parties and held that the right to have unpolluted water is the right of every person wherever he lives. SC liberally interpreted Articles 9 (right to life) and 14 (dignity of man) and held, “the word “life” in the Constitution has not been used in a limited manner. A wide meaning should be given to enable a man not only to sustain life but also to enjoy it”. SC argued that the Constitution guarantees dignity of man and right to “life” and if both are read together, question will arise whether a person can be said to have dignity if his right to life is below bare necessity such as without proper food, shelter, education, clean atmosphere and unpolluted environment.

The Court directed the miners to shift the mouth of the specific mine at a safe distance from the stream, within four months, in such a manner that water is no longer polluted by mine debris and water spilling out of the mine. The Court also appointed a Commission to look into the process of shifting the mine head. It further directed the miners to take measures for prevention of pollution of the water reservoir, to the satisfaction of the said Commission. The relevant authorities were ordered not to grant new leases to carry out mining works in the specific catchment area and not to renew the leases of companies, specified, without the Court’s permission.

5.1.16 Shehla Zia v. WAPDA (PLD 1994 SC 693)

Constitution, Article 9, 14 & 184 (3)

In this landmark case, the SC was moved to look into the matter of construction of a high-voltage grid station in the green belt of a residential locality in Islamabad. On behalf of the residents of the area, in which WAPDA proposed to construct the grid station, a letter was sent to the SC raising two questions: whether any government agency has the right to endanger the life of citizens by its actions without the latter’s consent; and whether zoning laws vest rights in citizens which cannot be withdrawn or altered without the citizens’ consent.

The Court liberally interpreted Article 9 (right to life) and held that word “life” in Article 9 covers all facets of human existence. Although “life” is not defined in the Constitution, the Court held that it did not mean, and could not be restricted to mean, vegetative or animal life alone, nor does it mean mere existence from conception to death. The Court held that life includes all such amenities and facilities that a person born in a free country is entitled to enjoy with dignity, legally and constitutionally. It argued that the fundamental rights to preserve and protect the dignity of man (Article 14) and right to ‘life’ (Article 9) are guaranteed under the Constitution. If both are read together, question will arise whether a person can be said to have dignity of man if his right to life is below bare necessity line without proper food, clothing, shelter, education, health care, clean atmosphere and unpolluted environment. It held that the right to clean environment is the fundamental right of all citizens of Pakistan, covered by the “right to life” and the “right to dignity” under articles 9 and 14 of the Constitution, respectively.

SC relied on the precautionary principle provided in the Rio Declaration on the Environment and Development and observed that although international agreements cannot be enforced as law in any country until incorporated in national laws, however such agreements have persuasive value and command respect. SC held that since conclusive evidence of the effect of electro-magnetic fields on human health was not yet available, principles of prudence and precaution needed to be invoked. SC appointed a Commissioner, with the consent of both the parties, to examine and study WAPDA's plan and report on the likelihood of any adverse effects on the health of residents of the locality and, if necessary, to suggest any alteration or addition which may be economically possible for construction and location of the grid station.

The Court also directed the government to establish an Authority or Commission composed of internationally recognized, impartial scientists, whose opinion or permission should be obtained before any new grid station is allowed to be constructed. The Court directed that in the future, prior to installing or constructing any grid station or transmission line, WAPDA must issue public notices in the newspapers, and on radio and television, inviting objections, and may only finalize the plan after considering such objections.

5.1.17 Environmental Pollution in Baluchistan (PLD 1994 SC 102)

Constitution, Articles 9 & 184 (3)

In this case, SC took notice of a news item "Nuclear Waste to be dumped in Baluchistan". This was seen as a big hazard for the developing ports. By dumping waste materials including nuclear waste from the developed countries would not only be a hazard to the health of the people but also to the environment and the marine life in the region. Therefore the Court ordered that the authorities who are charged with the duty to allot land on the coastal areas should insert a condition in the allotment letter that the allottees 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.

5.1.18 Abdul Razzak V Karachi Building Control Authority (PLD 1994 SC 512)

Constitution, Article 184 (3)

Sindh Building Control Ordinance, 1979, section 19

Karachi Building and Town Planning Regulation, 1979, regulations 16, 20 & 25

Karachi Development Authority Order, 1957, article 52-A

Two appeals were filed against a common judgment passed by a Division Bench of Sindh HC where the HC allowed the petition challenging construction of a high-rise building in a housing society. The SC dismissed the appeals and made certain observations. SC remarked that the concept of modern city planning, inter alia, envisages the orderly arrangement of parts of the city - residential, business and industrial etc. so that each part could perform its functions with minimum cost and conflict. The paramount object of modern city planning seems to be to ensure maximum comforts for the residents of the city by providing maximum facilities referred to hereinabove. It must, therefore, follow that a public functionary entrusted with the work to achieve the above objective cannot act in a manner, which may defeat the above objective. Deviation from the planned scheme will naturally result in discomfort and inconvenience to others. Framing of a housing scheme does not mean simply leveling of land and carving out of plots, but it also involves working out approximate requirements of water, electricity, gas, sewerage lines, streets and roads etc. If a housing scheme is framed on the assumption that it will have residential units 1 + 1. But factually the allottees of the plots are allowed to raise multistoried buildings having flats, the public utility services will fall short of requirements, with the result that everyone living in the scheme will suffer. This is what has happened in Karachi. Without any planning and without expanding the provisions of the items of public utility services, the people were allowed to

erect multi-storied buildings having shops and flats. In consequence thereof everyone living in Karachi is suffering. There is scarcity of water, some people even do not get drinking water. The above other items of the public utility services are short of demand. Roads and streets are normally flooded with filthy and stinking water on account of choking and over-flowing of sewerage lines. To reduce the miseries of most of the Karachisties, it is imperative on the public functionaries like the Authority to ensure the adherence to the Regulations. However, it may be clarified that it may not be understood that once a scheme is framed, no alterations can be made. Alterations in a scheme can be made for the good of the people-at-large, but not for the benefit of an individual for favoring him at the cost of other people.

5.2 Lahore High Court

5.2.1 **Abdul Ghaffar v DG EPA (2011 CLD 776)**

PEPA, sections 16, 17 & 21(2)

Environmental Tribunal Rules, 1999, rule 13

In this case the Director-General Environmental Protection Agency, Lahore filed nine separate complaints against the appellants, who were running poultry farms in Tehsil Murree and were found responsible for polluting environment due to improper waste/poultry waste management resulting into emission of foul smell and offensive odor in the area. A period of 15 days was given to the appellants, in which they were directed to undertake measures as per the requirement of section 16 of the Pakistan Environmental Protection Act. They did not comply with the order and hence the complaints were filed. It was however contested that under the PEPA, the tribunal had the authority to try such cases, which in this case the Tribunal had failed to do and accepted the petitions without conducting a trial. Therefore, the appeals were accepted and the impugned orders were set aside and the case was remanded to the tribunal for a quick decision without any unnecessary adjournment.

5.2.2 **Pehlwan Marble Factory v The State (2011 PCr.LJ 200)**

PEPA, sections 21(3) & 23(1)

Limitation Act (IX of 1908) sections 5 & 29(2) (a) (b)

A petition was filed to allow condonation of delay in filing of appeal in front of the concerned tribunal by the convicts. In this case Messrs Pehlwan Marble Factory through Muhammad Asif/ appellant was tried by the Environmental Tribunal Lahore in complaint under the PEPA where after they were convicted under section 21(3) of the Pakistan Environmental Protection Act and sentenced to pay fine of Rs.1, 00,000 failing which they were required to pay a further fine of Rs.15, 000 per day during the period in which non-compliance of the direction continues. This appeal was time barred since the appellant failed to file it within the prescribed time, which according to the section 23(1) of PEPA, is thirty days from the date of such communication or order. The petitioner did not provide and realistic evidence except for the fact that he suffered from a severe sunstroke due to which there was delay in the process. The case was based on the wider application of Section 5 of the Limitation Act 1908. The courts however did not find much evidence for the condonation of the delay and therefore the petition was dismissed.

5.2.3 **Attique Rehman v Environmental Tribunals (2009 CLD 1048)**

PEPA, section16

Complaint was filed against chili grinding industrial unit for spreading spices dust and causing air pollution. Inspector Environment found that the unit was disturbing local residents by causing air pollution. Permitting such unit to function in residential area for a considerable long time by offending provisions of Pakistan Environmental Protection Act would not serve its purpose and justice--Such illegal activity had to come to an end and should not be allowed to be carried on under shelter of frivolous and technical objections. The Tribunal while investigating this case ordered for the inspection of the industrial unit and therefore affirmed the decision regarding closure of the particular unit, but it did set aside the order regarding the shifting of the unit. The appellant instantly appealed against it but it was held that this activity in no way should be allowed to be carried on, and the unreasonable delay of ten years has been a considerable long time. The appeal was therefore dismissed.

5.2.4 Allah Ditta v DCO (2009 CLD 825)

Constitution, Article 199

National Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2001

A press clipping appeared in a national paper that a particular project emits dangerous pollutants which has made the water of the nearby drain and the River Chenab poisonous which has resultantly caused diseases in the inhabitants of the locality and has proved fatal to the animals. Allah Ditta and others who were residents of the locality wrote a mercy petition to the honorable chief Justice Lahore High Court to look into the matter. The plea was converted into a petition and advocates Mansoor Ali Shah and Saima Amin Khwaja were appointed as a commission to submit a report of the matter. The first report reflected that the effluents omitting from the factory are dangerous and unhealthy and they pollute the drain as well as the river. A committee of experts also submitted their recommendations which included that the factory should be allowed to restore the operation in the larger national interest and sampling and analysis of the effluents and gaseous emissions be conducted 20 days after the restoration and subsequently maintain NEQS. The factories made the necessary changes according to the directions of the Court and hence since the matter stood resolved, the court disposed of with a direction to the respondents to comply with the requirements so as to keep the project environmentally friendly. However, other incidental matters such as FIRs for breaking the law were directed to proceed on their own time.

5.2.5 Khurram Khan v Government of Punjab (PLD 2009 Lahore 22)

Constitution Articles 9, 38 (d) and 199

Punjab Prohibition on Manufacture, Use, Sale and Import of Polythene Bags (Black or Polythene Bags Below Fifteen Micron Thickness) Ordinance (IX of 2002), section 3

In this case petitioner argued that use of polythene bags is causing havoc in various areas of the society i.e. sewerage system in the cities; agriculture in the rural life, marine life on the coastal area, public health: spread of dangerous diseases like cancer. The use of these bags is also making our soil infertile. According to him, the polythene bags can also not be disposed of through recycling for many reasons, i.e. decomposition of polythene material is not possible. He adds that even disposal through burning of polythene is harmful as it releases toxic gases like dioxins which have cancerous effects on health and can also cause respiratory problem, thus, after use of polythene bags for a short period, it cannot be disposed of by throwing, dumping or by burning. All the matters were taken into consideration and special reports were put forward giving much importance to Article 9 of the Constitution of Pakistan (1973). It was held that more importance to the word 'life' should be given,

rather than just referring it to as vegetable life. The petition was therefore allowed and the respondents were directed to take some definite and positive steps, and create awareness amongst people.

5.2.6 Packages Limited v DG EPA (2008 CLD 1160)

PEPA sections 17, 22 & 23

In this case, the appellants felt aggrieved by the order of the Environmental Tribunal requiring them to take measures in reducing pollution since the order was based on wrong reports regarding the NEQS and the same was not adequately shown to the appellant. Furthermore that the appellants were already working to clean the water that had been polluted. The Court remarked that complaints regarding the pollution had started to arise against the unit of appellant as far back in the year 1999. The appellant was suggested remedial measures by the Environmental Protection agency. These Orders were maintained by the Environmental Protection Tribunal. Even though the Appellants had never questioned the fact regarding pollution being caused, they however intended to take measures regarding it but failed to do so. Hence the appeal was dismissed as the courts did not find any grounds being made out to interfere with the Tribunals judgment.

5.2.7 Syed Mansoor Ali Shah v Government of Punjab (PLD 2007 Lahore 403)

Constitution, Article 9, 14 and 199

This writ petition sought the courts directions to ensure that the environmental conditions on the roads of Lahore be improved by reducing the amount of polluting vehicles from the road. The directions given by the court included, inter alia, that CNG busses be introduced in the metropolis, which are Euro II compliant and phasing out of the existing polluting busses by 2007 and the certified conversion of existing busses. Cap the age of busses to 10 years and only those busses which are in perfect condition after 10 years to be used, all others to be scrapped, setting up of dedicated bus lanes in transport planning. In respect of wagons, phasing out of wagons from Urban centers and replacing the same with mini busses and where busses not feasible, new mini busses or wagons which are Euro-II compliant be introduced, Introduction of 4 stroke CNG rickshaws in Lahore and phasing out of existing Autocab rickshaws from Lahore by December 2007, strictly enforce the existing ban on the registration of two stroke motorcycle rickshaws, setting ambient air quality standards by 2007 in respect of air quality and vehicular emission standards in terms of fuel, to use the existing green fund to incentive cleaner fuels and vehicles, prioritize the establishment of ambient air quality monitoring squads and stations by the district government within a year, capacity building programs by the city district government and awareness raising for CNG use.

5.2.8 Amer Bakht Azam v Cooperative Model Town Society (1962) Ltd. Lahore (2007 CLC 374)

Co-operative Societies Act (VII of 1925), sections 1 (2) and 70

In this case the issue was regarding the conversion of a public amenity plot into a commercial area. Apart from Town Municipal Administration, permission is also required by the concerned Government Agency to discuss the Environment impacts. The learned counsel in this case contented that despite the obvious environmental impact, no permission had been taken in accordance with the provisions of the Pakistan environmental Provisions Act. Therefore the petition is decided accordingly, making it clear that before the project is started it should be in compliance with all the by-laws and the

Cooperative Societies Act 1925. Hence there was no change in the master plan but all permissions regarding the changing of the nature of the property were to be referred to the Town Municipal Administration.

5.2.9 Muhammad Tariq Abbasi v Defence Housing Authority (2007 CLC 1358)

Constitution, Articles 9 and 199

The petitioners contended that DHA planned to launch a development project on the beach, which would restrict the right of the residents of the city and visitors, to free access to the same and thus violative of their fundamental rights guaranteed under Art.9 of the Constitution. It was held that right of free access of the public at large to Parks etc. is a fundamental right guaranteed under Art.9 of the Constitution as it can be equated to the right to life provided for therein. It meant that access to all walkways and promenades etc. would be free for the public at large. Defence Housing Authority was directed to first take approval of the EPA for its proposed development project and the EPA was directed to act according to law in giving permission. As for the question of locus standi, the Court held that anyone could have locus standi where the question was regarding the use of a public facility.

5.2.10 Abdul Qayyum v DG EPA (2005 CLD 1523)

PEPA, sections 11 and 17

Petitioners had alleged that respondents were running their industrial units in an area, which was predominantly residential and that the noise and other emissions from the running of industries were above permissible limits. The contention was that since the concerned authorities under PEPA had not reviewed the state of affairs, the High Court should issue a writ of mandamus to direct the concerned authorities to remove the industrial units. However, the Court held that there was a complete procedure provided under PEPA for such a complaint and directed the authorities under PEPA to record the complaint and contentions of the petitioners and decide on the matter according to law.

5.2.11 Allah Ditta v Muhammad Ramzan (2005 YLR 650)

Criminal Procedure Code (V of 1898), sections 14 and 113

PEPA, section 17

The Petitioners contended that the orders passed by the judicial magistrate and additional sessions judge were without jurisdiction since they could no longer entertain a case filed under S 113 of CrPC. After passing of PEPA, jurisdiction to hear such matters was with the Senior Civil Judge cum Judicial Magistrate hence the order passed by the Judicial Magistrate was without lawful authority. It was held that the judicial magistrate indeed did not have jurisdiction to entertain the case in question, however, the case will be deemed to be pending in front of the appropriate forum.

5.2.12 Shehzad Mujahid v Additional Sessions Judge (2005 CLD 1718)

PEPA, sections 17 & 24

Criminal Procedure Code (V of 1898), section 133

The Petitioners had installed a shoe manufacturing factory which was causing public nuisance in the vicinity. The Judicial Magistrate had decided the case against the petitioners and the petitioners asked the High Court to set aside the judgment on the grounds that after passing of PEPA, jurisdiction to hear such matters was with the Senior Civil Judge cum Judicial Magistrate hence the order passed by the Judicial Magistrate was without lawful authority. The High Court agreed to this point in part. It was held that the judicial magistrate indeed did not have jurisdiction to entertain the case in question, however, the case shall be reheard by the Senior Civil Judge cum Judicial Magistrate.

5.2.13 Khurshida Shorish v Province of the Punjab (PLD 2004 Lahore 744)

Constitution, article 199

Punjab Development of Cities Act (XIX of 1976)

This judgment dealt with two writ petitions, which challenged the approval by the concerned authorities for the establishment of a food street on the service road in front of the premises of some houses. The respondents claimed that the proposed businesses were not of discomfort to any individual as their time to work started late at night when all other businesses had shut down. The court had to take in to consideration the fact that these cafés were being established on a public service lane which were going to be a cause of discomfort to pedestrians. The other contention, which the court looked at was also that with the dust and smoke contained in the air around the open café would be hazardous and unhealthy for the people having food in the café. The Court held that in the instant petition, an interference with the use of public street resulting in annoyance to public would constitute a public nuisance. Hence the orders of the authorities to establish a food street were set aside.

5.2.14 Muhammad Yousaf v Province of the Punjab (2003 CLC 576)

Constitution, Articles 9, 14 & 199

PEPA sections 2, 12 and 16

The petitioners who were owners of agricultural land in the village Mehmood Booti through this constitutional petition challenged the establishment of an industrial project for production of energy from waste near to their property. The pivotal questions involved in this petition were whether the dumping of solid waste over the land and using it as a dumping ground is creating multiple problems, causing diseases and pollution and is a series of nuisance for the inhabitants of the locality. The local commission appointed for the case came to the conclusion that this was in fact causing nuisance to the locality. The respondents filed objections to the report however they did not deny it in substance. Subsequently the Court issued directions to the Lahore City District Government to deploy all possible resources at their disposal in that area to minimize the effects of the dumping ground and necessary redressal of the grievances of the petitioners should be kept in mind while making alternative arrangements and to select a suitable place to be used as a dumping ground keeping in mind the provisions of PEPA and the directions and observations of the superior courts under Shehla Zia and Anjum Irfan cases.

5.2.15 Moeen Qureshi v President of Pakistan (2002 YLR 3372)

Constitution, Articles 9 and 199

In this case petitioners in their Constitutional petition had the Courts help to issue directions to the

Federal and Provincial Governments in the matter of commencement and completion of 'Kala Bagh Dam Project' contending that said Project was absolutely necessary for agricultural needs of the country as also for survival of citizens in long term. The Federal Government agreed with petitioners on the importance of this project however, the provinces of Sindh and NWFP (Now Khyber Pakhtunkhwa) raised objections to this project. However the Court held that this was a matter of policy and the court could therefore not interfere in it.

5.2.16 Anjum Irfan v Lahore Development Authority (PLD 2002 Lahore 555)

Constitution, Article 9

In this case the petitioner submitted that according to the study carried out by the Housing and Physical Environment Planning Department, Government of the Punjab, 98% rickshaws and 77% of 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 decibels and the maximum level to be endured by human beings is 90 decibels whereas the law requires the maximum level to be 85 decibels. The court accepted these contentions and suggested that newly-established industries be compelled by the relevant authorities to install devices exhaustive and its success depends on the implementations and enforcement machinery provided under the provisions of PEPA, public transport be made effective so that people may prefer it over personal cars, efforts should be made for utilization of solar energy which is in abundance in our country, electric rail car system should be introduced, trees plantation should be patronized by the Government, media should play its role to educate people of Pakistan to think and work for the nation and sacrifice its personal interest one the well know maxim that national interest is supreme qua individual, implement the law of the land without fear, favour and nepotism, 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 should be quarterly one meeting of the public functionaries of all 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 problem of pollution is more dangerous as compared to destruction by hydrogen bomb and it is high time to implement the law in letter and spirit without discrimination as the life of human being is more precious and speak the truth to save the country from attack of all types of pollution so that food chain be maintained. The court consequently issued directions to implement the provisions of PEPA.

5.2.17 Muhammad Niaz Malik V Province of Punjab (2002 CLC 696)

Punjab Minor Minerals Concession Rules 1990, rule 48

Regulations of Mines and Oilfields and Mineral Development Act (Act XXIV of 1948), sections 2 & 6

The High Court laid down the rule that protection of environment is the responsibility of the concerned government. Consciousness regarding environmental protection is of recent origin and this sense is on the increase. Human society is always progressing and therefore, law cannot be static. Society changes and the law has to help in such transformation. A balance has to be maintained between conflicting interests. Plans posing danger to the health in the neighborhood have to be weighed against various considerations such as welfare of the people and in this regard, the government has the responsibilities in relation to environmental matters, river pollution, clean air and noise control.

5.2.18 Prince Flying Coach Faisalabad v Muhammad Iqbal (2002 CLC 1852)

Constitution, Article 199

This was an ICA filed against an order made by a single judge of the High Court dismissing writ petitions challenging the construction of a bus stand on the green belt at Abdullahpur Branch Canal. The single judge had held that the respondents have denied the existence of the green belt and stated that the land in question belonged to the provincial government and was merely in use of the irrigation department for a silting tank. As a result it was not a green belt and construction could take place over it. Furthermore the question of whether the bus stand caused pollution was disputed and such an inquiry could not be held under Article 199 therefore the writ petition was dismissed. This order of the single judge was upheld in this case by the divisional bench of the high court. However, as per the original order, the appropriate authorities were directed to ensure cleanliness of the bus stand.

5.2.19 Abdul Latif v Additional Sessions Judge Sahiwal (2001 CLC 1139)

Criminal Procedure Code (V of 1898), section 133

PEPA, section 2, 7, 11 &16

This writ petition was filed against the order of the Additional Sessions Judge Sahiwal which upheld a judgment of the judicial magistrate for shifting a leather factory from a locality for causing pollution nuisance under Section 133 of the Criminal Procedure Code. However, the High Court said that since PEPA had been legislated, it was a complete court which provided for the procedure to entertain such cases therefore the orders passed by the judicial magistrate and the sessions judge under Section 133 were without jurisdiction and hence were set aside.

5.2.20 M.D. Tahir v. WAPDA (2000 MLD 851)

Constitution, Article 199

In this Constitutional petition, the petitioner has sought a direction to respondents to plant trees in the country; to impose a ban on the air-conditioners, refrigerators and deep-freezers, which according to him were causing environmental pollution. The court stated that the Federal Government is indeed concerned about the issues which have been highlighted through this petition and is making efforts within the available means to protect the environment and the Ozone layer. So far as contention that air-conditioners and refrigerators and depleting oxygen is concerned, the same has been controverted by the respondents and there is no scientific material and record to disagree with the stand taken on this issue in the comments. In any case, this aspect may require factual inquiry which exercise cannot be undertaken in a Constitutional petition. Hence the petition was dismissed.

5.2.21 Muhammad Jahangir v Government of Punjab (2000 MLD 1196)

Constitution, Article 199

In this case the petitioners who were occupants of shops and houses adjacent to area sought to be acquired for construction of flyover, had challenged the construction contended that they being lessees of Cantonment Board for ninety years through agreement, were entitled to easement rights and said rights could not be interfered with through construction of flyover which act of Development Authority would be violative of Article 4 of the Constitution. The courts had not only examined the project from an economic angle but also had taken into consideration its environmental aspect. The courts decided that

since the flyover was a public welfare project, hence there could be no objection to its construction therefore the petition was dismissed.

5.2.22 Munawar Malik v The State (2000 YLR 3027)

Criminal Procedure Code (V of 1898), sections 516 (a) & 561 (a)

Petition was made to remove industrial unit from vicinity as it had caused nuisance and created environmental pollution. Report was to be made by the Environment Protection Department to decide over this matter. The petitioner grieved that he had not been afforded a proper opportunity of hearing before the magistrate on the formula submitted by the Environmental Expert. Court stated that the proceedings were fair. The petitions were dismissed accordingly.

5.2.23 Muhammad Jahangir v Government of Punjab (2000 MLD 1196)

Constitution, Articles 4, 24 & 199

Cantonments Act (II of 1924), section 45

In this case the petitioners were occupants of shops and houses adjacent to an area sought to be acquired for the construction of a flyover, and they challenged the construction on the basis that they had a 90 years lease by the Cantonment Board through agreement, and were entitled to easement rights. They further contested that these rights could not be interfered with by the construction of the flyover, as this act would be violative of Article 4 on part of the development Authority. However the Court held that If a project or a scheme was actuated by laudable consideration of public welfare; if the same led to general convenience of public; if it engendered commercial activity to the benefit of public at large and if its impact on environment was considered to be positive then such project must have precedence over individual rights. Therefore the individual rights of easement of the petitioners would have to be ignored in view of the greater public good.

5.2.24 M.D. Tahir v WAPDA (2000 MLD 851)

Constitution, Article 199

In this case the petitioner asked the court to direct the government to take actions for protecting the ozone layer by placing a ban on the use of air conditioners, refrigerators and deep-freezers. The courts however took into account that even though allegedly speaking these gadgets deplete the ozone layer, they are a necessity in the modern world. The Court further remarked that the Federal Government is already concerned about this matter and is taking various steps to ensure the purity of the environment by plantation of trees and from time to time to impose bans on exploitation of forests. Hence there was no reason for the courts to interfere in the matter. Therefore it was held that no additional direction from the court was required in this matter and the petition was dismissed accordingly.

5.2.25 Haji Abdul Aziz v Haji Dost Muhammad (1999 PCr.LJ 31)

Criminal Procedure Code (V of 1898), section 133

In this case, the petitioners were carrying on the business of hides and skins in the area of Wandhi Ghundwali of District Mianwali. On account of foul smell and odor emanating from the said business and becoming a serious nuisance for the entire neighborhood an application under section 133 of Code of Criminal Procedure was moved by respondent. The petitioner filed this case against an impugned

decision of the magistrate. The court decided that the decision was justified on both, legal and moral grounds as the public interest was given priority over any other thing,

5.2.26 Shah Muhammad v Additional Sessions Judge Bahawalpur (1998 PCr.LJ 1987)

Criminal Procedure Code (V of 1898), section 133

In this case, the petitioner challenged the authority and legality of the order, dated 4-2-1998 passed by the learned Additional Sessions Judge, Bahawalpur. It was submitted that the petitioner had installed a diesel engine to operate a "Chakki" in crowded community without obtaining a license and that "Chakki" was a source of nuisance to residents of the community, therefore, causing damage to adjacent properties. The petitioner argued that the order given by Additional Sessions Judge was going to take away his source of income. However, the court stated that the chakki had to be removed or shifted as it had caused nuisance in the community hence the petition was dismissed.

5.2.27 City Council for Accountability and Welfare v Central Government (1998 MLD 387)

PLGO, sections 2, 59 & 61

In this case, the constitutional petition was filed by the City Council for Accountability and Welfare, which was a voluntary Organization formed by some of the residents of the city of Rahimyar Khan to voice the grievance of the residents of the city against the alleged apathetic attitude of the administration particularly, the Municipal Corporation. The residents of the city of Rahimyar Khan made complaints and lodged public protest against the broken and unserviceable sewerage system supply of unhygienic drinking water and over all unwholesome sanitary conditions of the city. An inspection was conducted and it was found that the sewerage system had mainly collapsed. The court accepted the petition keeping in mind the best interest of the community.

5.2.27 Pakistan Chest Foundation V Government of Pakistan (1997 CLC 1379)

Constitution, Article 199

In this case the petitioner was aggrieved by the commercials, which appeared on behalf of the cigarette companies on the television. The court ordered that the Pakistan Broadcasting Corporation shall not relay any advertisement for the purpose of popularizing smoking among the people. The commentaries of sports events without propagating smoking can, however, be relayed in view of the statement made by the learned counsel for the Pakistan Broadcasting Corporation that in the commentaries the only thing said is that the program is relayed with the cooperation of the particular-cigarette company.

5.2.28 Anjuman Tajran Chairman v The Commissioner Faisalabad (1997 CLC 1281)

The relevant facts of this case are that there were around 25 shops situated in Aminpur Bazar of Faisalabad where hide and skin business was being carried out since long. In addition thereto many other persons who did not own shops have been doing their business at this place in front of the shops and in the open market. Hides and skins are stored/kept inside and outside the shops. It is admitted position the stated place was situated in a thickly populated area: The offensive smell was a source of pollution and undoubtedly it endangered human life. By interim order the shopkeepers/merchants dealing in hides and skins were restrained from keeping the hides and skins and other articles of this merchandise outside their shops and on the footpaths. The court ordered the Municipal Committee that

the hides and skins shops were to be shifted to another area where it was not a cause of discomfort in the society.

5.2.29 *Salamat Ali v Deputy Commissioner (1997 MLD 2122)*

Criminal Procedure Code (V of 1898), section 133

The court in this case upheld a previous order passed by the Deputy Commissioner, Sahiwal, which ordered the authorities not to issue any further license for chilly grinding and rice husking. A complaint was filed against the petitioner as his chilly grinding unit produced noise, which was a source of discomfort to the neighbors. The petitioners filed a writ against this order. The court believed that the order did not suffer from any illegality, which had to be passed due to the nuisance being created by the chilly grinding and rice husking machines being operated by the petitioner. The comments sent by the Deputy Commissioner/respondent had the legal weight and force hence the petition was dismissed.

5.2.30 *Ameer Bano v S.E. Highways (PLD 1996 Lahore 592)*

Constitution, Articles 9 and 199

In this case, a resident raised the grievance that the sewerage system in Bahawalpur had become totally unserviceable with the result that the dirty water had collected in the form of ponds and in some cases it has entered the dwelling houses and the roads too have become impossible due to overflow of the gutters. After an inquiry was conducted, it was found that the sewerage system of the city had been facing issues since the past 30 years. The court took this in to consideration and gave an urgent order to repair these roads and gutters. The court also urged the Municipal Corporation to hire more sewer men and sanitary workers.

5.2.31 *M.D. Tahir v Provincial Government (1995 CLC 1730)*

Wild Birds and Animals Protection Act (VIII of 1912), section 3

In this case, the petitioner prayed for issuance of directions to the respondents to restrain the public from hunting/killing/catching/confining/caging/trading and eating of meat/beef, of Houbara Bustard (Tilor), Partridge and all kinds of other birds, animals, and to direct them to act strictly in accordance with the provisions of Wild Birds and Animals Protection Act, 1912, and the Punjab Wildlife (Protection, Preservation, Conservation and Management) Act, 1974. Petition was dismissed on the ground that the hunting was not done for personal purpose. Ayaats from the Holy Quran were quoted in which it was further clarified that only birds that are 'haram' are not to be hunted or used for other means. Tilor, falls in the category of 'halal' hence the issue doesn't portray any illegality.

5.2.32 *Ghulam Rasool v Haji Allah Wasaya (1995 PCr.LJ 385)*

Criminal Procedure Code (V of 1898), section 133

In this case, the petitioner argued that the respondents owned a flourmill (Chakki), chillies grinding machine and a cotton ginning "Painja" in a residential area. Petitioner moved an application to Commissioner Bahawalpur Division stating therein that the respondents' mill is emitting dust and other substance, which was injurious to health. It was further stated in the application that on account of the

respondents' business activity the narrower street is blocked and women-folk have great difficulty in passing through. An inquiry was conducted under the Magistrates order and the stated facts were found to be true. Under S.133 of the CPC, the court found that there was nuisance created on part of the respondent hence the petition was accepted.

5.2.33 Muhammad Ashiq v Rafiq (1993 CLC 1846)

Punjab Local Government Ordinance (VI of 1979), section 73

In this case, the courts found that the respondents in the house adjoining to the house of petitioner, had installed power-looms which they were operating day and night, thus, causing vibration and deafening noise which was a constant source of nuisance to petitioner and his family members. The court here applied the law provided under S. 73 of the Punjab Local Government Ordinance where elimination of nuisance was to be upheld keeping in mind the economic, social and cultural demands of the citizens of that area. The petition was accepted on the grounds that the society was suffering more than benefiting from those power looms.

5.2.34 Muhammad Akhtar v Haji Allah Bakhsh (1968 P. Cr. LJ 225)

Criminal Procedure Code, section 133

The court in this case justified an impugned order against which a petition was made. Evidence disclosed that the working of the Sour chakki and the cotton ginning plant caused vibration and thereby resulted in physical discomfort to the neighbors. It was also injurious to their health as fine particles of cotton emitted from the ginning plant remained suspended in the air. On facts, the court found that the impugned order was fully justified. The working of a flour chakki and a cotton ginning plant in a crowded locality of Lahore must have been a cause of great nuisance to the neighbors and it was eminently just to put an end to it. Therefore the petition was dismissed.

5.3 Environmental Tribunal

Reported cases

5.3.1 DG EPA Vs Gulzareen Poultry Farm (2011 CLD 1209)

PEPA, sections 11, 16 & 21

In the above case, the tenant of the respondent stated that the owner provided the soakage pit and burial pit when he took possession of the poultry farm. The complainant department conducted a site inspection and thereby concluded that the poultry unit had a mortality pit for birds, one solid waste storage room and had soakage pit. It was also stated in the inspection report that the poultry farm was built near the Korang river. The chairperson and member Technical of the Tribunal disposed off the complaint on the ground that the respondent had taken necessary measures to ensure that there is no pollution, however, the Member Legal disagreed with the order and concluded that the Inspection Report

only said that the poultry farm was near the Korang River, not specifying the distance. She supported her decision by relying on the paragraph 2.3 of the guidelines adopted by the Pakistan Environmental Protection Agency that poultry farms should be situated 500 meters away from human settlement and on the leeward side. Since the respondent's unit is near the Korang River, it is apprehended that it would pollute the natural reservoir therefore it was to be shifted 500 m away from human settlement area.

5.3.2 DG EPA v Hafeez Steel Mills (2011 CLD 1220)

PEPA, sections 11, 16, 17 & 21

The above case had no reported facts however the order given stated that the respondent had been causing pollution and was imposed a penalty. There was a non-compliance of this order on part of the respondent hence the Member Legal of the tribunal stated that the Criminal Procedure Code would be followed as laid down in Chapter XXII-A and prior to passing an order of conviction, a charge would be framed under S. 265-D, Cr.P.C, which shall be read over and explained to the accused and he shall be asked whether he pleads guilty or has any defense to make under S. 265-E, Cr.P.C. If the accused pleads guilty, it would be compulsory for the court to record the plea and thereafter pass an order of conviction.

5.3.3 Raheel Majeed v DG EPA (2011 CLD 1232)

PEPA, sections. 11, 12, 16, 17 & 21

In the above case it was alleged in the complaint that the two factories, "Fiber Optics" and "Furnace Works", situated in the residential area of the complainant were being run without securing EIA, which is necessary under section 12 of PEPA 1997. The claimant argued that the preparation of heavy electrical hammers in the factories caused loud noise, vibration and tremors as a result of which the adjoining houses and building were being damaged and also that offensive odor and pungent fumes emitted by these factories were adversely affecting the health of nearby inhabitants.

After examining the monitoring reports filed by the department, these claims were not accepted. However the main charge regarding the expansion/installation of a unit without an EIA was upheld. The respondents were unable to produce a NOC and hence failed to comply with the provisions of Section 12 of PEPA 1997 for which they were fined 100000 rupees

5.3.4 Mian Muhammad Imran Vs. Paramount Engineering Works (2011 CLD 1189)

PEPA, sections 11, 12, 13, 16 & 17

In this judgment, no facts were given however the order given stated that the statement of accused under section 342 had not been recorded immediately after the prosecution had been completed. The Member Legal of the tribunal explained that this may have been termed as a great violation of the mandatory provision of section 342 Cr.P.C. Resultantly, the whole trial could have been vitiated, since recording of the statement of the accused is necessary.

5.3.5 Sardar Fakhar Imam Vs, Taj Paper Mills (2011 CLD 1179)

Environmental Tribunal (Procedure and Functions) Rules, 2008, rule 21

In this judgment, no facts were given in detail however an order was given which asked for the DO (E) Sheikhpura to present the respondent no. 1 and 2 to the tribunal on the next given date.

The order was unanimously accepted however the Member Legal, Tribunal stated that the mode adopted by the Chairperson was wrong. The Member Legal claimed that the relevant provisions prescribed for the issuance of process under Criminal Procedure Code are sections 68 to section 93. The court is empowered to issue summons/warrant of arrest with or without surety to compel the appearance of any party. Modes were also prescribed under the Rule No. 21 of environmental tribunal (Procedure and Functions) which state that "Any process issued by the tribunal against a person residing within its territorial jurisdiction shall be served through a bailiff or registered post or by

publication in newspapers or through S.H.O of police station. The court concluded that hence serving notice through the DO (Environment) is not permissible as he acts as a complainant and a witness in the said case.

5.3.6 Lafarge Pakistan Cement Company v DG EPA (2011 CLD 1295)

PEPA, sections 12, 16, 17 & 21

In this case the appellant challenged the legality of an Environmental Protection Order. The facts were as such that the appellant had constructed his cement factory in 1994. The Environmental Protection Act came in the year 1997 which meant that the actions of the appellant were done in absence of this act. In 2008, and Environmental Protection Order was given to the respondent which concluded that the factory was a source of pollution. The respondent company had failed to obtain the permission of the EPA Punjab for the operation of the factory under S. 12 of PEPA 1997. For this non-compliance, a fine of 100,000 rupees was imposed on the respondent.

5.3.7 DG EPA v Multan Industrial Estate, Multan (2011 CLD 1325)

PEPA, sections 11, 16 & 21

On the direction of District Officer (Environment) Multan, the site inspection report stated that Environmental Pollution caused by the untreated and improper disposal of waste water of Multan Industrial Estate was of acute and chronic nature and was damaging the environment, health and lives of people living in the area. Samples were sent to the laboratory, which reported that no treatment facility was available either individually or collectively. An order was passed which directed the respondent to ensure that standards set by the PEPA 1997 were met.

Most importantly the court discussed the difference between a public project and a private project. The tribunal could not give a harsh decision against the Government Project since it knew that contrary to private sector, public projects are usually large, involve heavy financing and therefore careful handling. It was seen that the respondent had completed his duties by resolving the problems of immediate nature, which were within his capacity and control. The complaint was therefore disposed off with the direction to the respondent to pursue the case with the government till its completion.

5.3.8 Pakistan Mobile Communication, Sanga Hill v DG EPA (2011 CLD 1280)

PEPA, sections 12, 16, 21 & 22

The brief facts of this case are that the appellant had placed a functional generator located at Children Park, Sangla Hills District, Nankana Sahib. An Environmental Protection Order was issued to the applicant directing to stop within 10 days operation of said diesel generator being operated within the premises without obtaining environmental approval. Environmental Protection Agency during the pendency of application filed by application against the environmental protection order sealed the BTS Tower for which the said generator was being used. Much after the expiry of limitation period the appellant filed in an application for de-sealing of premises.

When the issue reached the court, evidence showed that the premises in question was situated in the children park of the residential area. The court stated that such aspect of the matter regarding the de-sealing of the BTS Tower could not be decided without hearing the final arguments in detail. The Member Legal of the tribunal stated that the de-sealing of the BTS Tower could cause adverse environmental effects and would cause an irreparable loss to the public at large in the children park and the adjacent area. The balance of convenience in this case lay in the favour of the public at large and not the appellant. By sealing the premises, the department had rightly acted upon its own direction embodied in environmental protection order as no status quo was granted by the Tribunal to suspend the operation of impugned order. No provision existed in the PEPA 1997 to de-seal the unit. The department had rightly sealed the premises and it was concluded therefore that the de-sealing was not permissible.

5.3.9 D.G EPA Vs. Qasim Glass Bottles (2011 CLD 1024)

PEPA, sections 11, 16 & 17

In this case there was violation of environmental protection order by the respondents. Respondents were the owners of a glass bottles manufacturing factory, which according to the inspections and reported by the people had caused a lot of harm and enhanced problems for the inhabitants. The Respondent misstated before the tribunal many times, that remedial measures had been taken, but in reality the respondent always closed down the unit before inspection. Therefore, after the last inspection it was held that the respondent had been very evasive with the Tribunal and so, was charged with a penalty of Rs.500, 000. It was further ordered with regards to S. 11 of The Pakistan Environmental Protection Act 1997, that the factory should be closed down permanently.

5.3.10 D.G EPA v. Telenor Company, Gharib Shah (2011 CLD 1067)

PEPA, sections 16, 17, 18, 20 & 21

In this case there was a violation of environmental protection order. The Respondent failed to personally present himself before the tribunal due to security reasons, as he was a foreigner. Normally for such an exemption three ingredients laid down in Section 540-A of the Criminal Procedure Code have to be satisfied. An exception was made in this case as the respondent was a foreigner and moreover due to the social and political situation prevailing in this country, it was not safe for the respondent to travel. The Tribunal accepted this reason and granted exemption.

5.3.11 DG EPA v. Abdul Hameed Poultry Farm (2011 CLD 1103)

PEPA, sections 11, 16 & 21

In this case a complaint was filed against the owner of a poultry farm. According to the inspection conducted the poultry farm had only one solid waste storage room and poultry waste was found burnt and dumped in the open. Respondent gave undertaking to remedy the situation. However it was argued that the site inspection report that was carried out did not submit the complete report and also did not provide the exact distance of the poultry farm from human settlement. Hence, it was ordered accordingly that a detailed Site Inspection Report was to be construed.

5.3.12 D.G EPA v. Wi-Tribe, Lahore (2011 CLD 1138)

PEPA, sections 11, 12, 13, 16, 17 & 21

In this case there was a violation of environmental protection order prohibiting certain discharges and emissions. While exercising jurisdiction under any law, Tribunal was not to negate the substantial principles of natural justice in coining its own procedure for criminal and civil jurisdiction by overlapping each other in a particular manner. In all complaints, whether filed by The Environmental Protection Agency or an individual person, Criminal jurisdiction was to be taken into account, and all decisions to be given with respect to general principles of natural justice. The tribunal under Sec 17, of the PEPA 1997 is competent to take cognizance against the person who contravenes or fails to comply with the provisions of sec 11, 12, 13 or 16. The sphere of jurisdiction and powers are provided in section 21. The tribunal shall follow the procedure laid in Cr Pc, hence as the Cr pc does not have provisions which supports the additions of party during trial. Therefore, the application for impleading as party was dismissed.

5.3.13 DG EPA v. Syed Maqsood Ali Shah Poultry Farm 2011 CLD 1155

PEPA, sections 11, 16 & 21

In this case the Environmental Protection Agency filed complaint against the respondent, who was the owner of a poultry farm. On the very first inspection the respondent was notified about the measures to be taken in order to rectify situation of waste disposal that was resulting in contamination of local streams. The Respondent undertook the measures accordingly. Later the next inspection revealed all measures to be taken, but it did not specify the distance required from human settlement. The court ordered accordingly that the distance was to be measured and observed.

5.3.14 D.G EPA v. Walid Junaid Steel Mills, Sheikhpura (2011 CLD 1168)

PEPA, sections 11, 16, 21 & 22

In this case there was violation of Sec. 11, 16, 21 and 22 of the Pakistan Environmental Protection Act 1997. There was prohibition on certain discharges and emissions, and the inspection confirmed that the respondent unit was creating environmental pollution. Site inspection confirmed the complaint. Later on the respondent contended that unit was closed. This was confirmed but offence had already been committed. The respondent had therefore, committed an offence under S. 11 of PEPA 1997, hence order was made accordingly. Instead of dismissing the case as the unit had been closed down the court held that an appropriate punishment be given, otherwise this would encourage other people to spread pollution at free will.

5.3.15 Abdul Ghaffar v D.G. Environmental Protection Agency (2011 CLD 776)

PEPA, sections 16, 17 & 21

In this case the Director-General Environmental Protection Agency, Lahore filed nine separate complaints against the appellants, who are running poultry farms in Tehsil Murree and were found responsible for polluting environment due to improper waste/poultry waste management resulting into emission of foul smell and offensive odor in the area. A period of 15 days was given to the appellants, in which they were directed to undertake measures as per the requirement of section 16 of the PEPA, 1997. They did not comply with the order and hence the complaints were filed. It was however contested that under the PEPA 1997, the tribunal had the authority to try such cases, which it in this case hadn't done. Therefore, the appeals were accepted and the orders impugned through the appeals were set aside and the case was remanded to the tribunal for a quick decision without any unnecessary adjournment.

Unreported Cases

5.3.16 D.G. Khan Cement Company Ltd v EPA, Government of Punjab (Appeal No. 08/08)

In this case the appellant challenged the validity of the order passed by the Environmental Protection Agency under Section 16 of the PEPA 1997 which concluded that the factory was operating without maintaining environmental standards. The counsel for the appellant argued that a NOC was granted by the Punjab EPA and filed several additional documents before the Tribunal to show that all directions of EPO had been complied with. Therefore the appeal was dismissed.

5.3.17 Allah Ditta v Tehsil Municipal Administration (Private Complaint No. 46/10)

In this case, the complainants filed cases against the respondents on the ground that a landfill site was located within the residential area having a population of three thousand people. It was alleged that it would produce environmental pollution and cause adverse environmental effects. Documents were submitted by the respondents and it was revealed that Environmental Approval was issued by EPA after observing all formalities contained in Environmental Protection Act 1997. After considering the alternatives the present site was found most suitable for landfill therefore the complaint was dismissed.

5.3.18 DG EPA v SHAHEEN FOUNDRY, OKARA (Complaint No. 20/09 13/06/2011)

EPO was issued to the respondent directing them to adopt remedial measures to control high level of noise and fumes of organic solvents. A survey was conducted during which it was found that the unit is not a foundry but is an engineering unit. In reply of the complaint it was stated by the respondent that he carried out business of engineering works in his workshop, which is not a foundry. Respondent also stated that he had already complied with the directions of EPO and a fresh inspection of the unit had been conducted by the agency. A re-inspection was conducted and later the only ground for proceeding against the respondent was that the unit was causing noise pollution, which was a source of discomfort to the complainant.

Level of noise and fumes found in the inspection report were taken to be within NEQS limits since the unit was located in a commercial area. Hence no case of causing pollution had been made out against the respondent therefore the complaint was dismissed.

5.3.19 GANGA RAM HOSPITAL v DG EPA (Appeal No. 09/10 13/04/2011)

The order passed by the Environment Tribunal Lahore rejects a previous order dated 26/07/2010 passed by the EPA. The respondents claimed that the construction of a new department at the Sir Ganga Ram Hospital Lahore without obtaining an NOC is in violation of Section 12 of the PEPA 1997. The four other contentions raised by the respondent were that firstly, the grassy lawn being converted into a ward will cause loss of buffer zone and will hinder the course of fresh air for resident students in a hostel. The tribunal found out that there was reasonable space between the ward and hostel hence this contention did not stand. Second contention was that a number of full-grown fruit bearing trees and plant have been cut down. There was no credible evidence given by the respondents regarding this hence the court did not consider it. Third was the installation of an Oxygen tank in front of the hostel. The tribunal decided that the installation of this tank is invariably fully secured as per international standards. The last issue was that after the completion of the project, the frontage of the hostel would be blocked and ventilation of fresh air would be restricted. The tribunal rejected the claim by saying that it was a mere apprehension on part of the respondents because it didn't fall under the definition of "Pollution" as given in Section 2 of PEPA 1997.

The tribunal concluded that since no environmental pollution as apprehended by the respondents is likely to occur therefore submission and approval of Environmental Inspection Agency was not required.

ANNEX 1: LEGISLATIVE POWERS, 1947–1973

The allocation of legislative powers, as specified in the Government of India Act 1935, Constitution of the Islamic Republic of Pakistan 1956, Constitution of the Republic of Pakistan 1962 and Constitution of the Islamic Republic of Pakistan 1973, is shown in the following table.

Schedule	Powers	Section/Article
Government of India Act 1935		
Seventh	Federal	100(1). The Federal Legislature has, and a Provincial Legislature has not, power to make laws with respect to any of the matters enumerated in List I in the Seventh Schedule to this Act (hereinafter called the "Federal Legislative List").
		100(4). The Federal Legislature has power to make laws with respect to matters enumerated in the Provincial Legislative List except for a Province or any part thereof.
	Provincial	100(3). The Provincial Legislature has, and the Federal Legislature has not, power to make laws for a Province or any part thereof with respect to any of the matters enumerated in List II in the said Schedule (hereinafter called the "Provincial Legislative List")
	Concurrent	100(2). The Federal Legislature, and, subject to the preceding sub-section, a Provincial Legislature also, has power to make laws with respect to any of the matters enumerated in List III in the said Schedule (hereinafter called the "Concurrent Legislative List")
	Residuary	104. Residual powers of legislation. — (1) The Governor-General may by public notification empower either the Federal Legislature or a Provincial Legislature to enact a law with respect to any matter not enumerated in any of the Lists in the Seventh Schedule to this Act, including a law imposing a tax not mentioned in any such list, and the executive authority of the Federation or of the Province, as the case may be, shall extend to the administration of any law so made,
Constitution of the Islamic Republic of Pakistan 1956		
Fifth	Federal	106(1). Parliament shall have exclusive power to make laws with respect to any of the matters enumerated in the Federal List.
		106(4). Parliament shall have power to make laws with respect to matters enumerated in the Provincial List, except for a Province or any part thereof.
	Provincial	106(3). A Provincial Legislature shall have exclusive power to make laws for a Province or any part thereof with respect to any of the matters enumerated in the Provincial List.
	Concurrent	106(2). Parliament, and subject to clause (1) a Provincial Legislature also, shall have power to make laws with respect to any of the matters enumerated in the Concurrent List.
	Residuary	109. Residuary power of legislation. — Subject to the provisions of Articles 107 and 108, the Provincial Legislatures shall have exclusive power to make laws with respect to any matter not enumerated in any list in the Fifth Schedule, including any law imposing a tax not enumerated in any such list; and the executive authority of the Province shall extend to the administration of any law so made
Constitution of the Republic of Pakistan 1962		
Third	Federal	131(1). The Central Legislature shall have exclusive power to make laws (including laws having extra-territorial operation) for the whole or any part of Pakistan with respect to any matter enumerated in the Third Schedule.
		131(5). The Central Legislature shall have power to make laws for any part of Pakistan not forming part of a Province with respect to any matter.
	Provincial	132. Provincial law-making powers. — A Provincial Legislature shall have power to make laws for the Province, or any part of the Province, with respect to any matter other than a matter enumerated in the Third Schedule.
	Residuary	131(2). Where the national interest of Pakistan in relation to— (a) the security of Pakistan, including the economic and financial stability of Pakistan; (b) planning or co-ordination; or

		<p>(c) the achievement of uniformity in respect of any matter in different parts of Pakistan, so requires, the Central Legislature shall have power to make laws (including laws having extra-territorial operation) for the whole or any part of Pakistan with respect to any matter not enumerated in the Third Schedule.</p> <p>131(3). If—</p> <p>(a) it appears to the Assembly of a Province to be desirable that a matter not enumerated in the Third Schedule should be regulated in the Province by an Act of the Central Legislature; and</p> <p>(b) a resolution to that effect is passed by the Provincial Assembly, the Central Legislature shall have power to make laws having effect in the Province with respect to that matter, but any law made in pursuance of this</p>
Constitution of the Islamic Republic of Pakistan 1973		
Fourth	Federal	142(a). [Majlis-e-Shoora (Parliament)] shall have exclusive power to make laws with respect to any matter in the Federal Legislative List.
	Concurrent	142(b). Before 18 th amendment, [Majlis-e-Shoora (Parliament)], and a Provincial Assembly both had the power to make laws with respect to any matter in the Concurrent Legislative List. However, after the 18 th amendment, the concurrent legislative list has been omitted from the Constitution and all the subjects provided there have been devolved to the provincial assemblies for legislation with the exception of criminal law, criminal procedure and evidence. Originally "ecology and environmental pollution" was a subject in the concurrent list,
	Residuary	142(c). A Provincial Assembly shall, and [Majlis-e-Shoora (Parliament)] shall not, have power to make laws with respect to any matter not enumerated in either the Federal Legislative List or the Concurrent Legislative List. After the 18 th amendment [Majlis-e-Shoora (Parliament)] is restricted to only make laws enumerated in the federal legislative list and on criminal laws, criminal procedure and evidence only. Rest of the subjects fall strictly within the domain of provincial assemblies for law-making.
		142(d). After the 18 th amendment, [Majlis-e-Shoora (Parliament)] shall have exclusive power to make laws with respect to all matters pertaining to such areas in the Federation as are not included in any Province.
Source: Desk study for <i>Environmental Law in Pakistan</i> , 2006.		

ANNEX 2: SUBJECT MATTER JURISDICTION, 1947-73

The following table traces the history of subject matter jurisdiction, as specified in the Government of India Act 1935 and the Pakistan Constitutions of 1956–73.

Subject	Jurisdiction			
	1935	1956	1962	1973
Land, Tenure				
delimitation of cantonment areas	F	F	F	F
lands and buildings vested in, or in the possession of [the government] for the purposes of the federation (not being naval, military or air force works) but, as regards property situated in a province, subject always to provincial legislation, save in so far as federal law otherwise provides	F	-	-	F
property of the federation situated in any province and revenue from such property	-	F	-	-
property of the centre, wherever situated, and the revenue from such property	-	-	F	-
lands and buildings vested in or in the possession of [the government for the purposes of] the province	P	P	-	-
compulsory acquisition of land	P	-	-	-
compulsory acquisition or requisitioning of property	-	P	-	-
land, rights in or over land, land tenures, including the relation of landlord and tenant, collection of rent	P	P	-	-
colonisation	P	P	-	-
land improvement and agricultural loans	P	P	-	-
encumbered and attached estates	P		-	-
treasure trove	P	P	-	-
wills, intestacy, and succession, save as regards agricultural land	C	-	-	P
transfer, alienation and devolution of agricultural land	P	P	-	-
transfer of property other than agricultural land	C	-	-	P
registration of deeds and documents	C	-	-	P
evacuee property	-	C	-	P
flood control	-	P		
Forests, Timber				
forests	P	P	-	-
Fisheries				
fishing and fisheries beyond territorial waters	F	F	-	F
fisheries	P	P	-	-
Wildlife, Fauna and Non-Timber Flora				
protection of wild birds and wild animals	P	P	-	-
prevention of cruelty to animals	C	P	-	-
botanical, zoological surveys	-	P	-	-
Protected Areas				
not mentioned	-	-	-	-
Freshwater				
water, water supplies, irrigation and canals, drainage and embankments, water storage	P	P	-	-
Coastal and Marine				
not mentioned	-	-	-	-

Urban and Rural Development				
works vested in, or in the possession of [the government] for the purposes of the federation (not being naval, military or air force works) but, as regards property situated in a province, subject always to provincial legislation, save in so far as federal law otherwise provides	F	-	-	F

works vested in or in the possession of [the government for the purposes of] the province	P	P	-	-
Agriculture				
agriculture	P	P	-	-
protection against pests, prevention of plant diseases	P	P	-	-
[preservation, protection and] improvement of stock	P	P	-	-
prevention of animal diseases, veterinary training and practice	P	P	-	-
pounds and the prevention of cattle trespass	P	P	-	-
Extractive Industry—Mining, Petroleum				
regulation of labour and safety in mines and oilfields	F	-	-	P
regulation of mines and oilfields and mineral development to the extent to which such regulation and development under Federal control is declared by federal law to be expedient in the public interest	F	-	-	-
regulation of mines and oilfields and mineral development subject to the provisions of List I with respect to regulation and development under federal control	P	-	-	-
regulation of mines and mineral development, subject to Federal List and Concurrent List	-	P	-	-
petroleum, so far as regards possession, storage and transport	F	-	-	-
gas and gasworks	P	P	-	-
mineral oil and natural gas	-	F	F	F
coal and mineral products, except mineral oil and natural gas	-	C	-	-
geological surveys	-	F	F	F
Pakistan Industrial Development Corporation	-	-	-	F
Non-Extractive Industry, Commercial Operations				
industries	-	P	-	-
industries connected with defence	-	F	F	-
development of industries, where development under federal control is declared by federal law to be expedient in the public interest	F	-	-	F
development of industries, subject to the provisions in List I with respect to the development of certain industries under federal control	P	-	-	-
industries, owned wholly or partially by the federation/central government, or by a corporation setup by the federation/centre	-	F	F	-
Pakistan Industrial Development Corporation	-	-	-	F
iron and steel products	-	C	-	-
factories	C	P	-	-
regulation of labour and safety in factories	-	-	-	P
commercial and industrial monopolies, combines and trusts	-	C	-	-
hospitals and dispensaries	P	P	-	-
trade and commerce within the province	P	P	-	-
markets and fairs	P	P	-	-
boilers	C	P	-	P

incorporation, regulation and winding-up of trading, banking, insurance and financial corporations (not including co-operative societies), and of corporations, whether trading or not, with objects not confined to one province/unit, but not including universities —not including municipal and local bodies (1956, 1962) —not including corporations owned or controlled by a province and carrying on	F	F	F	F
incorporation, regulation, and winding-up of corporations, not being corporations specified in List I or universities; unincorporated trading [subject to Federal List]	P	P	-	-
insurance and corporations, subject to Federal List	-	C	-	-
regulation of the conduct of insurance business, except as respects business undertaken by a province	-	-	-	F

Taxation				
duties of customs, including export duties	F	F	F	F
corporation tax	F	F	F	F
taxes on income other than agricultural income	F	F	F	F
taxes on agricultural income	P	P	-	-
taxes on the sale of goods [until 31 March 1950]	F	-	-	-
taxes on sales and purchases	-	F	F	-
taxes on the sales and purchases of goods imported, exported, produced, manufactured or consumed	-	-	-	F
taxes on the capital value of the assets, exclusive of agricultural land, of individuals and companies; taxes on the capital of companies	F	F	-	-
taxes on the capital value of assets, not including taxes on capital gains and immovable property	-	-	F	-
taxes on the capital value of the assets, not including taxes on capital gain on immovable property	-	-	-	F
duties with respect to succession to property	F	-	F	F
estate duty with respect to property	F	-	F	F
estate duty with respect to agricultural land	-	P	-	-
estate and succession duties with respect to property other than agricultural land	-	F	-	-
duties with respect to succession to agricultural land	-	P	-	-
terminal taxes on goods or passengers carried by railway or air	F	-	-	-
terminal taxes on goods or passengers carried by sea or air	-	F	F	-
terminal taxes on goods or passengers carried by railway	-	P	-	-
terminal taxes on goods or passengers carried by railway, sea or air	-	-	-	F
taxes on railway fares and freights	F	-	-	-
taxes on sea and air fares and freights	-	F	F	F
land revenue, including assessment and collection of revenue, maintenance of land records, survey for revenue purposes and record of rights, and alienation of revenue	P	P	-	-
duties of excise on tobacco and other goods manufactured or produced in Pakistan except— (a) alcoholic liquors for human consumption; (b) opium, Indian hemp and other narcotic drugs and narcotics; non-narcotic drugs; and (c) medicinal and toilet preparations containing alcohol, or any substance included in sub-paragraph (b) of this entry.	F	-	-	-
duties of excise including duties on salt but not including duties on alcoholic liquor, opium and other narcotics	-	F	F	F
duties of excise on the following goods manufactured or produced in the Province and countervailing duties as the same or lower rates on similar goods manufactured or produced elsewhere in Pakistan — (a) alcoholic liquors for human consumption; (b) opium, Indian hemp and other narcotic drugs and narcotics; non-narcotic drugs; and (c) medicinal and toilet preparations containing alcohol, or any substance included in sub-paragraph (b) of this entry.	P	P	-	-
taxes on the capital value of agricultural land	-	P	-	-

taxes on lands and buildings	P	P	-	-
taxes on hearths and windows	P	-	-	-
taxes on mineral rights, subject to any limitations imposed by any Act of the Federal Legislature relating to mineral development	P	-	-	-
taxes on mineral rights, subject to Federal List and to any limitations imposed by law relating to mineral development	-	P	-	-
taxes on mineral oil and natural gas	-	F	F	F
taxes on minerals for use in the generation of nuclear energy	-	-	F	F
taxes and duties on the production capacity of any plant, machinery, undertaking, establishment or installation in lieu of the taxes and duties specified in entries 44, 47, 48 and 49 or in lieu of any one or more of them	-	-	-	F
taxes on professions, trades, callings and employments	F	P	-	-

taxes on professions, trades, callings and employments [subject to section 142-A]	P	-	-	-
taxes on animals and boats	P	P	-	-
taxes on vehicles suitable for use on roads, whether mechanically propelled or not, including tramcars	P	P	-	-
taxes/cesses on the entry of goods into a local area	P	P	-	-
taxes on boats, launches and steamers on inland waters	-	P	-	-
dues on passengers and goods carried on inland waterways	P	P	-	-
taxes on goods and passengers carried by road	-	P	-	-
tolls	P	P	-	-
taxes on luxuries including entertainments, amusements, betting and gambling	P	P	-	-
taxes on the consumption or sale of electricity [subject to section 154-A]	P	-	-	-
taxes in the consumption or sale of electricity	-	P	-	-
Investment—Domestic and Foreign				
banking, excluding co-operative banking, with objects and business not confined to one province	-	F	-	-
banking, subject to Federal List	-	C	-	-
central banking	-	-	F	
other banking, not including co-operative banking, with objects and business not confined to one province	-	-	F	-
conduct of banking business by corporations other than corporations owned or controlled by a province and carrying on business only within that province	-	-	-	F
stock exchanges and futures markets with objects and business not confined to one province	-	F	F	F
stock exchanges and futures markets, subject to Federal List	-	C	-	-
foreign loans	-	F	F	F
foreign aid	-	-	-	F
contracts including partnership, agency, contracts of carriage, and other special forms of contract but not including contracts relating to agricultural land	C	-	-	P
bankruptcy and insolvency	C	-	-	P
Transport				
maritime shipping and navigation	F	-	-	F
shipping and navigation on tidal waters	F	P	-	F
navigation and shipping (including coastal shipping but not including shipping confined to one province)	-	F	F	-
coastal shipping confined to ports within one province	-	P	-	-
admiralty jurisdiction	F	F	F	F
piracy and offences committed on the high seas and in the air	-	F	F	-
shipping and navigation on inland waterways as regards mechanically propelled vessels	C	-	-	P
carriage of passengers and goods on inland waterways	C	-	-	P

inland waterways [subject to the provisions of List III with regard to such waterways]	P	P	-	-
lighthouses [including lightships, beacons] and other provisions for the safety of shipping and aircraft	F	F	F	F
major ports, declaration and delimitation of such ports, constitution and powers of port authorities	F	F	F	F
ports, subject to Federal List	P	P	-	-
aircraft and air navigation; the provision of aerodromes; regulation and organisation of air traffic and aerodromes	F	F	F	F
carriage of passengers and goods by sea or by air	F	-	-	F
national highways and strategic roads	-	-	-	F
roads, bridges, ferries, and other means of communication not specified in List I	P	P	-	-

regulation of all railways other than minor railways with respect to safety, maximum and minimum rates and fares, station and service terminal charges, interchange of traffic and the responsibility of railway administrations as carriers of goods and passengers	F	-	-	-
federal railways	F	-	-	-
railways	-	P	-	F
regulation of minor railways with respect to safety and the responsibility of the administrations of such railways as carriers of goods and passengers	F	-	-	-
minor railways	P	P	-	-
municipal tramways	P	P	-	-
ropeways	P	P	-	-
vehicles other than mechanically propelled vehicles	P	-	-	-
mechanically propelled vehicles	C	-	-	P
vehicles, including mechanically propelled vehicles	-	P	-	-
Energy, Hydroelectric Power				
electricity	C	P	-	P
water power	P	P	-	-
Pakistan Water and Power Development Authority	-	-	-	F
mineral oil and natural gas	-	F	F	F
gas and gasworks	P	P	-	-
nuclear energy, mineral resources necessary for the generation of nuclear energy	-	F	F	F
production of nuclear fuels; generation and use of nuclear energy; ionising radiation	-	-	F	F
Tourism				
inns and innkeepers	P	P	-	-
tourism	-	-	F	P
Import, Export				
import and export across customs frontiers	F	F	F	F
trade and commerce with foreign countries	-	F	F	F
standards of quality for goods to be exported	-	F	F	F
Phytosanitary, Quarantine				
port quarantine	F	-	-	F
inter-provincial quarantine	-	C	-	-
quarantine, including hospitals connected therewith	-	-	F	-
prevention of the extension from one province/unit to another of infectious or contagious diseases or pests affecting men, animals or plants	C	-	-	P
prevention of the extension from one province to another of infectious or contagious diseases	-	P	-	-

Inter-Provincial Trade				
trade and commerce between the provinces	-	F	F	-
inter-provincial trade and commerce	-	-	-	F
Research Institutions				
agricultural education and research	P	P	-	-
federal agencies and institutes for research, or for the promotion of special studies [and special research]	F	F	-	F
scientific and other societies and associations	P	-	-	-
scientific and industrial/technological research	-	C	-	F
scientific societies and associations	-	P	-	-
[national] libraries, museums, and similar institutions controlled or financed by the federation	F	F	F	F
libraries, museums and other similar institution controlled or financed by the province	P	-	-	-

libraries, museums	-	P	-	-
education, including universities	P	P	-	-
co-ordination and determination of standards in institutions for higher education or research and scientific and technical institutions	-	P	-	-
[federal] meteorological organisations	-	F	-	F
meteorology and meteorological observation	-	-	F	-
Drugs, Pharmaceuticals				
drugs and medicines	-	-	-	P
poisons and dangerous drugs	C	C	-	P
narcotic drugs; production, manufacture, possession, transport, purchase and sale of opium and other narcotic drugs but subject, as respects opium, to the provisions of List I and, as respects poisons and dangerous drugs, to the provisions of List III	P	-	-	-
opium (cultivation)	F	P	-	P
opium (manufacture)	F	P	-	P
opium (sale for export)	F	-	-	F
opium (sale)	-	P	-	-
Other				
environmental pollution and ecology	-	-	-	P
treaties and agreements with other countries [conventions, declarations and other agreements]	F	F	F	F
international organisations; participation in international bodies and implementing of decisions made thereat	-	F	F	-
ancient and historical monuments; archaeological sites and remains	F	-	-	P
ancient and historical monuments declared to be of national importance	-	C	F	-
ancient historical monuments	-	P	-	-
explosives	F	-	-	P
manufacture of explosives	-	F	F	-
explosives, subject to Federal List	-	C	-	-
liquids and substances declared by federal law to be dangerously inflammable	F	-	-	F
public health and sanitation	P	P	-	-
adulteration of foodstuffs and other goods	P	P	-	-
charities and charitable institutions; charitable and religious endowments	P	P	-	-
institutions, establishments, bodies and corporations administered or managed by the federal government immediately before the commencing day; all undertakings, projects and schemes of such institutions, establishments, bodies and corporations, industries, projects and undertakings owned wholly or partially by the federation or by a corporation set up by the federation	-	-	-	F

Key

C:concurrent

F:federal

P:provincial

Source:Desk studyfor *Environmental LawinPakistan*,2006.

ANNEX 3: MULTILATERAL ENVIRONMENTAL AGREEMENTS

Pakistan's participation in multilateral environmental agreements is shown in the table below.

Agreement	Status(date)
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)	Accession(26July1994)
Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)	Ratification (23July1976)
Convention on Biological Diversity(CBD)	Ratification (26July1994)
Cartagena Protocol on Biosafety(Cartagena Protocol)	Signature (4 June 2001)
Convention on the Conservation of Migratory Species of Wild Animals (CMS)	Signature *
Convention on the International Maritime Organization (IMO)	Party [√] *
Convention on International Trade in Endangered Species of Wild Fauna and Flora(CITES)	Accession (20April 1976)
Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention 72) (LDC)	Party [√] *
Convention on Wetlands (Ramsar)	Party [√] *
International Convention for the Prevention of Pollution from Ships(Annex I & II)(MARPOL)	Party [√] *
International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)	Accession (2 September 2003)
Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol)	Accession(18December 1992)
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides International Trade (PIC)	Ratification (14July2005)
South Asia Co-operative Environment Programme (SACEP)	Member(1982)
Stockholm Convention on Persistent Organic Pollutants (POPs)	Signature (6 December 2001)
United Nations Convention on the Law of the Sea (Law of the Sea)	Declaration (26February 1997)
United Nations Convention to Combat Desertification (UNCCD)	Ratification (24February 1997)
United Nations Framework Convention on Climate Change(UNFCCC)	Ratification (1Jun 1994)
Kyoto Protocol to the UNFCCC (Kyoto Protocol)	Accession (11January2005)
Vienna Convention for the Protection of the Ozone Layer(Vienna Convention)	Accession (18December 1992)
Key	
*: Date not available	
√: Party to the agreement; information on whether by ratification or accession is not available.	
Source: IUCN Regional Environmental Law Programme, 2006.	