THE ASPECTS OF LEGISLATION IN ENVIRONMENTAL MANAGEMENT: CASE STUDY OF PUNJAB PROVINCE (PAKISTAN)

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ABSTRACT: Climate change and escalating environmental degradation have become key constraints to economic growth and sustainable development. One of the biggest challenges in the world is to achieve sustainable development with balanced social, economic, and environmental development. Punjab is the South Asia's rapidly urbanizing and industrializing region, but environmental degradation reflects the neglected area of sustainable development. It is therefore well recognized that the real attainment of sustainable development is through integration of environmental considerations. Law shapes the behavior and attitudes of human for sustainable and wise use of resources hence effective and biting legislative provisions are needed to lessen the adverse environmental impact of anthropogenic activities through regulatory regime. After 18th constitutional amendment, all provinces made their provincial Environmental laws, but Punjab province just adopted the federal law with few cosmetic changes. The lacunas have been observed by stakeholders and judiciary at every level of its implementation. The overall objective of this study is to improve the environmental management regime in Punjab. The methodology focuses on functional elements of the institutions to present a clear picture of gaps, flaws in legislation. The research has been developed based on extensive review of research literature, existing documentation, Comparative study of provincial environmental laws, Judgements of Courts, comments from the stakeholders and procedures, as well as interviews and meetings with staff of Environment Protection Department (EPD) Punjab. The analytical structure is based on three components: Institutional, Legal & Regulatory, and Technical aspects.

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INTRODUCTION

Everyone has the right of having hygienic, clean, and healthy environment for a healthy life. Survival of Flora, Fauna and all other living beings depend on the suitable environment. Anthropogenic activities have created environmental problems and to control this menace, environmental management is necessary at local, regional, and global level. The World Health Organization (WHO) has ranked Pakistan as fourth country in the world with the most air pollution after China, India, Nigeria, and the situation is likely to be aggravated (WHO, 2016), the same is endorsed in another Report (SUPARCO. 2017). It is one of the major causes of increase in number of deaths per year in Pakistan. Smog and air pollution are collectively caused by same sources. Different sectors contribute in it i.e. transport sector 43 %, industrial sector 25 %, agriculture sector 20% and power sector 12% in ambient air pollution (FAO, 2020). Province of Punjab faces severe problems of smog in November-December every year especially for the last 04 years, different measures are taken but the situation is not improved. The apex courts also acted pro-environmentally and the Supreme Court constituted "Smog Commission" while the Lahore High Court also constituted "Environmental Commission" but all these actions need proper backing of substantive legislation to cope with the menace of Pollution / smog.

Environmental management (EM) is a term which summarize all the international protocols, treaties, convention, agreements related to environmental conservation like ISO-14001, ISO 9001 environmental compliance under the provision of local laws. It deals with natural environment, ecology, and ecosystem to reduce the impacts of human activities on them. Our environment is suffering from ailments of global warming, climate change, ozone depletion, air pollution and smog. A person can avoid local water or food due to their elements of contamination, but he must depend on the local air quality. Most of the developing countries have either inadequate legislation or is lacking enforcement. The legislation is effective tool for

environmental remediation, conservation, protection, sustainability and reduces the pressure on natural resources and ecosystems. There is dire need to control the rising pollution level through Local, National and International Legislation and Agreements / Protocols / Treaties. Public sensitization and enforcement of law are the major components of environmental management. NGOs do realistic public education research while elected authorities and courts implement the law. Effective and proper legislation has key importance in EM. The biting provisions in the law, good administrative hierocracy, and qualified staff for enforcement are also the components for achieving the goals of environmental Management.

There are different systems like environmental management systems (EMS) for this purpose. According to USEPA, EMS is a collection of different policies, decisions, processes, and practices which enables the organization to reduce environmental impacts and increase its operating efficiency (Sroufe and Robert, 2003). It involves trainings, monitoring and reporting of environmental concerns to beneficiaries. ISO 14001 is the most widely used EMS (Chin, *et al.*, 1999). It follows the processes of planning, doing, acting, checking, and acting again cycle.

The legislations, standards, and policies are framed to control the anthropogenic activities to save natural resources from human exploitation. These may be qualitative or quantitative standards like emission, technology, process, fuel, and product standards but mostly the Stack Emissions (EQS), Ambient Air Quality Standards (AAQS) and Air Quality Index (AQI) are applied. The technology / process standards are to stop pollution at their sources through the policies implementation and use of clean technologies, for example imposition of ban on operation of 150 years old Bull's Trench brick Kiln Technology in all the provinces of Pakistan through a public interest litigation in the Supreme Court (HRC No. 6257-P/2018) and introduction of cleaner technology namely Zigzag Firing Technology in these brick kilns to address air pollution and smog issues in the country.

The product standards impose restrictions on certain materials injurious to the environment directly or indirectly or may have focus on the use of materials which can be recycled or are environment friendly. Such materials may be conditionally allowed e.g. Petroleum Fuel Standards (Euro II, III, IV Standards), Polythene Shopping bags are allowed only having thickness more than 15 microns and black polythene are banned due to adverse environmental effects under the Polythene Ordinance (GoP., 2004). Many chemicals having adverse environmental effects are regulated through product standards e.g. pharmaceuticals, detergents, sulphur content of fuels, ban on mercury in pesticides, and eco-

labelling requirements. These standards are based on prevention and pre-emption of environmental hazards.

Environmental Laws in Pakistan: After 18th constitutional amendment through Constitutional (18th amendment) Act 2010, the Environmental Laws in Pakistan are provincial as well as Federal. The Environmental Management system in Pakistan comprises of Environment Protection Department (EPD), Environmental Protection Agency (EPA), Environmental Tribunals, Environmental Magistrates, Environmental Protection Acts, Rules & regulations, Constitutional provisions, and some provisions in other General legislations. Multinational environmental Agreements have played a major role in shaping policy and legislation in Pakistan and the second feature apparent in the development in the Pakistani Environmental law is the role of superior judiciary (Alam, et al., 2018). Although some general legislations were available in the form of Pakistan Penal Code 1860 (Sections 188, 269, 270 & 278), Cr. PC (Section 133), Local Government Act 2019 (Section 284) and Land Use/ Development Regulations to check the environmental degradation/ pollution, but their domain of implementation were generic having limited scope to cope with the environmental issues/ problems. Prior to the special legislation on environment, the industries were bound to comply with Factories Act 1934 (Sial, et al., 2018). The word 'Environment' was not mentioned in the federal, provincial, and concurrent legislative lists of the Constitution1956 (Choudhury, 1956) and Constitution 1962 (Singhal, 1962) which enumerated matters with respect to which the Central Legislature had exclusive power to make laws. The Constitution of the Islamic Republic of Pakistan, 1973, also does not contain provisions regarding rights and obligations of the State and the citizens in relation to the protection of environment (Mehmood, 2006, Alam, 2018) but it has provision in its fourth schedule (Entry #24) to legislate in respect of "environmental pollution and ecology". Article 9, 14, 184(3) and 199(1)(c) (16) of the Constitution 1973 also provides relief to public under the umbrella of right to life and dignity of man through public interest litigations through higher judiciary (Constitutional Courts). The environmental application of Articles 9 of the constitution was reflected in the most acknowledged Supreme Court of Pakistan case of 'Shehla Zia v. WAPDA (PLD 1994 SC 693) in the judgement the construction of Grid Station was ordered to be stopped in the public interest due to its possible radiations affecting right to life of the petitioner (May, J. and Daly, E, 2011).

After the incident of London smog in 1956, many countries including Pakistan started thinking of having legislation on environment to redress the environmental issues. The Stockholm Conference (June 15 to 16, 1972) emphasized on preservation and enhancement of human environment (Holdgate, 1982)

and its Principle 17 directly imposes the duties of establishing institutions for the safety and remediation of environment. In compliance, different institutions were created like Pakistan Environmental Protection Council, Pakistan Environmental Protection Agency to control the pollution and preservation of living environment.

National Environmental Quality Standards (NEQS) were notified in 1993 and 2000 under the Pakistan Environmental Protection Ordinance 1983 and later Ambient Air Quality Standards (AAQS) and Noise Standards in 2010 under the Pakistan Environmental Protection Act, 1997. Pakistan has signed numerous international treaties and also the member of organizations which are working for environmental sustainability like International Union of Conservation of Nature and Natural Resources (IUCN), Worldwide Fund for Nature (WWF), United Nations Environment

Program (UNEP) and South Asia Cooperative Environmental **Program** (SACEP). The Constitutional amendment in 2010, provided provisions for provincial and regional standards as there are in some European Countries and currently there are various environmental legislations at federal as well provincial levels. These are Pakistan Environmental Protection Act 1997, Azad Jammu & Kashmir Environmental Protection Act-2000, Punjab Environmental Protection Act-1997 2017), Baluchistan Environmental (amended in Protection Act-2013, Sindh Environmental Protection Act-2014, KPK Environmental Protection Act-2014, Gilgit-Baltistan Environmental Protection Act-2015 and Pakistan Climate Change Act, 2017.

The overall current set up of Environmental Management in the country is as follows.

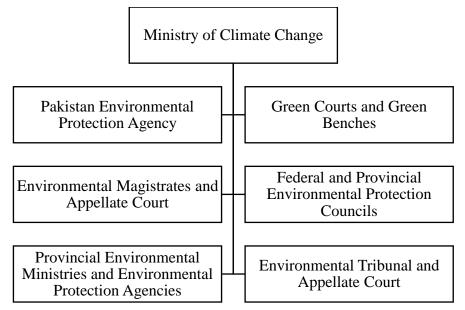


Figure 1: Managerial Infrastructure for Environmental Protection in Pakistan

Impacts of 18th Constitutional Amendment: After 18th constitutional amendment in 2010, there is no mechanism that allows for Province-Federation interaction about implementation of MEAs (Alam, et al., 2018). Under 4th schedule read with Article 70(4) Federal Legislative List of the Constitution, the External affairs (treaties, agreements, etc.) are the exclusive mandate of the Federal Government. The Federal Government Rules of Business also confirms the mandate of the federal Government for implementation of International treaties, conventions, agreements and international arbitration (GoP., 1973) and under Rule 43 the Parliament of the Pakistan has the powers to introduce new laws for working with the international treaties etc. Only the Sindh and Gilgit-Baltistan EPAs have excluded international treaties from their Acts considering it as mandate of Federal of Government but despite this fact Pak EPA has 14, Punjab 13, Baluchistan 30, KPK 19 and AJK 14 Treaties in the Schedules of their Acts. After constitutional amendment, the Pakistan Environmental Protection Act 1997 has been repealed to the extent of provinces and its extent is limited to federal territory, but the federal government has not amended the act in the light of constitutional amendment.

The Article 270AA (6) of the constitution provides saving to PEPA 1997, until Provincial Assembly or Authority repeal or amend this Act. After 18th constitutional amendment, the Federal Government has enacted Pakistan Climate Act-2017 having no provincial level infrastructure by the Climate Change Authority and its implementation is done through Pakistan Climate Change Council established under

section 3 of the Act ibid in which all the provinces are its members. After the 18th amendment the provinces have notified their Provincial Environmental Protection Councils with similar hierarchies to formulate Policies,

strategies, EQS, etc. at local level. Section 3 of the Pakistan Environmental Protection Act, 1997 also have provisions of Pakistan Environmental Protection Council to discuss the policies and other inter-provincial conflicts.

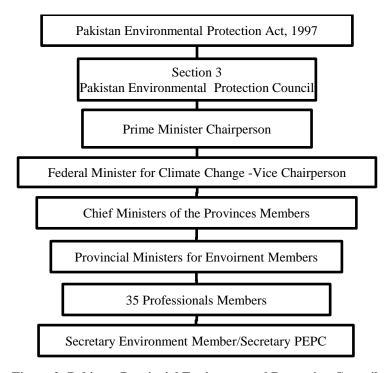


Figure 2: Pakistan Provincial Environmental Protection Council.

Development of Environmental Laws in Punjab: Punjab Environmental Protection Agency was created under section 5 of the Pakistan Environmental Protection Ordinance 1983, as a wing of Housing, Physical and Environmental Planning Department, Punjab (Alam, et al., 2018) and remained functioning under delegated powers under this Ordinance and afterwards under Pakistan Environmental Protection Act 1997. The Punjab Environment Protection 1997 (amended in 2017) was enacted on 18.04.2012 and EPA Punjab started working independently under this Act. This provincial Act was enacted after few amendments in the Federal Act with the aim of updating later. It has not been updated but other provinces have enacted better provincial Acts to cope with emerging issues like electronic waste, Strategic Environmental assessment, etc. The Punjab province has notified its own PEQS, Drinking Water Standards in 2016 but its implementation is not satisfactory as mandate of drinking water is distributed amongst different authorities and these have made their own standards i.e. EPA (GoP., 2016), WASA and PSQCA (GoP., 2004). All Food Authorities are following the drinking water standards of Pakistan Standards and Quality Control Authority, Standards Development Centre (Agriculture & Food Division) and are also member of the Standardization Committee (PSQCA.,

WASA and Public Health Engineering Department is following the drinking water standards of EPA (GoP., 2011). Environmental Laws have broad domain overlapped with many other laws including laws on Hospitals, Health & Safety, Factories, Land Development, Planning, Forest, Municipality issues, etc. Before 2018, many violators of environmental offences used to get stay orders from Civil Courts despite having special and dedicated Tribunal on Environmental with exclusive jurisdiction in this field to prolong their offences but now the jurisdiction of Civil Courts have been barred wherein special laws exist, under amended provisions of the Section 9 of the CPC 1908, amended through the Code of Civil Procedure (Punjab Amendment) Act 2018 (Gupta, 2018).

MATERIALS AND METHODS

A research flyer was got filled from 141 direct stakeholders of environmental field to know their opinion on effectiveness of provincial legislations. A survey was conducted to get the opinion of people on existing Environmental Laws of Punjab. The people interviewed were related directly or indirectly to the environmental Sector. The awareness regarding environmental issues are

increasing day by day among the masses, owing to awareness campaigns of Government Departments, media, and NGOs. The target groups were Environmental Lawyers, Environmental consultants, persons from industrial and Government sector, academia, and public. The purpose was to focus more on people who are somewhat connected to the field of Environment, so that the most relevant opinion can be garnered. The survey form was developed on google form which was distributed to masses using email, WhatsApp, and Facebook. Few people were given the forms in hard form. The form was filled out from 141 people, 104 of whom were filled out through Google Forms, while 37 were filled out directly on hard form. The detailed results are discussed below. The form was divided into 3 sections. First section is the introduction of the interviewee. Second Section deals with the opinion on existing environmental legislation in Punjab. Last section requires interviewee to give critical comments / opinion on existing environmental legislation in Punjab. The last section proved to be very useful in gathering valuable comments / merits / demerits / improvements regarding existing legislation. The results have been discussed Further all the five section-wise. provincial Environmental Acts, Federal Environmental Act along with the environmental Act of Azad Kashmir have been studied and their comparison has been done to know the room for improvement in Punjab environmental Protection legislation, moreover the judgements of the Tribunals and Courts have been studied for this purpose. Physical visits and interviews were conducted to know the effectiveness of the legislation and regime of implementation. The Hierarchies, human resource and service rules have been studied. The functions of the Agency under the law and constrains in implementation have been pointed out. The results have been shown graphically and in comparative Charts. The rapid industrialization is bringing new environmental challenges hence it is imperative to make provision in law to cater new problems. The results of this survey help understand the bottlenecks in in the enforcement regime, lacunas in Laws / predicaments that need to be fixed for smooth implementation of Environmental Laws for effective Environmental Management. The aim was to know all aspects of Environmental management i.e. Stakeholders, Enforcement Authority, Courts and legislation on environment and suggestions for effective Environmental management Regime.

RESULTS AND DISCUSSION

A. Stakeholders Consultation

Categories of interviewees: The major chunk of interviewees was from Education sector which is 51% of the total (144) forms. Environmental Consultants constituted 34% of total, followed by Government Sector 22%, Industrial Sector at 14%, Public 18%, Lawyers 4% and NGO 1%. It is pertinent to mention that some alike categories were merged for better representation of results. The following Table represents these percentages.

Table 1. Percentage categories of Interviewees.

Field	Percent
Education	51
Environmental Consultant	31
Government Sector	22
Industrial Sector	14
Public	18
Lawyer	4
NGO	1
Total Interviewees	141

Comments on existing environmental legislation: The second section focuses on 3 questions i.e. i. "Do you believe that Punjab Environmental Protection Act-2017 needs improvements?", ii. "Do you believe that Rules & Regulations under the Act need improvements?" and iii. "Do you believe that the Environmental Laws in other Provinces are better?". The results of Question No. 1 are shown in following figure:

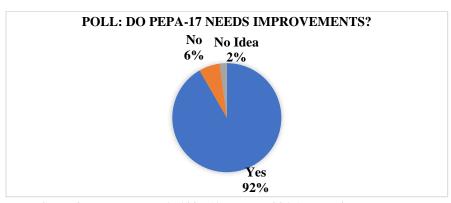


Figure 3: Poll: Do PEPA-1997 (Amended 2017) needs improvements

Out of 144 people being interviewed that belonged to various fields, 92% are of the opinion that the Punjab Environmental Protection Act-1997 (amended 2017) requires improvement. 6% people do not think that the Act requires any improvements, while 2% have no

idea in this regard. The results reveal that majority of the people are of the opinion that amendments are required to be done in PEPA for better implementation of Environmental laws.

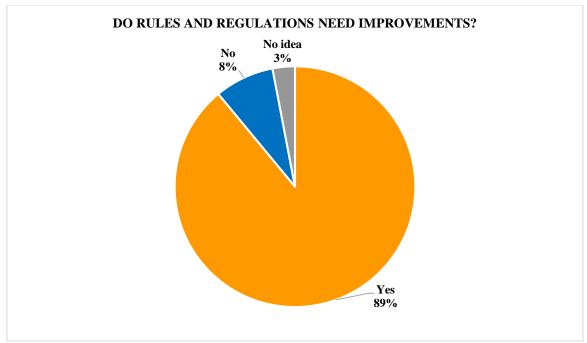


Figure 4: Poll: Do Rules & Regulations need improvements

The above figure represents the results for the second question i.e. "Do you believe that Rules & Regulations under the Act need improvements?". 89% people were affirmative that the Rules & Regulations must be revised or improved. 8% were of the view that no

improvements are needed, and current legislation is satisfactory. While 3% have no idea in this regard. The majority believes that the legislation must be upgraded for smooth implementation of laws.

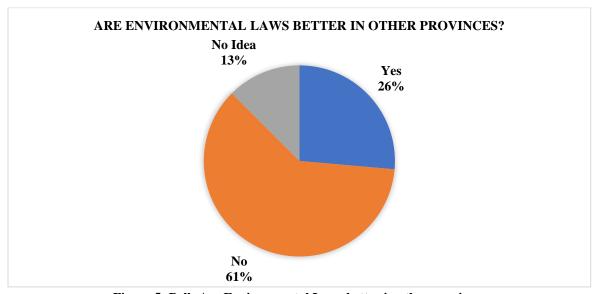


Figure 5: Poll: Are Environmental Laws better in other provinces

The above figure shows the results for the last question of section-II i.e. "Do you believe that the Environmental Laws in other Provinces are better?". After the 18th Amendment, the provinces were authorized for the formation of their own rules and regulations. The subject of environment was also among the devolution. After devolution of powers, the Provinces made their own Environment Acts, likewise Punjab also made Punjab Environment Protection Act-2017, which is same as Pakistan Environmental Protection Act 1997, with some minor amendments. Some provinces like Sindh and KPK engineered their own Environment Act with significant amendments to original Environment Act. Hence this question was added to get generic opinion

about the comparative analysis of Environment Act of Punjab with those of other provinces. The results revealed that 61% of the people think that the Environmental Laws in other provinces are not better than Punjab's. 26% think that the Environmental Laws of other provinces are better than that of Punjab's. 13% people have no idea in this regard.

Summary of Stakeholders Survey: The comments on existing Environmental Legislation, garnered from survey form were very heterogeneous in nature. However, all the comments were scrutinized to six common recommendations / comments. Which are shown in graph below:

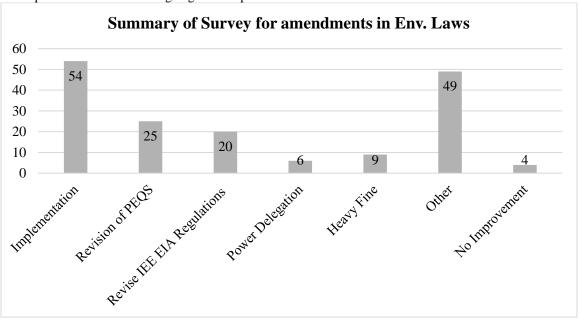


Figure 6: Most common comments on Environmental Legislation

The polls in above Figure shows that out of 141 people, around 54 people believe that the implementation of existing environmental laws need to be effective. 25 of people being surveyed contends that the Punjab Environmental Quality Standards (PEQS) needs to be revised. This implies that the PEQS can be more industry specific, detailed, and stringent to improve environmental monitoring and compliance.

It is opinion of 20 of people that there is dire need to revise "Review of IEE / EIA Regulations-2000". These regulations were formulated by Federal EPA, but after the 18th Amendment, the Punjab EPA adopted these Regulations as such without any amendment. It is been 20 years since these Regulations were made but no amendment was made in these regulations during this time. There is vast development in the field of Environment and hundreds of new project types have been evolved. Now, it is perplexing for proponents, consultants and as well as officials of EPA define or

handle many of the projects considering these Regulations because there is a lot of grey area in these Regulations. Therefore, it is high time that these Regulations may be revised and improved.

Many of the people (6 nos.), mostly EPA officials who submitted survey form contended that the Powers of certain Sections (esp. Sec 11, 12, 15 and 16) of Punjab Environmental Protection Act-1997 (Amended 2017) must be delegated to District Officers / in charge of EPA Field Formations (Assistant Directors / Deputy Directors) for rapid enforcement of laws and timely redressal of Public grievances. Currently some of the powers to issue Environmental Approval under Section 12 and enforcement under section 16 are delegated to Divisional Commissioners and District Offices of Environment, respectively. It was opinion of most of the persons that rest of the powers may also be delegated to District Offices so that the implementation and enforcement process can be made fast and to avoid

unnecessary delays. Around 9 people also suggested that fines may also be increased to make people comply with Environmental Laws. 4 people were found satisfied with the current legislation, while 49 people submitted other miscellaneous improvements.

B. Comparative Analysis of Provincial Laws: After 18th constitutional amendment in 2010, all the provinces made their provincial environmental laws with some

Additions (Sections & Definitions), amendments and improvements in the Federal Environmental Protection Act (PEPA 1997). Some provinces have eliminated international treaties with the plea that it is the exclusive mandate federal government, but some provinces have still included them in their laws. The comparative analysis is as follows.

Table 2: Comparative analysis of provincial laws.

#	Provincial Environmental Protection Act	New Sections Added (Sections Nos.)	New definitions added	Intentional Treaties
1	Punjab Environmental Protection Act-1997 (amended in 2017)	Nil	Nil	13Nos. (Deleted the Convention on the law of the Sea, Montego Bay, 1982)
2	Baluchistan Environmental Protection Act-2013	8. Creation, Rules, Functions 11. Inter-Provincial Environmental Issues. 12. Multi-lateral Environmental Agreements. 13. Strategic Environmental Assessment (SEA) 18. Electronic Waste 19. Prohibition of solid and hospital waste management licenses. 20. provisions for water resource management. 23. areas near to sea.	Best Practicable Environmental Options, E-Waste, Genetic resources, and their Handlings, Environmental Protection, Ship breaking, SEA, Sustainable Management of resources.	30 Nos.
3	Sindh Environmental Protection Act-2014	14. Ban on all the activities which are affecting the environment. 16. Certification and organization of the environmental laboratories. 19. Environmental Monitoring, impact assessment, audit, review, and involvement of public in these processes.	Rules about biosafety, Environmental Aspect, Audit, Management, and its Protection Order, Environmental Review, Biodegradable and plastic Products, SEA, Trans-boundary Pollution.	Nil
4	KPK Environmental Protection Act-2014	31. Formation of KPK Environmental Protection Council. 12. provision of establishment of Strategic Environmental Assessment (SEA). 34. Introduction of uniforms EPA employees	Biosafety, Complaint, Climate action, E-Waste, GMOs, Transportation, Complaints, Radiations, Reward, Schedule, SOPs and SEA.	19 Nos.

		25 C :C ED4 1		
		35. Specific EPA employees		
		were called as public		
		prosecutors.		
		•		
		36. Effective adoption of		
		rules and regulations		
		37. Prevention through		
		different actions.		
5	The Cilcit Deltisten		Diagofaty	Nil
5	The Gilgit-Baltistan	_	Biosafety,	NII
	Environmental	17. Establishment of the	Environmental Court, Genetically	
	Protection Act-2015	Strategic Environmental	Modified Organism,	
		Assessment (SEA)	Green Court,	
		18. Environmental	Strategic Environmental	
			6	
		monitoring, environmental	Assessment (SEA)	
		audit, green and		
		environmental courts with		
		jurisdictions		
		9		
		30. Public participation and		
		full access to the related		
		information.		
6	Azad Jammu &	Nil	Nil	14 Nos.
	Kashmir			
	Environmental			
	Protection Act-2000			

The comparison shows that there is dire need of insertion of new definitions and new sections in the Punjab Environmental Protection Act 1997 (Amended in 2017) to cope with the environmental issues. The Punjab province has just adopted the federal environmental protection Act with minor amendments. The Punjab Environmental Protection Act 1997 (Amended in 2017) has many confusions and needs updating as it does not address many issues like Electronic waste, Strategic Environmental Assessment, etc. The Tribunal is of the view that EPA has no sealing powers (PET Appeal No. 117/2019) while in reported judgement of Lahore High Court, the EPA has jurisdiction of sealing (WP No. 1193/2017). The judgements of the tribunal have many clashes e.g. the PET dismissed the Appeal of M/S Saifi Green Foundation Lahore being not qualified to file this appeal u/s 22 of the Act as the appellant is not the addressee of the Order (PET Appeal No. A-186/2018) while in the similar Appeal of Rana Usman vs DG EPA, the PET accepted the appeal and announced judgement that EPA has no Sealing powers (PET Appeal No. A-117/2019). Environmental legislation in Punjab after the 18th constitutional amendment has failed to incorporate these precedent breaking legal developments into laws and future legislation should attempt as much as practical to reflect these principles and rights into legislation (Alam, et al., 2018). The Punjab Environmental Protection Act 1997 (Amended in 2017) repeals the PEPO 1983 and does not mention the Pakistan Environment Protection Act 1997(Alam, et al., 2018). As there were several cases pending before the Provincial Tribunal which were initiated under the Pakistan

Environmental Protection Act 1997 and there was no saving to this Act under the Provincial Act which created many legal complications hence the saving has been got Notified on 08-11-2017 through Punjab Environmental Protection (amendment) Act 2017 (Alam, *et al.*, 2018).

C. Administrative Hierarchy of EPA and Environmental Courts: Administrative Department of EPA Punjab is Environment Protection Department Punjab. The responsibility of implementation of the provisions of the Act lies with the Director General EPA, Punjab. The administrative hierarchy is as follows.

Due to shortage of staff and gaps in hierarchy, some Sections of EPA are inactive since their creation e.g. employees of Research & Investigation, Technology Transfer, Information Technology, Investigation & Planning (I&P) and Resource Management (R.M) Sections are deputed on irrelevant jobs and it is the mandatory functions of EPA to provide technical and research data to Public / Stakeholders under the provisions of the Section 6(1) (e, m, n, o, p, q, r & t) of the Act ibid. The plea is that the Directorate (P&C) must deal with pollution cases of the whole province and Same is with Technology Transfer Section as they are deputed in Annual Development Schemes. Even EPA Labs are not fully functional lacking facilities of several parameters and its staff is also partially adjusted in field posts. The service rules have not been updated to incorporate the specialized degrees like Environmental Management, Environmental Policy & Governance, Environmental Law, Environmental Environmental Health, Environmental Planning, Climate

Change, etc. The environmental engineering is included for the post of Assistant Director (Field), but it is not included in the qualifications of Inspectors and Senior Inspectors despite they are in the same field/ line of promotion. The service rules of the Agency need rationalization in specialized qualifications with respect to job description and grades of the posts.

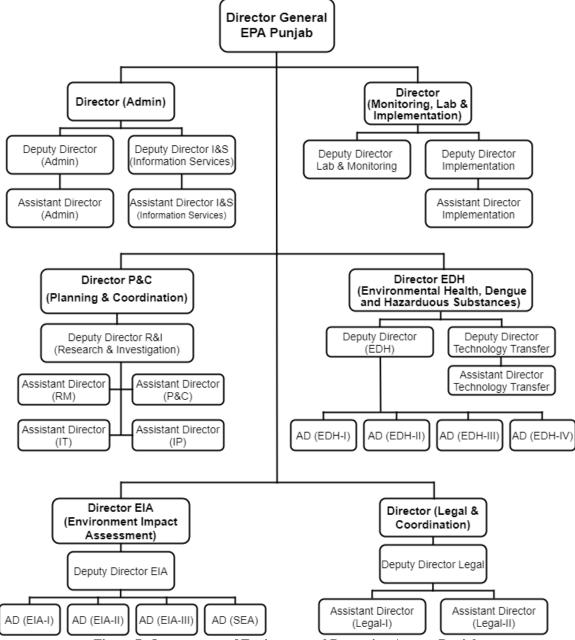


Figure 7: Organogram of Environmental Protection Agency Punjab

Environmental Courts and Jurisdiction Matters of Environmental Tribunal: After the 18th amendment, the Punjab Environmental Tribunal was established in 2012 under Section 20 read with Punjab Environmental Tribunal Rules 2012, with exclusive jurisdiction empowered under Section 21(2) to try offences under Section 11(industrial discharges & emissions in

accordance with NEQS), Section 12 (Environmental Impact Assessment of Proposed Projects), Section 13 (Import of hazardous wastes) and Section 16 (Environmental Protection Orders) and its all contraventions are punishable under section 17(1). There is only one Tribunal in the Province and long distances must be travelled to attend the tribunal even by owners of

small industrial entities like Flour Grinding Machine, etc. The Tribunal also becomes overloaded consequently delays for years in judgements.

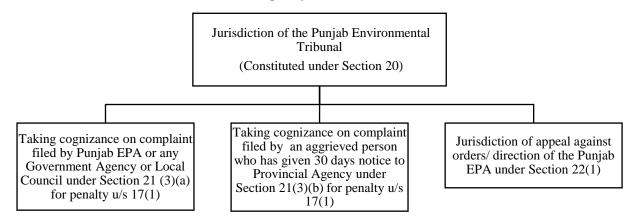


Figure 8: Jurisdiction of the Punjab Environmental Tribunal

Source: PEP Act 1997 (Amended 2017)

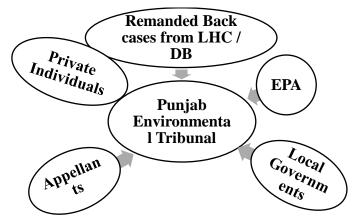


Figure 9: Five sources from where cases can be submitted to Environmental Tribunal Source: PEP Act 1997 (Amended 2017)

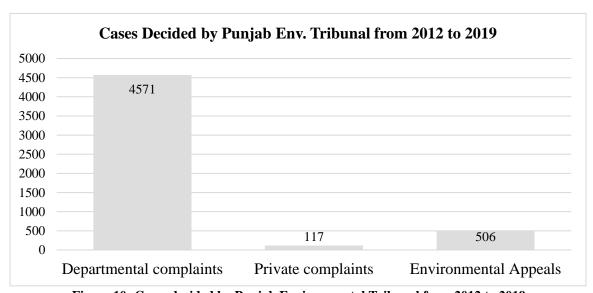


Figure 10: Cases decided by Punjab Environmental Tribunal from 2012 to 2019

Source: Punjab Environmental Tribunal

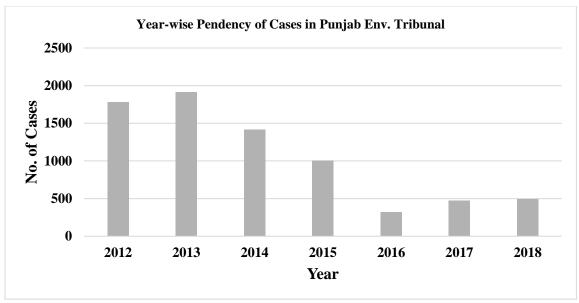


Figure 11: Year-wise Pendency of Cases in Punjab Environmental Tribunal Source: Punjab Environmental Tribunal.

Environment Magistrates: Senior Civil judges have been nominated as Environmental Magistrates under Section 24 of the Act with jurisdiction under sections 14

(hazardous Substances) and Section 15 (motor vehicles regulations) having Session Courts as Appellant Forums under Section 25.

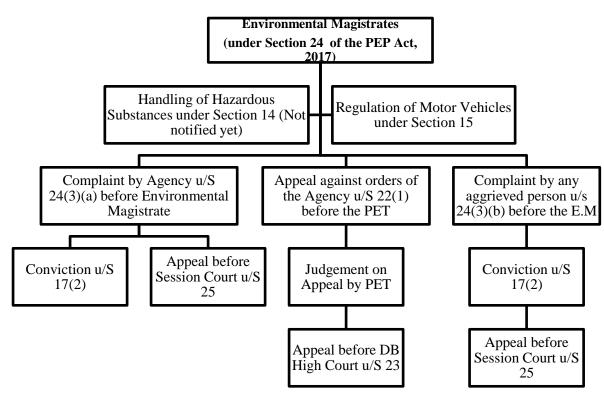


Figure 12: Jurisdiction of Environmental Magistrates.

As per judgement of High Court, no person can be condemned unheard (WP # 240084/2018) but hearing and issuance of orders provisions for Sections 14 & 15

have not been provided and neither it has been mentioned that offences under these sections are to be dealt in summary trial. At least the trial on offenses of Section 15 must be in Summary manner. Further the Environmental magistrates are not lined with Environmental Tribunal. The appellate authority should be the Environmental Tribunal. The regulations / rules for handling of hazardous substances have been drafted since past but still has not been notified due to which Section 14 is dormant for implementation.

Prosecution under Punjab Environmental Act 1997 (Amend. 2017): The prosecution procedure under the

Punjab Environmental Protection Act 1997 (Amended 2017) comprises of Site Inspection Report (SIR), Site Monitoring Report (SMR / Lab Report), hearing of delinquent, issuance of Environmental Protection Order (EPO) and on compliance status report of EPO, complaint before the Punjab Environmental Tribunal (PET) under Section 22 (3)(a) of the Act ibid for offences under Section 11, 12, 13 and 16.

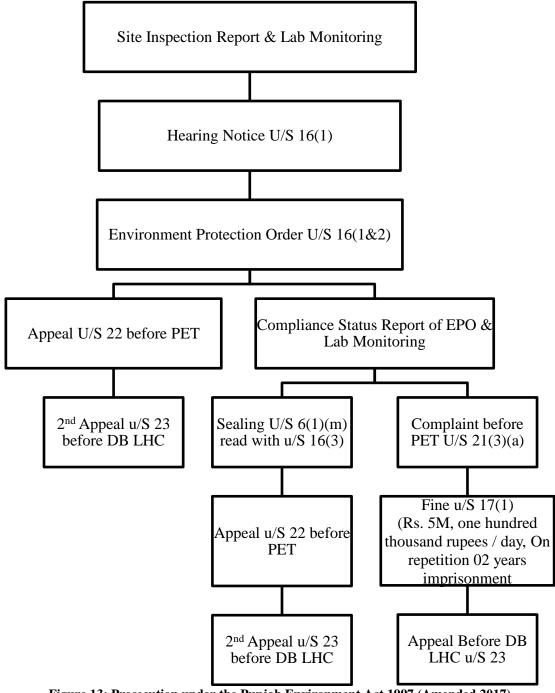


Figure 13: Prosecution under the Punjab Environment Act 1997 (Amended 2017)

D. Judgements of Environmental Tribunals / Tribunal

- 1. Jurisdictions on handling of hazardous substances is overlapping under Section 14 and 16(1) which is creating confliction between Environmental Magistrate and Punjab Environmental Tribunal.
- 2. Even in emergency, the immediate stoppage cannot be done without providing the opportunity of personal hearing (PET Appeal No. 119 / 2019), under Section 16(1) and thus law lacks summary trials for immediate relief. The rules to implementation of Section 16 are needed as the whole outcome revolves round this Section. The subsections 16(4) be may added for summary trial provisions.
- 3. There is no provisions/ power of petty / levy spot fines for the violators for the time being i.e. open burning of waste, stubble/ crop residue burning, recovery of recyclables by burning the materials / wastes. The system of spot fines and summary trials are needed for minor offenses.
- 4. Administrative penalties are provided for in section 17(7) and it appears that it provides an alternative to lodging a case with the environmental tribunal. Punjab Environmental Protection (Administrative Penalty) Rules 2013 has been notified vide Notification No. SO(G)EPD/8-1/2012 in March 2013 but these are ineffective as these are not Gazette notified and these rules are not comprehensive to calculate administrative penalty proportionate to offensive.
- Due to lack of awareness, some owners / proponents of projects commence construction / operation before mandatory approval under section 12 and there is no mechanism to resolve the issue of violation. This gap was also pointed out by the tribunal in its judgment that there is no mechanism that the owner / proponent himself request the Tribunal for fine of his violation (PET Appeal No. 166/2019) and if the EPA sends the case of violation it may take months or years to decide which is totally unjustified. In such case of Environmental Approval, the proponent having violation, is required to submit an under taking that he will deposit administrative penalty when the Administrative penalty Rules will be notified, but the violations are saved under retrospective effect of law (PET Complaint No.15/2014). In case of EPO, the violator is directed to get the violation of Section 12 regularized, but the PET has no jurisdiction to regularize the violation except imposition of fine. The Violator / proponent has only option to file an appeal against the EPO. The government is facing millions of rupees loss of revenue due to absence of Administrative Penalty Rules. The Deputy Director Environment, District office letter Rawalpindi in his No. DD(F)/EPA/RWP/F-28(Gen)/2018/194 dated 14-11-

- 2019 has requested the EPA head Quarter how to regularize the Environmental Approval cases in which violation has been committed / construction started / completed.
- The Act provides several financial mechanisms and systems but not all of which are optimally designed, implemented due to lacking the subordinate legislation. These finances/ revenues are loans, Grants. Sustainable development funds. administrative penalties, IEE/EIA Review fees, License Fees, Lab testing fees, fines by the Tribunals and Magistrates but there is no effective backing of subordinate legislation for collection, maintaining and utilization mechanism and administrative hierarchy for keeping its records. The agency also failed to explore new avenues of funding, such as environmental taxes. Under Section 6(2)(d)(ii), the EPA is bound to make recommendation to the government with respect to "taxes, duties, cesses and other levies" The section 11(2) and 11(3) provides levy a pollution charge but since the enactment, even a single case has not been dealt under these provisions. The section 29, states that all dues recoverable under the Act are "recoverable as arrears of land revenue". Ideally, all funds generated under the Act should be under the same law. These provisions be made clear and easier so that these can easily be implemented and exercised.
- 7. The EPA is lacking trained and skillful staff. The preparation of cases is poor, lacking effective/valid evidence and site inspection reports are defective and substandard, there hearing notices and EPOs have many legal as well as technical lacunas. The investigation documents and orders are not in line (PET Complaint No. 09/2017).
- 8. There is no time limit for EPA to complete and file the complaints before the PET, consequently the complaints remain pending for long periods. The departmental complaints are decided after years due to lenient backing by the Agency, but the private complaints are decided within months.
- 9. After 18th constitutional amendment in 2010, all the subordinate legislation which is borrowed from federal EPA needs to be notified at provincial level with proper updating & modifications.
- 10. The Sampling Rules 2001 provides mechanism only for the wastewater sampling and are silent about Noise and air pollution monitoring as their samples cannot be taken or cannot be sub-divide into 03 portions.
- 11. The Air Quality Index be officially notified for strategic planning.
- 12. There is dire need of capacity building in technolegal field for effective implementation and enforcement of the environmental laws.

- 13. There are many lacunas in filing Departmental Complaints, Private complaints, Appeals due to lack of command on environmental legislation. Even there has been confusions on the jurisdiction matter of EPA and the Punjab Environmental Tribunal (WP No. 1193/2017)
- 14. The Act provides immediate stoppage, etc. provisions but as per judgement of the Environmental Tribunal reasonable time for personal hearing and submission of reply must be provided and also specify a period within which such person could take the prescribed measures including the immediate stoppage of pollution causing activities (PET Appeal No. 119 /2019).
- 15. As there is no mechanism in the environmental legislation for immediate reliefs hence on the request of EPD dated 24-09-2019, the Home Department imposed Section 144 Cr.P.C 1898 vide No. SO(IS-II)1-1/2004 dated 30-09-2019 in Punjab on "burning of crop residue, municipal solid waste, tyres, plastics, polythene bags, rubber, and leather items etc." w.e.f 01-10-2019 to 31-12-2019, to avoid smog formation.

Conclusion: On the bases of instant study, it has been proved that effective legislation has key role in environmental management and the Puniab environmental Protection legislation needs make up of amendments, improvements to cope with the emerging constrains of the current era through; Insertion of more key definitions, new Sections and summary trial provisions to deal with emergency situations and small Removal of Ambiguities in jurisdictions, offenses, Framing subordinate legislations, Rationalization of Service Rules with respect to job descriptions, Devising revenue collection mechanism and functionalizing the Technology Transfer, of Information Technology, Research & Investigation.

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