THE HANDBOOK ON ENVIRONMENTAL LAW

We are the first generation to feel the sting of climate change,
and we are the last generation that can do something about it.

Jay Robert Inslee – Governor of the State of Washington

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PREFACE

Environment is a phenomenon not yet understood by us completely since it is a predicament that requires a collectivist solution in an individualist world. It is a challenge that the humanity faces and has consistently fallen short of doing what is required.

Global weather patterns are changing with surface temperatures of the earth rising beyond acceptable limits. The frequency and intensity of natural disasters is increasing. Agricultural yields are reducing threatening the subsistence of barely subsisting communities. Polar icecaps are melting raising sea levels while heat waves are becoming more and more severe. Desertification and deforestation are prevalent phenomena where ecosystems are gradually collapsing. By the day, communities are being displaced due to consequences their actions have no direct correlation with. We are destroying the earth, and nature is fighting back.

What we must understand is that environmental degradation is not numbers and figures, it involves moral and ethical questions that must rest heavy on our conscience and the answers to which stem not just from science, but philosophy, economics, law and the like. What we must appreciate, to the utmost degree, is that it is an issue where we are either part of the solution, and if we are not, then we certainly are part of the problem simply by virtue of continuing our lives as we do and doing nothing to arrest the environmental degradation. We cannot be innocent bystanders hoping that someone else will resolve this for us. It may be a slow burning issue invisible to everyday life, but it is an issue deserving not just our attention, but our undying efforts.

We must appreciate that it is an existential threat shaking the very foundations of our existence and this planet. We must appreciate that the damage has already been done, parts of which are irreversible. We could go down to zero emissions at this very moment, and the environment will continue to deteriorate further due to past emissions. However, we must appreciate that we have the obligation to ensure that future generations inherit a world worth living in. That we are answerable to the future generations, and will one day stand trial not just for our acts but our omissions too, if things are allowed to continue as they are. We must appreciate that sustainable development and all that is intrinsic to it is the solution to this predicament.

In the global scheme of things, Pakistan is disproportionately affected by environmental degradation and the consequent severely adverse climatic changes, being one of the most vulnerable countries despite its share in global greenhouse gas emissions being one of the lowest in the world. Locally, we are faced with issues of water security, food security, energy security and other social concerns. As an integral organ of the state, we, the judiciary, are tasked with doing our fair share to prevent and alleviate the effects of environmental degradation in ensuring the protection of the fundamental rights of the people, in particular the vulnerable and weak segments of society.

Our legal and judicial toolkit possesses a great degree of underutilized apparatus and resources that can serve the need of the day. What we need is not piecemeal solutions but a coherent and cohesive approach to model our existing jurisprudence to meet the exigencies of the situation. We cannot allow delay and lethargy to weaken our response. The judiciary had undertaken obligations and made commitments under the Bhurban Declaration of 2012 and it is our responsibility to see them through.

This handbook is a stepping stone to the many actions required on our part. It is a guide seeking to elaborate the most basic principles and practices required of us to steer things in the right direction. A guide on how to employ existing resources, innovatively, to achieve the end of sustainable development. A medium through which the judiciary can be sensitized to the effects of environment degradation and the issues it raises and in turn become a medium that disseminates awareness and knowledge amongst others. A reminder that we must fulfill our duties towards this generation and the next and instill people's confidence in the judicial limb of the state, in its efforts to protect the environment.

Justice Ayesha A. Malik

MODULE 1 - THE POWERS AND JURISDICTIONS OF EXECUTIVE, ADMINISTRATIVE AND JUDICIAL AUTHORITIES UNDER THE PUNJAB ENVIRONMENTAL PROTECTION ACT 1997

Having agreed to the Rio Declaration on Environment and Development, Pakistan has taken on obligations specified therein. One such obligation emerges under Principle 11 of the Rio Declaration which, *inter alia*, mandates that *"States shall enact effective environmental legislation."*

It is in this backdrop that environmental protection acts have been enacted in Pakistan. The Punjab Environmental Protection Act, 1997, as amended in 2012, (the "**PEPA**"), grants the executive and judicial limbs of the Province of Punjab authority to deal with environmental issues. PEPA provides a comprehensive scheme of environmental regulation ranging from policy making and setting standards of environmental compliance to providing executive and judicial authorities with teeth to bite down and ensure enforcement of the provisions of PEPA in line with the principle of sustainable development as provided in the preamble which reads as follows:

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

CHAPTER I - THE JUDICIAL LIMB UNDER THE PUNJAB ENVIRONMENTAL PROTECTION ACT

" *"Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided."* - Principle 10 of the Rio Declaration

Not only has Pakistan, by virtue of signing the Rio Declaration, taken on the obligations put in place by Principle 10, but it is also pointed out that the right and access to environmental justice has been considered as customary international law giving the principle the utmost important. In addition thereto, in the context of Pakistan, the principle has then again been paid homage in the Bhurban Declaration of 2012 where judiciaries from South Asia adopted a common vision on the environment and agreed to strengthen the pillars of environmental justice within their respective countries. Under PEPA, the judicial limb is divided into two forums, the Environmental Tribunals and the Environmental Magistrates.

PART I - POWERS OF ENVIRONMENTAL MAGISTRATES

I. The Scheme of Section 24

24. Jurisdiction of Environmental Magistrates.–

(1) Notwithstanding anything contained in the Code of Criminal Procedure, 1898 (Act V of 1898), or any other law for the time being in force, but subject to the provisions of this Act, all contraventions punishable under sub-section (2) of section 17 shall exclusively be triable by a judicial Magistrate of the first class as Environmental Magistrate[1] especially empowered in this behalf by the High Court.

(2) An Environmental Magistrate shall be competent to impose any punishment specified in sub-sections (2) and (4) of section 17.

[1] Section 2(xii) "Environmental Magistrate" means the Magistrate of the First Class appointed under section 24;

(3) An Environmental Magistrate shall not take cognizance of an offence triable under sub-section (1) except on a complaint in writing by–

(a) the Provincial Agency[2], or Government Agency[3] or local council[4]; and

(b) any aggrieved person[5]

II. Primary Jurisdiction of Environmental Magistrates under PEPA

As provided for under the scheme of sub-section 1 of Section 24, all contraventions punishable under sub-section (2) of section 17 shall exclusively be triable by an Environmental Magistrate. The said powers extend to hazardous waste in terms of Section 14 and regulation of any motor vehicle in terms of Section 15. In addition to the powers granted under Section 14 and 15, the Environmental Magistrates also act as the Court that ensures compliance to orders or directions issued by the EPA or the Council or other rules and regulations made under PEPA and all licenses, non-compliance of which may have an adverse environmental impact as elaborated hereunder.

III. Additional powers of Environmental Magistrates as per Section 17(2)

In addition to the foregoing powers, Environmental Magistrates have been given several other functions under the scheme of Section 24. Such powers extend to enforcement of any of the following:

1. Rules or Regulations under PEPA;
2. Conditions of any license;
3. Any order or direction issued by the EPA
4. Any order or directions issued by the Council

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[2] Section 2(xxxvii) "Provincial Agency" means the Provincial Environmental Protection Agency established under the Act, or any Government Agency, local council or local authority exercising the powers and functions of the Provincial Agency;

[3] Section 2(xvii) "Government Agency" includes–

(a) a department, an attached department or any other office of the Government; and

(b) a development authority, local authority, company or a body corporate established or controlled by the Government;

[4] Section 2(xxvi) "local council" means a local council constituted or established under a law relating to local government;

[5] Section 2(xxxii) "person" means any natural person or legal entity and includes an individual, firm, association, partnership, society, group, company, corporation, co-operative society, Government Agency, non-governmental organization, community-based organization, village organization, local council or local authority and, in the case of a vessel, the master or other person having for the time being the charge or control of the vessel;

To comprehend the depth of powers granted to Environmental Magistrates under PEPA, the language employed in Section 17(2) must be analyzed. The provision expressly begins by stating that whoever contravenes or fails to comply. The interpretation that must be employed while understanding the scope of sub-section 2 of Section 17 is that the term "contravene" is to be read with Sections 14 and 15. Whereas the word "fails to comply" is to be read in conjunction with any rule (as defined under section 31) or regulations (as defined under Section 33) or conditions of any license (given under Section 14 and 15 or any other license granted by any Government Agency) or any order or direction issued by the Council of the EPA under PEPA. It is stressed that such licenses are not limited to the ones granted under PEPA, but all licenses granted by any Government Agency.

Under PEPA, the Council is established under Section 3 and functions under Section 4 of PEPA, with the prime objective to supervise the enforcement of the provisions of PEPA. And in addition thereto, it gives appropriate directions under sub-section (f) of Section 4. Moreover, the Council, can also direct the EPA to improve the environment and prevent the control of pollution and sustainable development. This entails that if the Council gives a direction to the EPA or any government agency and if there is any non-compliance, it can execute its order through the Environmental Magistrates.

Similarly, in the case of the EPA, the words any order or direction issued by the EPA are to be read with Sections 6(2) and Section 7. The framework of the law is that in order to prove the case regarding the violation or contravention of any provision of PEPA, the EPA has to take the following steps (undertake inquiries, request information, summon, confiscate articles, take samples, testing) before the case is presented to the Environmental Magistrates. Hence, the EPA can issue directions and orders to the persons as authorized under sub-sections (a) & (b) of Section 6. If the orders are not implemented or complied with by the persons violating the law, the EPA can file a complaint to the Environmental Magistrate under Section 24 read with sub-section (2) of Section 17. Hence, it must be stressed that the EPA has to rely on the Environmental Magistrates in order to ensure enforcement of its orders. For this reason, both the EPA and the Environmental Magistrates must understand and appreciate the nature of their respective jurisdictions and powers vested under PEPA in order to work together and ensure that the spirit of the law as embodies in its preamble is furthered by their actions.

IV. Environmental Magistrates to be empowered by the High Court

As aforementioned, Environmental Magistrates in terms of Section 24 read with sub-section (xii) of Section 2, shall be a judicial magistrate of the first class, empowered by the High Court in this respect. The significance of this is that the valid exercise of powers under PEPA is predicated on the condition that a magistrate exercising such powers must be duly empowered in this regard by the competent authority i.e. the High Court.

If one dissects the provision for its contents, two questions arise, firstly, who is a judicial magistrate of the first class, and secondly, how may the High Court validly empower such a magistrate under to be an Environmental Magistrate.

While dealing with the first question, it must be pointed out that the answer to the question is not covered under PEPA, therefore, when the procedure not is not given, the Code of Criminal Procedure, 1908 (the "**Criminal Code**") is applicable. Similar is the case with Environmental Magistrates under PEPA, therefore the same rule shall apply in this matter. The only reference in PEPA is to a judicial magistrate, which finds meaning under the Criminal Code, specifically Sections 2(ma), 6, 12 and 14.

Under the Criminal Code, a Magistrate as defined under sub-section ma of Section 2 means a Judicial Magistrate and includes Special Judicial Magistrates appointed under Sections 12 and 14.

While dealing with the second question, it is important to appreciate that Section 24 requires a specific notification empowering a magistrate of the first class as an Environmental Magistrate.

The significance of this is that exercise of such powers by magistrates or other judges not duly authorized in this respect renders any orders passed by them without jurisdiction. A similar issue came before the Honourable Lahore High Court in **Allah Ditta versus Muhammad Ramzan**[6] where the Honourable Court declared orders passed by magistrates not duly empowered under the law to exercise powers as Environmental Magistrates to be without jurisdiction.

Furthermore, the phrases "notwithstanding anything contained in the Criminal Procedure Code" and "or any other law for the time being in force" as used in Section 24 give primacy to the powers of the Environmental Magistrates under PEPA over any or all functions granted to magistrates under various other laws. In

[6] 2005 YLR 650

this regard it is pointed out that powers granted to Judicial Magistrates under Ch X and Ch XI of the Criminal Code and other laws such as Chapter XIV of the Pakistan Penal Code, 1860 relating to *"Offences Affecting the Public Health, Safety, Convenience, Decency and Morals"* are subservient to the powers granted under to Environmental Magistrates under PEPA. Therefore, a Judicial Magistrate wearing two hats, one of a Magistrate of first class and the other of an Environmental Magistrate must, in cases falling both under general law and PEPA, give credence to its powers under PEPA since the enactment of PEPA, issues regarding environment are in their entirety within the jurisdiction of Environmental Magistrates as per Section 17(2). A similar issue came up before the Honourable Lahore High Court in **Abul Latif versus Additional Sessions Judge**[7] where the Honourable Court ruled that the Pakistan Environmental Protection Act 1997 is a complete code and will prevail over the general principles or provisions of the Criminal Code.

V. Procedure of a complaint under PEPA

As aforementioned, Environmental Magistrates can take cognizance of offences on a complaint in writing by the EPA, Government Agency, local agency or an aggrieved person. The language used in PEPA is that except of a complaint in writing means that unlike under the Criminal Code where a complaint need not be in writing, PEPA mandates that such complaint be made in writing.

The word cognizance of an offence stated in Section 24(3) means that unless a complaint in writing is filed, by disclosing facts and contraventions of the sections of PEPA, in this regard Section 14, 15 or orders of the EPA with the evidence (notices issued, orders passed, summon issued, tests conducted by the certified laboratory), Environmental Magistrates are barred from trying the complaint as per the powers given under PEPA. However, it must be stressed that Environmental Magistrates given the nature of their role under PEPA and the importance of preventing environmental degradation, must ensure that they exercise their powers of inquiry to the fullest extent wherever possible.

VI. The Question of Limitation under PEPA

Although there is no limitation prescribed in the law for filing of a complaint under PEPA as the only limitation period provided is with respect to filing of appeals in terms of Sections 22, 23 and 25. Therefore, where the limitation period is not prescribed under a special law, then the principles of laches and acquiescence along

[7] 2001 CLC 1139

with the law of equity are applicable[8]. In this regard the maxim 'Vigilantibus et Non Dormientibus Jura Subveniunt' (the law assists those that are vigilant with their rights, and not those that sleep thereupon) is important. The essence of the maxim and the principles mentioned above entail that complaints under PEPA must be treated like constitutional petitions before the High Court or First Information Reports before the Policy, the more unaccounted for or unexplained delay in pursuing the matter, the more the matter loses its effectiveness. This entails that while exercising their functions under PEPA, Environmental Magistrates must consider this aspect of complaints also. Once a complaint is filed, Environmental Magistrates consider the delay in filing of a complaint in conjunction with the occurrence of an offence/contravention of a provision of PEPA, in order to assess the urgency and the seriousness of the complaint along with the potential damage that may have occurred. The question of delay has been dealt by the Environmental Tribunal Lahore in **DG EPA versus Fatima Sugar Mills**[9]

VII. Involvement of Environmental Magistrates under PEPA and the rules/regulations made thereunder

As aforementioned, the Environmental Magistrates are, in terms of sub-section 2 of Section 17 empowered to enforce the rules and regulations made under PEPA. Even though such powers extend to any and all rules and regulations made under PEPA, Environmental Magistrates have been given specific powers under the various rules and regulations itself.

For instance, under the Environmental Samples Rules, 2001, Environmental Magistrates have been empowered, under the proviso to sub-rule (2) of Rule 3, to provide police assistance to the EPA as and when required in order to carry out its functions under sub-sections (g), (h), (i) & (j) of Section 7. Similarly, the powers of entry and inspection & search have been provided for under sub-rule (3) of Rule 4 and sub-rules (1) & (2) of Rule 5, respectively. Lastly, in aid of investigation and collection of samples, Environmental Magistrates may then also receive the certificate of analysis along with a complaint in terms of sub-rule (5) of Rule 10.

Similarly, under the Punjab Polythene Bag Rules, 2004, Environmental Magistrates are the designated authority to hear complaints constituting an offence under the Punjab Prohibition on Manufacture, Sale, Use and Import of Polythene Bags (Black or any other Polythene Bag below fifteen micron thickness) Ordinance, 2002 under

[8] PLD 2007 SC 472, PLD 1966 Lahore 258, 2014 SCMR 1573, PLD 2014 Lahore 451, 1998 SCMR 2182, PLD 2003 SC 132

[9] 2016 CLD 1186

sub-rule (4) of Rule 7 of the said rules. Even though these rules have been framed under a distinct law, the law itself makes reference to PEPA and enables Environmental Magistrates empowered thereunder to hear such complaints.

Under the Punjab Environmental Protection Motor Vehicles Rules, 2013, Environmental Magistrates hear complaints in relation to violations or contraventions thereunder. In terms of sub-rule 9(b) of Rule 4, Environmental Magistrates may hear a complaint in case of non-compliance to the provisions of Rule 4. Similarly, in cases where the Environmental Magistrate deems it appropriate to deliver a motor vehicle that has been impounded to its owner, the Environmental Magistrate may order the same subject to sub-rule (3) of Rule 5.

VIII. The Role of Environmental Magistrate in controlling motor vehicles under Section 15

Section 15 empowers the Environmental Magistrates with respect to regulation of motor vehicles and prohibits persons from operating motor vehicles[10] from which air pollutants[11] and noise[12] are being emitted in an amount, concentration or level in excess of the Punjab Environmental Quality Standards prepared by the EPA in terms of sub-section 1(e) of Section 6 and approved by the Council in exercise of its functions under sub-section 2(c) of Section 4 or standards for ambient air, water and land established by the EPA in terms of sub-section 1(g) of Section 6.

In the instant case, the applicable standards and rules are as follows:

- Punjab Environmental Quality Standards for Motor Vehicle Exhaust and Noise
- Punjab Environmental Quality Standards for Ambient Air
- Punjab Environmental Quality Standards for Noise
- Punjab Environmental Protection (Motor Vehicles) Rules 2013

[10] Section 2(xxvii) "motor vehicle" means any mechanically propelled vehicle adapted for use upon land whether its power of propulsion is transmitted thereto from an external or internal source, and includes a chassis to which a body has not been attached, and a trailer, but does not include a vehicle running upon fixed rails;

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

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

In exercise of its powers under sub-section 1(f) of Section 6 read with sub-section (f) of Section 7, the EPA may direct that any motor vehicle or class of vehicles shall install such pollution control devices or other equipment or use such fuels or undergo such maintenance or testing as provided under the Punjab Environmental Protection (Motor Vehicles) Rules 2013.

Even though the enforcing agency under PEPA is the EPA, the jurisdiction of the Environmental Magistrates is to ensure compliance with the directions of the EPA. Therefore, where the EPA has, in terms of sub-section (2) of Section 15 read with the Punjab Environmental Protection (Motor Vehicles) Rules 2013, directed a motor vehicle or any class thereof, to undertake any of the aforementioned actions, upon failure of the owner/owners of such vehicle or class thereof to comply with such direction, the Environmental Magistrate shall assume jurisdiction upon a complaint in writing by the EPA.

The only reason this section is not implemented is because under Section 15(2), it is clearly stated that fuel maintenance and testing of the vehicle will be done as may be prescribed by regulations. However, under Section 33(2)(i) it is clearly mentioned that the EPA can make regulations regarding installation of devices and testing of vehicles. No such rules or regulations regarding this aspect have been framed, hence the provision has been rendered unenforceable to such extent. As such, when there are no rules or regulations under Section 15(2), the EPA cannot give directions under Section 15(3).

IX. Powers of Environmental Magistrates in controlling hazardous substances under Section 14

In terms of Section 14, no person shall generate, collect, consign, transport, treat, dispose of, store, handle or import any hazardous substance[13] except under a license issued by the EPA or in accordance with the provisions of other law for the time being in force, or of any international treaty, convention, protocol, code, standard, agreement or other instrument to which Pakistan is a party.

[13] Section 2(xviii) "hazardous substance" means–
(a) a substance or mixture of substances, other than a pesticide as defined in the Agricultural Pesticides Ordinance, 1971 (II of 1971), which, by reason of its chemical activity or toxic, explosive, flammable, corrosive, radioactive or other characteristics causes, or is likely to cause, directly or in combination with other matters, an adverse environmental effect; and
(b) any substance which may be prescribed as a hazardous substance;

Once Section 14 is read with sub-section 2 of Section 17 and Section 24, it is evident that the Environmental Magistrates are empowered to deal with contraventions of Section 14. As aforementioned, hazardous substances may only be dealt with under the following:

- A license issued by the EPA,
- The provisions of any other law specifically authorizing a person to deal with such hazardous substances, or
- any international treaty, convention, protocol, code, standard, agreement or other instrument to which Pakistan is a party.

In this context, it is important to appreciate that Environmental Magistrates become the guardians of not just PEPA, but all other domestic and international laws applicable in this respect. The international laws applicable in this respect are as follows:

- International Plant Protection Convention, Rome, 1951.
- Plant Protection Agreement for the South-East Asia and Pacific Region (as amended), Rome, 1956.
- Agreement for the Establishment of a Commission for Controlling the Desert Locust in the Eastern Region of its Distribution Area in South-West Asia (as amended), Rome, 1963.
- Convention on Wetlands of International importance Especially as Waterfowl Habitat, Ramsar, 1971 and its amending Protocol, Paris, 1982.
- Convention Concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention), Paris, 1972.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Washington, 1973.
- Convention on the Conservation of Migratory Species of Wild Animals, Bonn, 1979.
- Convention on the Law of the Sea, Monte go Bay, 1982.
- Vienna Convention for the Protection of the Ozone Layer, Vienna, 1985.
- Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987 and amendments thereto.
- Agreement on the Network of Aquaculture Centres in Asia and the Pacific, Bangkok, 1988.
- Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal, Basel, 1989.
- Convention on Biological Diversity, Rio De Janeiro, 1992.

- United Nations Framework Convention on Climate Change, Rio De Janeiro, 1992.

However, it must be specified that articles not covered under any other law or any international treaty convention and the like, cannot be enforced at this stage as no rules or regulations in relation to licenses have not been made rendering the provisions of Section 14 nugatory in their absence.

X. Implementation of the orders of the EPA

As previously noted, the basic functions of the Environmental Magistrates under PEPA is to ensure implementation of the order of the EPA. It is reiterated that the EPA has been established under Section 5, exercises functions under Section 6 and derives powers from Section 7. Under PEPA, the EPA can, *inter alia*, issue specific directions under the following provisions:

- Section 15(2) - that any motor vehicle or class of vehicles shall install such pollution control devices or other equipment or use such fuels or undergo such maintenance or testing
- Section 15(3) – owners not to operate motor vehicles unless compliance has been made to a direction issued under Section 15(2)
- Section 16(1) – issuance of an environmental protection order

Furthermore, the EPA also has general powers to issue directions under the following provisions:

- Section 6(1)(a) – power to direct in furtherance of the power to administer and implement the provisions of this Act and the rules and regulations made thereunder
- Section 6(1)(f) – ensure enforcement of the Punjab Environmental Quality Standards
- Section 6(2)(a) – undertake inquires or investigation into environmental issues, either of its own accord or upon complaint from any person or organisation
- Section 6(2)(b) – request any person to furnish any information or data relevant to its functions
- Section 7(f) – summon and enforce the attendance of any person and require him to supply any information or document needed for the conduct of any enquiry or investigation into any environmental issue

- Section 7(g) – enter and inspect and under the authority of a search warrant issued by the Environmental Tribunal or Environmental Magistrate, search at any reasonable time, any land, building, premises, vehicle or vessel or other place where or in which, there are reasonable grounds to believe that an offence under this Act has been or is being committed;
- Section 7(h) – take samples of any materials, products, articles or substances or of the effluents, wastes or air pollutants being discharged or emitted or of air, water or land in the vicinity of the discharge or emission
- Section 7(i) – arrange for test and analysis of the samples at a certified laboratory

Once the EPA has issued any of the aforementioned order/direction, its enforcement may be carried out through Environmental Magistrates. However, a precursor to such enforcement is that the EPA must file a complaint in writing in order to initiate any proceedings for enforcement.

XI. Aggrieved person – Nature of

Even though the term aggrieved person has not been defined under PEPA, the term occurs under the law at four instances. The first instance where the term finds mention is under sub-section 3(b) of Section 21 which relates to the jurisdiction of environmental tribunal. Here, the requirement of filing of a complaint by an aggrieved person requires such person to give at least 30 day notice to the EPA of the alleged contravention and of his intention to make a complaint. Furthermore, the term also appears in the context of appeals to the Environmental Tribunals against orders/directions of the EPA (Section 22) and also from the orders of the Environmental Tribunals to the High Court (Section 23). In a similar fashion, these sections also provide that such appeals may be preferred within a period of 30 days from the communication of such an order.

However in the case of Environmental Magistrates, no such limitation has been provided under sub-section 3 of Section 24, therefore aggrieved persons can bring a complaint without giving any such notice.

The Honourable Sindh High Court in **Pakistan Defence Officers Housing Authority versus the Federation of Pakistan**[14] has recognized that PEPA falls within the category of beneficial legislation and observed as follows:

[14] 2014 CLD 1279

"The legislative intent behind the 1997 Act is clear: the protection, conservation, rehabilitation and improvement of the environment. This is simply too sensitive a matter to require anything but cautious, conservative and careful treatment. It is better to err on the side of caution and test the project on, and hold it to, the more stringent standard even if this is more onerous for the proponent. The 1997 Act is beneficial legislation enacted for the welfare of the public at large (or any relevant section thereof)."

That furthermore, the Honourable Lahore High Court has in **CIR versus Ambreen Fawad Co.**[15] acknowledged that beneficial provisions call for liberal and broad interpretation so the real purpose underlying such enactments is achieved and full effect is given to the principles underlying such legislation.

Synthesizing the ratio of both decisions, it may be gathered that the term aggrieved person, as used in sub-section 3 of Section 24 must also be interpreted as liberally as possible. Therefore, the question of standing in a complaint must be seen from the standpoint that all members of the public are stakeholders in the wellbeing and maintenance of the environment and any person bringing a claim ought to be given due weightage as having *locus standi* to file a claim.

Further guidance regarding the scope of an "aggrieved person" in the context of public interest matters can be sought from the ruling of the Honourable Lahore High Court in **Pakistan Chest Foundation versus Government of Pakistan**[16] which states as follows:

"22. However, public interest litigation has to be dealt with differently. This belongs to that species of litigation which is initiated in the public interest for I_ the benefit of a large section of the society, with a view to secure their guaranteed rights or to save them from State excesses. This type of litigation can be initiated by a public spirited individual who may feel hurt by the wrong done to him and others or it may as well be initiated by or on behalf of voluntary organizations or associations which have dedicated themselves to work for and protect the rights of the people in particular fields. Such persons, bodies or associations cannot be termed as unconnected persons with the causes involved in the lis. They are very much the 'aggrieved party' or 'aggrieved person' within the meaning of Article 199 of the Constitution. In the present case petitioners Nos. I and 3 are the registered societies whose functions, aims and objects are to work for the health of the people by actively engaging themselves in creating awareness among the masses against diseases and to propogate methods by which diseases and ailments can be prevented by taking precautions. Petitioner No.2 in his individual capacity has also been doing laudable service in working for

[15] 2014 PTD 320
[16] 1997 CLC 1379

people's health. It cannot be said that such associations or individuals do not feel aggrieved or feel concerned when any action or inaction on the part of the functionaries 'of the State or Public Sector Organizations/enterprises, has the effect of endangering human health. Any wrongdoing or invasion of public rights, against the aims and objects of such societies does clothe them with the necessary locus standi to move the Courts of law, including a High Court under Article 199 of the Constitution. In matters relating to public interest litigation more liberal meaning shall have to be assigned to the words 'aggrieved party' or 'aggrieved person' as occurring in Article 199 of the Constitution. As observed by the Honourable Supreme Court in the case of Ms. Benazir Bhutto (supra), the restricted meaning of these words would be destructive of the rule of law which is enshrined in Article 4 of the Constitution which gives protection to all i citizens. In the words of honourable Chief Justice Muhammad Haleem, 'the inquiring into law and life cannot, in my opinion be confined to the narrow limits of the rule of law in the context of constitutionalism which makes .a greater demand of judicial functions'."

XII. Powers of Environmental Magistrates to Impose Penalties

With regard to the aforementioned contraventions, the Environmental Magistrates are empowered to levy fines up to PKR 500,000/- with an additional PKR 1000/- for each day in case of continuing contravention along with any monetary benefits that may have accrued to the offender as a result of the commission of the offence.

Furthermore, similar to the power of the Tribunals, the Environmental Magistrates, in case of repeat offenders, have also been empowered to take actions under sub-section (5) of Section 17, namely:

a) endorse a copy of the order of conviction to the concerned trade or industrial association, if any, or the concerned Provincial Chamber of Commerce and Industry or the Federation of Pakistan Chambers of Commerce and Industry;
b) sentence him to imprisonment for a term which may extend up to two years;
c) order the closure of the factory;
d) order confiscation of the factory, machinery, and equipment, vehicle, material or substance, record or document or other object used or involved in contravention of the provisions of the Act:
   Provided that for a period of three years from the date of commencement of this Act, the sentence of imprisonment shall be passed only in respect of persons who have been previous convicted for more than once for any contravention of section 11, 13,14 or 16 involving hazardous waste;

e) order such person to restore the environment at his own cost, to the conditions existing prior to such contravention or as close to such conditions as may be reasonable in the circumstances to the satisfaction of the Provincial Agency; and
f) order that such sum be paid to any person as compensation for any loss, bodily injury, damage to his health or property suffered by such contravention.

XIII. Power to Issue Summons and Require Supply of Information

The Environmental Magistrates, are subject to the procedure provided under the Criminal Code, empowered under Section 7(f) to permit the EPA to summon and enforce the attendance of any person and require him to supply any information or document needed for the conduct of any enquiry or investigation into any environmental issue. Such power of the EPA may be read into its powers under sub-sections (a) and (b) of Section 7(2) which read as follows:

(a) undertake inquires or investigation into environmental issues, either of its own accord or upon complaint from any person or organisation;

(b) request any person to furnish any information or data relevant to its functions;

XIV. Power to Issue Search Warrant or Enter and Inspecting warrants

The Environmental Magistrates are also, subject to the procedure provided for under the Criminal Code, empowered under 7(g) to permit the EPA to enter and inspect any land, building, premises, vehicle or vessel or other place where or in which, there are reasonable grounds to believe that an offence under has been or is being committed.

It must be noted that such a power is distinct from the power of the Environmental Magistrate to take cognizance of an offence which is subject to taking of a statement under Section 200 of the Criminal Code. The power under discussion is the power of the Environmental Magistrate to assist in the investigation of a potential offence under PEPA.

That furthermore, such powers have also been provided for under rules such as the Environmental Sample Rules, 2001, as has been elaborated above.

XV. Power to take Samples and Send for Testing

Similarly, the Environmental Magistrates may also permit the EPA or its officers to take samples of any materials, products, articles or substances or of the effluents, wastes or air pollutants being discharged or emitted or of air, water or land in the vicinity of the discharge or emission. Furthermore and in furtherance thereof, the Environmental Magistrate may also permit the testing and analysis of the samples at a certified laboratory. The procedure for exercise of such a power has been elaborated for under the Environmental Samples Rules, 2001.

XVI. Evidence and Material to be Considered by the Environmental Magistrates

Environmental Magistrates and the EPA must work hand in hand in order to ensure that investigations and inquiries are carried out to their fullest extent and in accordance with law. However, in the exercise of such powers, Environmental Magistrates must consider all inquiries and investigation reports compiled by the EPA in exercise of its powers under sub-section 2(a) of Section 7. Similarly, any and all information sought by the EPA in exercise of its powers and functions under sub-section 2(b) of Section 6 and sub-section f of Section 7, respectively. In addition thereto, the Environmental Magistrate may also rely on all articles confiscated, samples taken and tested under the provisions of the rules.

Lastly, it is important to mention that the Environmental Magistrates must also liberally exercise their *suo moto* power under Section 540 of the Criminal Code in summoning any witness that the Environmental Magistrate deems appropriate or necessary to the matter at hand irrespective of whether such a witness has been included by either party.

XVII. Procedure of filing complaint under CrPC.

Section 4(1)(h) articulates the requirements of the Complaint and states as follows

"Complaint" means *the allegation made orally or in writing to a magistrate, with a view to his taking action under this Code, that some person whether known or unknown, has committed an offence, but it does not include the report of a police officer.*

In this regard it must be noted that, as aforementioned, under PEPA, the complaint must however only be in writing and not orally. Moreover, it embodied under the scheme of the Criminal Code that the emphasis is to be placed upon the substance

not the form of the compliant. The complaint should in essence allege the facts (but not all the facts) relying on which the accused is to be charged. It is the duty of the magistrate to examine the facts in order to form an opinion regarding the commission of the alleged offence.

PEPA being the governing law in this regard where complaints are to be filed under sub-section (3) of Section 24. This section must be read with Section 200 of the Criminal Code which states that the Magistrate while taking cognizance of an offence shall examine upon oath the complainant and the witnesses in the matter beforehand. Provided that, when the complaint is in writing, the Magistrate need not examine the complainant and the witnesses.

Furthermore, in light of Section 202 of the Criminal Code, the Magistrate, on receipt of a complaint of an offence on which he is authorized to take cognizance of, may, if he deems fit, postpone the issue of process against the accused, and either inquire into the case himself or direct an investigation to be made by a police officer or by such other person as he deems fit, for the purpose of deciding whether or not there is sufficient ground to commence proceeding.

Moreover, the process of dismissal of the complaint is being laid down under section 203 of the Criminal Code that the Magistrate, if, after considering the statements of the complainant and the witnesses and the result of the inquiry or investigation, if any, under Section 202 is of the opinion that there is no sufficient ground for the proceeding, shall dismiss the complaint, and in every such case the Magistrate shall briefly record his reasons for so doing.

Section 204 of the Criminal Code enunciates that if the Magistrate is of the opinion, upon taking cognizance of the offence, that there are sufficient grounds for the proceeding and if it appears to be a summons case, the Magistrate shall issue summons for the attendance of the accused. In addition, if the case appears to be a warrant-case, the Magistrate may issue a warrant, or if he deems fit, a summons, for causing the accused to be brought or to appear at a certain time before such Magistrate or (if he lacks jurisdiction himself) some other magistrate having jurisdiction. Moreover, under section 204(2) of the Criminal Procedure Code, 1973, no effect can be given to sub-section (1) unless the prosecution witnesses have been filed. Section 204(3), states that with regards to the proceeding instituted upon the complaint made in writing, every summons or warrant issued under sub-section (1) shall be accompanied by the copy of such compliant. Section 204, empowers the Magistrate dismiss the compliant if, by any law for the time being in force any

process-fees or other fees are payable, no process shall be issued until the fees are paid and, if such fees are not paid within a reasonable time.

Section 221(2) of the Criminal Procedure Code, 1973 and Section 17(2) of the Punjab Environment Protection Act, 1997 are to be read together. Section 221(2) of the Criminal Procedure Code, 1973 states that where it appears from the evidence that the accused is charged with the one offence, which the accused has not committed and, where upon evidence the accused has committed a different offence for which he might has been charged under the provisions of sub-section (1), he may be convicted of the offence which he is shown to have committed, although he was not charged with it.

In addition to the substantive powers, the procedural powers of the Environmental Magistrates so far as they have not been specifically provided under PEPA, shall be governed by the Criminal Code, more specifically the provisions of Chapter XVI, XVII, XIX & XX, some of which have been explained above. However, it is worth mentioning specifically that the responsibility placed on the Environmental Magistrates under PEPA should be exercised in a manner that ensures that the ends of sustainable development are furthered. For instance, in cases involving complaints by aggrieved parties, Environmental Magistrates should adopt a practice where rather than exercising adversarial jurisdiction, Environmental Magistrates should exercise inquisitorial jurisdiction.

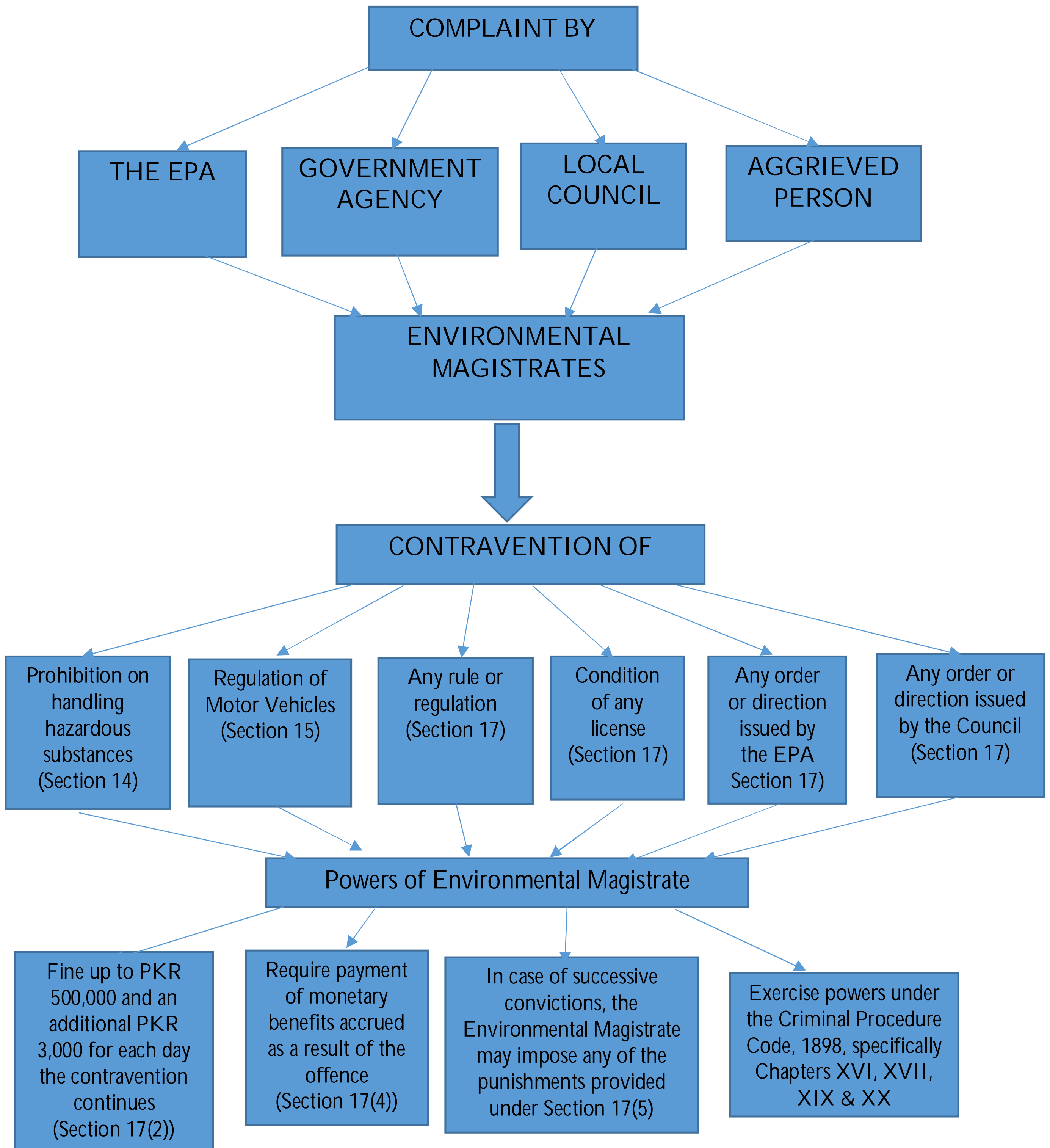
The reason for this is that due to the nature of environmental degradation and its irreversibility, courts must not let the substance of a complaint limit the court's ability to dispense with justice in a particular matter. Environmental Magistrates should, in fact, exercise their procedural jurisdiction in a manner that ensures the furtherance of their substantive powers granted under PEPA. Such exercise of powers should ensure that a thorough inquiry is conducted at the time of the complaint to ascertain the true nature and extent of the offence committed and the adequacy of the charge framed. That furthermore, due to the technical nature of environmental complaints, magistrates should also exercise their suo moto powers to summon the EPA, or persons from other concerned government agencies or local authorities as witnesses under Section 540 of the Criminal Code.

XVIII. Appeal against the orders of the Environmental Magistrates

Any order passed by the Environmental Magistrate or the rules or regulation, may file an appeal to the district and session judge whose decision shall be final. This

section also clarifies that emphasis was given to the contravention of the provisions of this Act and its rules and regulations. Once the appeal is decided, then the only remedy is to file a writ petition seeking judicial review before the High Court which will be dealt by a single bench. Although against the order of a tribunal, under Section 21, an appeal lies to a division bench of the High Court.

FLOWCHART - POWERS OF ENVIRONMENTAL MAGISTRATES



PART II - THE POWERS OF ENVIRONMENTAL TRIBUNALS

Establishment of Environmental Tribunals

The Environmental Tribunals are created and established in terms of Section 20 of the PEPA and exercise the jurisdiction granted to them under Section 21. First and foremost, it is important to note that the tribunals are to consist of both judicial and technical members. The reason for this is that the environment is a subject not simply legal in nature but has an interplay with much more. Therefore, the tribunal is required to have both judicial and non-judicial members in order to ensure that decisions appreciate not only the legal aspect of things but also the technical nuances and complexities of any particular issue relating to the environment.

Jurisdiction of Environmental Tribunals

The Jurisdiction and powers of the Environmental Tribunals (the "**Tribunals**") are defined in Section 21 of the PEPA. Sub-section 1 grants the Tribunals general powers and functions that it shall exercise and perform as are conferred or assigned to it by the PEPA or any rules or regulations made thereunder.

Furthermore, under sub-section 2, the Tribunals are to try all contraventions punishable under sub-section 1 of section 17, namely:

- Discharging[17], emitting or allowing the discharge or emission of any effluent[18] or waste[19] or air pollutant[20] or noise[21] in the amount, concentration or level in excess of the Punjab Environmental Quality Standards or any

[17] "discharge" means spilling, leaking, pumping, depositing, seeping, releasing, flowing out, pouring, emitting, emptying or dumping

[18] "effluent" means any material in solid, liquid or gaseous form or combination thereof being discharged from industrial activity or any other source and includes a slurry, suspension or vapour

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

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

[21] "noise" means the intensity, duration and character of sounds from all sources, and includes vibration

other standards made with respect to ambient air, water and land. (Section 11);

- the failure to file an IEE or EIA with the EPA, as the case may be, before commencement of construction or operation of a project. (Section 12)
- the import of hazardous waste[22] into the Province of Punjab. (Section 13)
- contravention of an environmental protection order by the Environmental Protection Agency in matters relating to adverse environmental effects[23]. (Section 16).

In addition to the contraventions mentioned above, the Tribunals are also empowered to sit in appeal over orders of directions of the EPA upon application by any aggrieved person, provided that such application is made within a period of 30 days from the date of communication of such order or direction in terms of Section 22.

Furthermore, in terms of subsections 4 & 5 of section 17, the Tribunals are to follow the procedure laid down in the Code of Civil Procedure, 1908, wherever applicable. Similarly, in their criminal jurisdiction, the Tribunals are vested with the powers of a Court of Session in terms of the Code of Criminal Procedure, 1898.

The initiation of proceeding before the Tribunals of the aforementioned contraventions require a complaint in writing by the following:

- the EPA
- any Government Agency[24]
- Local Council[25]; or
- Any aggrieved person

With reference to contraventions coming before them, the Tribunals are to follow the standards or rules made or adopted by the EPA, which are as follows:

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[22] "hazardous waste" means waste which is or which contains a hazardous substance or which may be prescribed as hazardous substance or which may be prescribed as hazardous waste, and includes hospital waste and nuclear waste

[23] "adverse environmental effect" means impairment of, or damage to, the environment and includes–

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

[24] "Government Agency" includes–

(a) a department, an attached department or any other office of the Government; and
(b) a development authority, local authority, company or a body corporate established or controlled by the Government

[25] "local council" means a local council constituted or established under a law relating to local government

- Punjab Environmental Quality Standards for Municipal and Liquid Industrial Effluents
- Punjab Environmental Quality Standards for Drinking Water
- Punjab Environmental Quality Standards for Motor Vehicle Exhaust and Noise
- Punjab Environmental Quality Standards for Ambient Air
- Punjab Environmental Quality Standards for Noise
- Punjab Environmental Quality Standards for Treatment of Liquid and Disposal of Bio-medical Waste
- Punjab Environmental Quality Standards for Industrial Gas Emissions
- Hospital Waste Management Rules, 2014
- Punjab Bio-safety Rules, 2014
- Punjab Environmental Protection (Administrative Penalty) Rules 2013
- Punjab Environmental Protection (Motor Vehicles) Rules 2013
- Punjab Environmental Protection (BTS) Regulations 2012

It is to be noted that the Tribunals are bound by the standards they are to enforce and cannot go beyond them. However, the Tribunals do have the power to impose fines for the aforementioned contraventions which may extend to PKR 5 million, and in the case of a continuing contravention, PKR 100,000/- for each day that the contravention continues in terms of subsection 1 of section 17.

Furthermore, the Tribunals have been vested with the following powers:

- In passing of sentences, the Tribunals shall take into account the extent and duration of the contravention constituting the offence and the attendant circumstances (subsection 3 of Section 17)
- To direct the offender to, in addition to the fines payable, pay the monetary benefits accrued to the offender as a result of the contravention (subsection 4 of Section 17)

Furthermore under subsection 5 of Section 17, in case of repeat offenders, the Tribunals have the power to do the following:

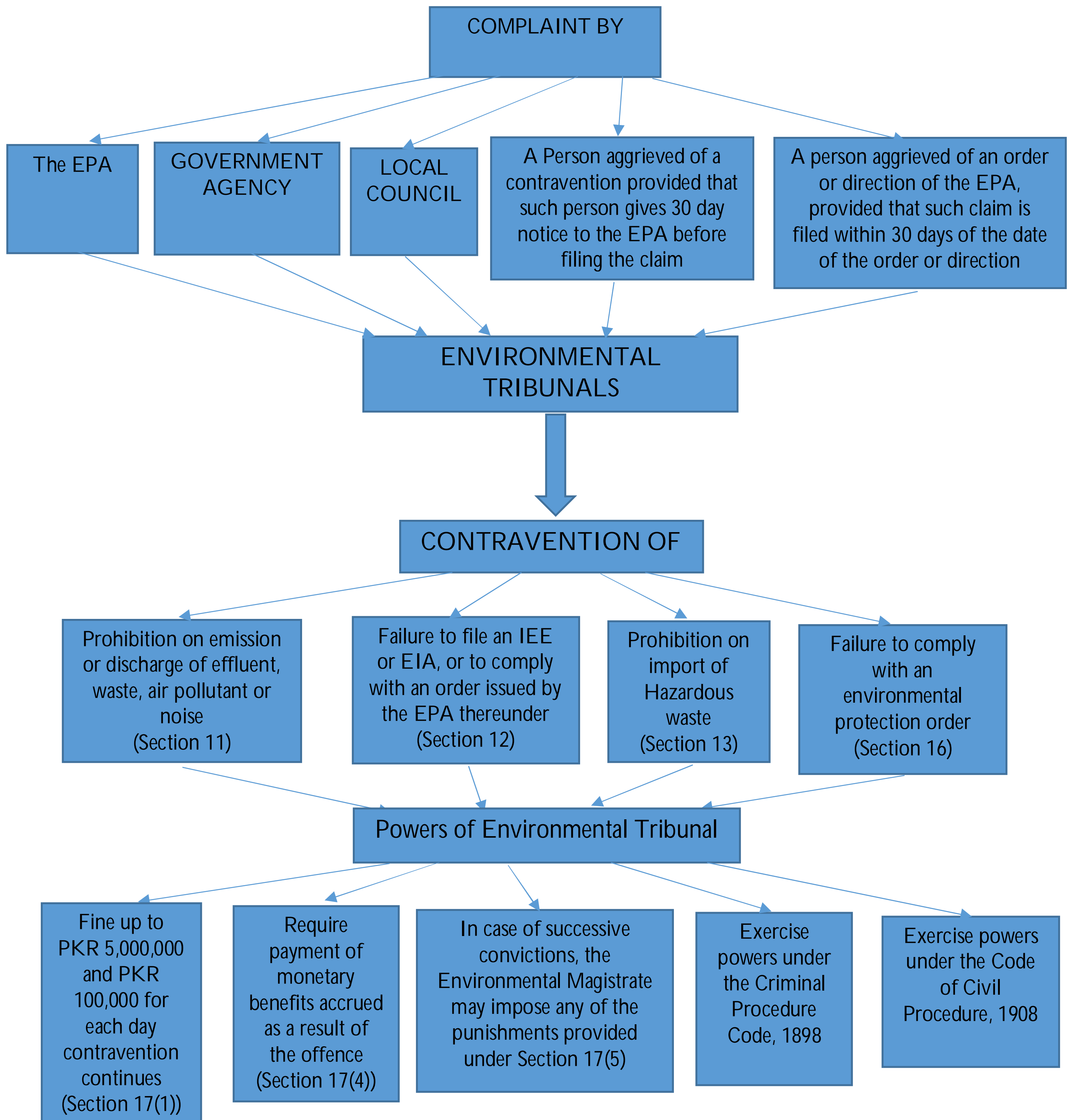
a) endorse a copy of the order of conviction to the concerned trade or industrial association, if any, or the concerned Provincial Chamber of Commence and Industry or the Federation of Pakistan Chambers of Commerce and Industry;
b) sentence him to imprisonment for a term which may extend up to two years;
c) order the closure of the factory;

d) order confiscation of the factory, machinery, and equipment, vehicle, material or substance, record or document or other object used or involved in contravention of the provisions of the Act:
   Provided that for a period of three years from the date of commencement of this Act, the sentence of imprisonment shall be passed only in respect of persons who have been previous convicted for more than once for any contravention of section 11, 13,14 or 16 involving hazardous waste;
e) order such person to restore the environment at his own cost, to the conditions existing prior to such contravention or as close to such conditions as may be reasonable in the circumstances to the satisfaction of the Provincial Agency; and
f) order that such sum be paid to any person as compensation for any loss, bodily injury, damage to his health or property suffered by such contravention.

However, it is to be noted that any person who pays an administrative penalties which the Director General of the EPA may, in his discretion levy, is not to be charged with contravention of any provision of the PEPA, provided the person is not a repeat offender.

Lastly, the appellate powers of the Tribunals are only exercisable against orders or directions of the EPA on application of any person aggrieved therefrom.

FLOWCHART - POWERS OF ENVIRONMENTAL TRIBUNALS



CHAPTER II - THE EXECUTIVE LIMB AND ADMINISTRATIVE FUNCITONS UNDER THE PUNJAB ENVIRONMENTAL PROTECTION ACT

PART I - THE PUNJAB ENVIRONMENTAL PROTECTION COUNCIL

Establishment and Constitution of the Council

Section 3 of PEPA provides for a Punjab Environmental Protection Council (the "**Council**"). The Council is to consist of a Chairman who may be either the Chief Minister of Punjab or such other person as may be nominated by him. The Minister Incharge of the Environment Protection Department as the Vice Chairman. Furthermore, the Council is to consist of members from the Provincial Assembly, the Chamber of Commerce, Chamber of Agriculture, Medical and Legal Profession, trade unions, NGOs, scientists technical experts and educationalists. The Secretary of the Environment Protection Department is to be the Secretary of the Council. In addition thereto, there is a specific requirement that women also be made part of the Council.

Functions of the Council

The functions of the Council are provided under Section 4 and are as follows:

- to co-ordinate and supervise enforcement of the provisions of the PEPA;
- to approve national environmental policies and ensure their implementation within the framework of a national conservation strategy
- to approve the Punjab Environmental Quality Standards
- provide guidelines for the protection and conservation of species, habitats, and biodiversity in general, and for the conservation of renewable and non-renewable resources
- coordinate integration of the principles and concerns of sustainable development into national development plans and policies
- consider the Punjab Environment Report and give appropriate directions thereon.

From the structure of the Council, it is evident that the spirit behind its creation is relates to the principles of environmental justice. The diversity in the membership

shows that the intention of the legislature was that decision making ensures principles such as participation from all segments of society in ensuring the rights of minorities and vulnerable groups along with promoting gender equity.

Furthermore, the Council also has the specific power to direct the Environmental Protection Agency or any other Government Agency to prepare, submit, promote or implement projects for the protection, conservation, rehabilitation and improvement of the environment, the prevention and control of pollution, and the sustainable development of resources, or to undertake research in any specified aspect of environment.

PART II - THE PUNJAB ENVIRONMENTAL PROTECTION AGENCY

Establishment and Constitution of the Agency

Section 5 provides for the establishment of the Provincial Environmental Protection Agency (the "**EPA**"). The EPA is to have a Director General and other administrative, technical and legal staff. It is important to note that in terms of sub-section 5 of Section 5, the Director General has the power to delegate its functions to the staff by way of special or general order. Lastly, sub-section 6 of Section 5 provides that the Government[26] shall establish advisory committees for various sectors for assisting the EPA in the discharge of its functions specified in Section 6. The provision also provides that the members of the committees are to be eminent representatives of the relevant sector, educational institutions, research institutes and non-governmental organizations. In this regard, it is specifically pointed out that the establishment of such committees has been held as a mandatory duty of the government by the August Supreme Court in **Lahore Development Authority versus Imrana Tiwana[27].**

Functions and Powers of the Agency

The functions of the EPA are provided in Section 6. In this regard it is important to note that the functions provided have been categorized as either mandatory or directory. The mandatory functions are as follows:

- administer and implement the provisions of the PEPA and the rules and regulations made thereunder

[26] Section 2(xvi) "Government" means Government of the Punjab", i.e. The Provincial Cabinet
[27] 2015 SCMR 1739

- prepare, in coordination with the appropriate Government Agency and in consultation with the concerned sectoral Advisory Committees, environmental policies for approval by the Council
- take all necessary measures for the implementation of the environmental policies approved by the Council
- prepare and publish an annual Punjab Environment Report on the state of the environment
- prepare or revise, and establish the Punjab Environmental Quality Standards with approval of the Council. There is a further requirement that such quality standards are subject to the public opinion and can only be finalized once such opinion has been sought.
- ensure enforcement of the Punjab Environmental Quality Standards
- establish standards for the quality of the ambient air, water and land, by notification in the official Gazette
- co-ordinate environmental policies and programmes nationally and internationally
- establish systems and procedures for surveys, surveillance, monitoring, measurement, examination, investigation, research, inspection and audit to prevent and control pollution, and to estimate the costs of cleaning up pollution and rehabilitating the environment in various sectors
- take measures to promote research and the development of science and technology which may contribute to the prevention of pollution, protection of the environment, and sustainable development
- certify one or more laboratories as approved laboratories for conducting tests and analysis and one or more research institutes as environmental research institutes for conducting research and investigation, for the purposes of the PEPA
- identify the needs for, and initiate legislation in various sectors of the environment
- render advice and assistance in environmental matters, including such information and data available with it as may be required for carrying out the purposes of the PEPA, however, this is limited to the restrictions provided under Section 12.
- assist the local councils, local authorities, Government Agencies and other persons to implement schemes for the proper disposal of wastes so as to ensure compliance with the standards established by it
- provide information and guidance to the public environmental matters

- recommend environmental courses, topics, literature and books for incorporation in the curricula and syllabi of educational institutions
- promote public education and awareness of environmental issues through mass media and other means, including seminars and workshops
- specify safeguards for the prevention of accidents and disasters which may cause pollution, collaborate with the concerned person in the preparation of contingency plans for control of such accidents and disasters, and co-ordinate implementation of such plans
- encourage the formation and working of non-governmental organizations, community organizations and village organizations to prevent and control pollution and promote sustainable development
- take or cause to be taken all necessary measure for the protection, conservation, rehabilitation and improvement of the environment, prevention and control of pollution and promotion of sustainable development

The directory functions are as follows:

- undertake inquires or investigation into environmental issues, either of its own accord or upon complaint from any person or organization
- request any person to furnish any information or data relevant to its functions
- initiate with the approval of the Government, requests for foreign assistance in support of the purposes of this Act and enter into arrangements with foreign agencies or organizations for the exchange of material or information and participate in international seminars or meetings
- recommend to the Government the adoption of financial and fiscal programmes, schemes or measures for achieving environmental objectives and goals and the purposes of this Act, including
- establish and maintain laboratories to help in the performance of its functions under this Act and to conduct research in various aspects of the environment and provide or arrange necessary assistance for establishment of similar laboratories in the private sector
- provide or arrange, in accordance with such procedure as may be prescribed, financial assistance for projects designed to facilitate the discharge of its functions

In carrying out the aforementioned functions, the EPA has specifically been granted the following powers under Section 7:

- lease, purchase, acquire, own, hold, improve, use or otherwise deal in and with any property both movable and immovable
- sell, convey, mortgage, pledge, exchange or otherwise dispose of its property and assets
- fix and realize fees, rates and charges for rendering any service or providing any facility information or data under this Act or the rules and regulations made thereunder
- enter into the contracts, execute instruments, incur liabilities and do all acts or things necessary for proper management and conduct of its business;

PART III - THE PROVINCIAL SUSTAINABLE DEVELOPMENT FUND

Section 9 & 10 provide for the establishment and management of a Provincial Sustainable Development Fund (the "**Development Fund**") to be managed by the Provincial Sustainable Development Fund Board headed by the Chairman Planning and Development Board along with members from the government and non-governmental sector.

The sources of the Development Fund are as follows:

a) grants made or loans advanced by the Government of the Federal Government;
b) aid and assistance, grants, advances, donations and other non-obligatory funds received from foreign governments, national or international agencies, and non-governmental organizations; and
c) contributions from private organizations, and other persons

That furthermore, the fund is to be utilized for:

a) providing financial assistance to the projects designed for the protection, conservation, rehabilitation and improvement of the environment, the prevention and control of pollution, the sustainable development of resources and for research in any specified aspect of environment; and
b) any other purpose which in the opinion of the Board will help achieve environmental objectives and the purposes of PEPA.

In addition thereto, the Board has been empowered to:

a) sanction financial assistance for eligible projects;

b) invest moneys held in the Provincial Sustainable Development Fund in such profit-bearing government bonds, savings schemes and securities as it may deem suitable; and
c) take such measures and exercise such powers as may be necessary for utilization of the Provincial Sustainable Development fund for the purposes specified above.

Lastly, it is also important to mention that the Board is also required to constitute committees of its members for regular monitoring of projects financed from the Provincial Sustainable Development Fund and to submit progress reports to the Board which shall publish an Annual Report incorporating its annual audited accounts, and performance evaluation based on the progress reports. It is specifically highlighted that such a requirement is goes to the very heart of the law and is a mandatory requirement in accordance with the principle laid down in **Lahore Development Authority versus Imrana Tiwana.**

PART IV - INITIAL ENVIRONMENTAL EXAMINATIONS (IEE) AND ENVIRONMENTAL IMPACT ASSESSMENTS (EIA)

Sub-section 1 of Section 12 of PEPA provides that no proponent of a project shall commence construction or operation unless he has filed with the Provincial Agency an *'initial environmental examination'*[28] or where the project is likely to cause an adverse environmental effect, an *'environmental impact assessment'*[29], and has obtained from the EPA approval in this respect.

Sub-section 2 of Section 12 empowers the EPA to review the IEE or the EIA, as the case may be. The provision of specifically empowers the EPA to:

- review the IEE and accord its approval, or
- require the submission of an EIA,

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[28] Section 2(xxiv) "initial environmental examination" means a preliminary environmental review of the reasonably foreseeable qualitative and quantitative impacts on the environment of a proposed project to determine whether it is likely to cause an adverse environmental effect for requiring preparation of an environmental impact assessment;

[29] Section 2(xi) "environmental impact assessment" means an environmental study comprising collection of data, prediction of qualitative and quantitative impacts, comparison of alternatives, evaluation of preventive, mitigatory and compensatory measures, formulation of environmental management and training plans and monitoring arrangements, and framing of recommendations and such other components as may be prescribed;

- or review the EIA and accord its approval subject to such conditions as it may deem fit to impose,
- or require that the EIA be re-submitted after such modifications as may be stipulated by the EPA, or
- reject the project as being contrary to environmental objectives.

Sub-section 3 mandates that the review of every EIA shall be carried out with public participation the process of which has been outlined in the Review Regulations. The purpose behind such a requirement is to further sustainable development and ensure adherence to the principles of Intra-Generational and Inter-Generational Equity, Gender Equity, Participation of Minorities and Vulnerable Groups and The Rights of Indigenous and Tribal Peoples. The only limitation on the public hearing is that no information relating to the following shall be disclosed to the public:

a) trade, manufacturing or business activities, processes or techniques of a proprietary nature, or financial, commercial, scientific or technical matters which the proponent has requested should remain confidential, unless for reasons to be recorded in writing, the Director General is of the opinion that the request for confidentiality is not well-founded or the public interest in the disclosure outweighs the possible prejudice to the competitive position of the project or its proponent; or
b) International relations, national security or maintenance of law and order, except with the consent of the Government; or
c) matters covered by legal professional privilege.

Once the IEE or the EIA, as the case may be, has been submitted in its entirety, the EPA is under an obligation to communicate its approval within a period of four months, failing which, the IEE or the EIA, as the case may be, shall be deemed to be approved to the extent to which it does not contravene the provisions of PEPA or any rules or regulations made thereunder. In this regard, the Government may extend the four month period in any particular case if the project so warrants.

The EPA, in terms of sub-section 7 is also mandated to maintain registers for IEE and EIA approvals which shall contain brief particulars of each project and a summary of decisions taken thereon. That furthermore, such registers are to be open for public inspection.

Lastly, the categories of projects to which the provisions of sub-sections 1 – 5 apply have been provided for under the **Review of IEE and EIA Regulations, 2000** (the "**Review Regulations**"). It is to be noted that even though such regulations

were made by the Federal Agency under the Pakistan Environmental Protection Act, 1997, the same has been given protection in terms of Article 270AA of the Constitution as acknowledged by the Honourable Lahore High Court in **Kamil Khan Mumtaz versus Province of Punjab**[30] and the Honourable Sindh High Court in **Defence Officers Housing Authority versus Sindh Environmental Protection Agency**[31]. That furthermore, all references to the Federal Agency in the Review Regulations, till such time that the EPA frames its own regulations in terms of Section 33, shall be read as references to the EPA.

Regulation 3 of the Review Regulations outlines the list of projects requiring an IEE whereas Regulation 4 outlines the list of projects requiring an EIA. However, in line with the scheme of Section 12, the regulations provide that an addition to the categories provide under the respective schedules, projects likely to cause adverse environmental effects may also be required to file an EIA. Similarly, projects not falling within either schedule of the Review Regulations may be required to file either an IEE or EIA as the EPA may require. However, such direction shall not be given without a written recommendation of the Environmental Assessment Advisory Committee constituted under Regulation 23.

Upon submission of the IEE or EIA, as the case may be, the same shall be subjected to preliminary scrutiny and thereafter upon its completeness be sent for review. Once the confirmation of completeness has been issued, the EPA shall in cases of EIA, also issue a public notice in terms of Regulation 10 and solicit comments from all other concerned government agencies.

The decision of the review is to be based on quantitative and qualitative assessment of the documents and data furnished by the proponent, comments from the public and the concerned Government Agencies received under Regulation 10, and views of the committees mentioned in sub-regulations 2 and 3 and thereafter grant approval.

In case the approval is granted subject to certain conditions, the proponent shall, in terms of Regulation 13:

a) before commencing construction of the project, acknowledge acceptance of the stipulated conditions by executing an undertaking in the form set out in Schedule VII; and

[30] PLD 2016 Lahore 699
[31] 2015 CLD 772

b) before commencing operation of the project, obtain from the Federal Agency written confirmation that the conditions of approval, and the requirements given in the IEE or EIA relating to design and construction, adoption of mitigatory and other measures and other relevant matters, have been duly complied with.

It is to be noted that the request for written confirmation of compliance by the proponent is to be accompanied by an environmental management plan indicating the measures and procedures proposed to be taken to manage or mitigate the environmental impacts for the life of the project, including provisions for monitoring, reporting and auditing.

Furthermore, the EPA while issuing the written confirmation of compliance, impose such other conditions as to the Environmental Management Plan, and the operation, maintenance and monitoring of the project as it may deem fit, and such conditions shall be deemed to be included in the conditions to which approval of the project is subject.

In this regard it is noteworthy that Section 12 provides two independent streams of projects, one requiring an IEE and the other requiring an EIA as held by the Honourable Sindh High Court in the case of **Pakistan Defence Officers Housing Authority versus Federation of Pakistan[32].** The judgment further specifies that the scheme of Section 12 is as such the EPA cannot in all instances assess the environmental impacts of any project. It acknowledges that there may be a project which may *prima facie* fall within the list of projects requiring an IEE, however, the IEE in itself may be insufficient to enable the EPA to make a proper determination of the true extent of the project's environmental impact due to which the intention of the legislature was to adopt the precautionary approach and grant the EPA the authority to require any project, in case of doubt or uncertainty, to provide an EIA.

It is evident from this scheme that the purpose of the IEE is to subject those projects that may or may not have an adverse environmental to preliminary scrutiny whereas the EIA is to carry out a more extensive study of projects that are likely to cause an adverse environmental impact due to their very nature. The Honourable Sindh High Court in Standard Chartered Bank Limited versus Karachi Municipal Corporation[33] also held that *"the interplay between the definitions, subsection 1 and 6 constitutes a dynamic equilibrium that provides certainty at any given time as to what projects*

[32] 2014 CLD 1279
[33] 2015 YLR 1303

require the filing of an IEE or EIA, and also flexibility over time to cater for changing circumstances. It may also be noted that the requirement that the executive agency must adopt a dynamic and proactive approach and periodically update the regulations is a statutory duty. Should the agency fail to discharge it properly, an order in the nature of mandamus may lie in appropriate circumstances to include or even exclude a category of projects in or from the regulations or to shift an existing category from the first to the second schedule or vice versa." – Para 10

It has already been acknowledged by the Honourable Lahore High Court in **Imrana Tiwana versus Province of Punjab**[34] that *"the EIA as a tool was created to be used at the planning stage in line with the precautionary principle – a principle initiated by the Rio Declaration for better and sustainable development."* Moreover, building on what the Honourable Court has held, the process aforementioned in addition to advocating the precautionary principle, also forms the basis of ensuring sustainable development by strict adherence to all other principles embedded within the essence of sustainable development.

Given that the EIA is based on environmental studies comprising collection of data, prediction of qualitative and quantitative impacts, comparison of alternatives, evaluation of preventive, mitigatory and compensatory measures, formulation of environmental management and training plans and monitoring arrangements, and framing of recommendations, it grants administrative agencies such as the EPA the first opportunity to avoid any adverse environmental impacts rather than taking remedial measures once the adverse impact has occurred.

That furthermore, the public hearing requirement ensures that minority interests and concerns of vulnerable groups are addressed at the project conception stage rather than being subsequently agitated. Similarly, the fact that the approval is granted for a limited period of time requiring projects to undergo the same process of approval thereafter also ensures adherence to the principle of progression so that as scientific knowledge moves forward, environmental regulation does not remain stagnant. Such a requirement provides the EPA the opportunity to require projects to shift to cleaner technologies or more efficient technologies.

[34] PLD 2015 Lahore 522

PART V - ENVIRONMENTAL PROTECTION ORDER

Section 16 provides that the EPA may, upon satisfaction that a discharge or emission of any effluent, waste, air pollutant or noise, or the disposal of waste, or handling of hazardous substance, or any other act or omission is likely to occur, or is occurring, or has occurred, in violation of any provision of PEPA, rules or regulations or of the conditions of a license, or is likely to cause, or is causing, or has caused an adverse environmental effect, the EPA shall after giving opportunity of hearing to the person responsible, shall by order direct such person to take such measures as the Provincial Agency may consider necessary within such period as may be specified in the order.

Such powers of the EPA include but are not limited to the following:

a) immediate stoppage, preventing, lessening or controlling the discharge, emission, disposal, handling, act or omission, or to minimize or remedy the adverse environmental effect;
b) installation, replacement or alteration of any equipment or thing to eliminate or control or abate on a permanent or temporary basis, such discharge, emission, disposal, handling, act or omission;
c) action to remove or otherwise dispose of the effluent, waste, air pollutant, noise, or hazardous substances; and
d) action to restore the environment to the condition existing prior to such discharge, disposal, handling, act or omission, or as close to such condition as may be reasonable in the circumstances, to the satisfaction of the EPA.

That furthermore, where directions so issued by the EPA have not been complied with, PEPA empowers the EPA to, in addition to the proceedings initiated against him, itself take or cause to be taken such measures specified in the order as it may deem necessary, and may recover the costs of taking such measures from such person as arrears of land revenue.

It is to be noted that such powers have been elaborated upon by the Honourable Lahore High Court in **Muhammad Ayaz versus Government of Punjab**[35] wherein the Honourable Court while explaining the scope of Section 16 stated as follows:

[35] 2017 CLD 772

"8. Section 16 of the Act governs the procedure and powers related to an EPO. An EPO is a written order that is designed to protect the environment. It is issued to secure compliance by a person who is causing harm to the environment in order to protect human health and the environment. It specifies the sensation of the harm and provides for the methods to cure or stop/prevent the harm within a given time frame. Essentially the EPO provides the action that needs to be taken and the timeframe during which it must be taken, to rectify the wrong. In terms of section 16(1) of the Act, the EPA has to satisfy itself that there is discharge or emission of any waste or pollutant or noise in violation of the Act. Once satisfied it must give an opportunity of hearing to the person causing the pollution and can then pass an order directing the person to take necessary measures to cure the problem. However, the EPO can also direct measures requiring immediate action. The measures under section 16(2) of the Act require instant or emergent action, such as immediate stoppage or immediate control of the equipment or thing causing the pollution or removal or disposal of the hazardous or pollutant substance or action that helps to restore the environment to the condition it was in before the pollutant. While the EPO under section 16(1) of the Act provides for remedial or corrective measures to cure pollution or stop further pollution; Section 16(2) of the Act lays down preventative measures that require immediate action for an immediate effect. Therefore the distinction between section 16(1) and (2) is essentially that the latter acknowledges the need for immediate action as a necessary response mechanism to imminent threat or irreparable damage to the environment.

9. The vital question is whether the EPA can enforce its orders under the EPO where a person fails to comply with the measures prescribed by the EPA. In terms of section 16(3) of the Act, the EPA can either proceed against the person under the Act which could mean proceeding under section 17 of the Act to impose penalties or proceeding under section 21 of the Act where it can file a complaint against the person disobeying the EPO or it can itself take or cause to be taken such measures necessary in the order to implement its EPO. Therefore section 16(3) of the Act itself provides for an enforcement mechanism which is in addition to remedy under the Act. The mandate of the law under Section 16(3) of the Act is very clear. An EPO can be passed to prevent any form of pollution be it air, water, noise or waste or handling of hazardous substance. Section 16(3) of the Act is an enabling provision to ensure compliance with orders under section 16(1) and (2) of the Act, enabling immediate action by the EPA to enforce orders where necessary. The need to provide for enforcement powers in the EPA is essential given that immediate measures may be required to prevent environment degradation. The purpose and overarching objective of the Act to protect the environment and promote sustainable development would be rendered redundant if such powers did not exist.

10. The spirit of section 16 of the Act is based on the Precautionary Principle. The Precautionary Principle requires the relevant agency to anticipate the danger and take immediate

steps to prevent harm or danger to the environment. The Rio Declaration and Agenda 21 in 1992 adopted the Precautionary Principle as a necessary mechanism in the following terms:

…to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environment degradation. (Article 15, Rio Declaration)

….

12. Therefore it is clear that the state and its officers must employ measures to achieve environmental justice and preserve the environment. With the growth of jurisprudence on the establishment of environmental justice in Pakistan, it is necessary to now shift the focus on enforcement mechanism especially where certain kinds of harm or pollution which require immediate stoppage, must be stopped. The Act emphasizes on immediate measures empowering the EPA to protect the environment where there is imminent threat to the public or cause to believe environmental degradation/pollution will be irreversible. In such cases, the enforcement mechanism must act immediately to effectively control the harm and prevent any further degradation without this power of enforcement the issuance of an EPO under section 16(2) of the Act specifically would become redundant. If the EPO requires immediate stoppage or immediate removal of the pollutant then allowing the harm and pollution to continue would defeat the purpose of section 16(2) of the Act."

That furthermore, the Environmental Tribunal Punjab, in **District Officer (Environment) Bahawalnagar versus Ghulam Farid Atta Chakki Unit**[36] has held that an Environmental Protection Order under Section 16 can only be issued in accordance with the provisions of PEPA by the Director General, EPA, or any staff of the EPA to whom such authority has been delegated in terms of sub-section 5 of Section 5. However, in the instant case, the Environmental Protection Order had been issued by the District Officer (Environment). The Tribunal held that such exercise was impermissible and declared the order to be illegal and without jurisdiction. However, the Tribunal allowed the EPA to initiate fresh proceedings in accordance with law.

[36] 2016 CLD 778

PART VI - STATUS OF RULES AND REGULATIONS MADE UNDER THE PAKISTAN ENVIRONMENTAL PROTECTION AGENCY, 1997

As aforementioned, the Honourable Lahore High Court has in **Kamil Khan Mumtaz versus Province of Punjab** held that all rules and regulations made under the Pakistan Environmental Protection Act, 1997, have been protected under Article 270AA of the Constitution. Such regulations include the following:

- Environmental Tribunal Rules, 1999;
- Review of IEE & EIA Regulations, 2000;
- Provincial Sustainable Development Fund Board (Procedure) Rules, 2001;
- National Environmental Quality Standards (Certification of Environmental Laboratories) Regulations,2000;
- Environmental Samples Rules, 2001;
- National Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2001;
- Pollution Charge for Industry (Calculation and Collection) Rules, 2001;
- Provincial Sustainable Development Fund (Utilization) Rules, 2003; and
- Punjab Prohibition on Manufacture, Sale, Use and Import of Polythene Bags (Black or any other Polythene Bag below fifteen micron thickness) Rules, 2004;

This entails that all such rules and regulations shall remain valid and enforceable till such time that the competent authority chooses to alter, repeal or amend the same. The Punjab Environmental Tribunal in **Shakarganj Limited versus Environmental Protection Agency**[37] held that the National Environmental Quality Standards (NEQS) are no longer applicable and as such no proceedings can be initiated on the basis of the NEQS in the absence of the Provincial Environmental Quality Standards. It is pointed out that such view is not tenable and in direct conflict with the Kamil Khan Mumtaz ruling of the Honourable Lahore High Court. Similarly, in **Director General EPA versus Ashraf Sugar Mills Limited**[38] the Punjab Environmental Tribunal adopted a similar view holding not only the PEQS but also the Review Regulations being inapplicable based on the

[37] 2016 CLD 1439
[38] 2016 CLD 1628

same rationale. It is reiterated that the same view is also in contradiction with the view expressed by the Honourable Lahore High Court in Kamil Khan Mumtaz.

MODULE 2 - THE EVOLUTION OF INTERNATIONAL ENVIRONMENTAL LAW

PART I

The progression of International Environmental Law can be divided into various eras, each having its own ethos and significance for the subject.

Prior to the United Nations Stockholm Conference

Before the 1900s, international agreements relating to natural resources were largely based on the notion of unrestrained national sovereignty over natural resources which is illustrative of the zeitgeist of the time given the initial emergence of nation-states. It was a time when states were beginning to define their boundaries and the extent of their jurisdiction and property. It is in this backdrop unsurprising that international agreements of the time primarily lay focus on issues such as boundary waters, navigation and fishing rights but failed to address or consider pollution or other ecological issues.

At the turn of the twentieth century, in the early 1900s, even though states began to enter into and conclude agreements to protect various species, the thrust behind such agreements was purely economic and based on the commercial value, importance or usefulness of a particular species to mankind. Such an approach, even though a step in the right direction, was problematic because it failed to acknowledge the importance and complexities of ecology and ecosystems. The limitation of such an approach was due to the fact that it was based on human perceptions and scientific knowledge of the time and was thus limited by our understanding of nature. Furthermore, the effect of such an approach was that no protection was extended to species of animals that were not deemed important to our existence without realizing that interdependence between subsystems of the ecosystems was integral to its sustenance. It must also be pointed out that during this era, focus was solely on fauna rather than flora. Examples of such agreements include the following:

- 1902 Convention for the Protection of Birds Useful to Agriculture;

- 1911 Treaty for Preservation and Protection of Fur Seals;
- 1916 Convention for the Protection of Migratory Birds in the United States (U.S.) and Canada;
- 1900 Convention for the Preservation of Wild Animals, Birds and Fish in Africa (London Convention of 1900)

In 1930s and 1940s, states began to recognize the importance of natural resources beyond their commercial significance. The larger conscience moving from individual species to a more nuanced understanding of wild-life in general led to agreement being negotiated to protect flora and fauna. Examples of such agreements include the following:

- 1933 Convention Relative to the Preservation of Fauna and Flora in the Natural State (London Convention of 1933);
- 1940 Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere;

However, the decades immediately preceding the Unite Nations Stockholm Conference may be termed as the era of environmental awareness with local legislations in countries such as the US relating to the environment began to take place at the national level along with further international environmental agreements.

The United Nations Stockholm Conference

This period beginning in 1972 may be termed as the era of modern environmental law where our understanding progressed from more primitive notions of nature to more nuanced and robust understanding of the environment where protection was extended not just to individual species but to whole ecosystems. Similarly, protection against degradation was also extended to cultural heritage. It was in this period that the United Nations Stockholm Conference took place and the UN Environment Programme (UNEP) was also established at the beginning of this period.

Further important developments within this period include the following:

- Negotiations on the Convention on International Trade in Endangered Species of Wild Fauna and Flora began in this year.
- 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter
- 1972 The World Heritage Convention

- 1973 and 1982 Convention on the Law of Seas (Art 192 of the 1982 Convention requires states to protect and preserve marine envrionment and provides dettailed measures to be taken in order to do so
- 1985 Vienna Convention on the Protection of the Ozone Layer
- 1989 Montreal Protocol on Substances that Deplete the Ozone Layer
- 1991 Protocol on Environmental Protection to the Antarctic Treaty
- 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
- 1986 Convention on Early Notification of a Nuclear Accident
- Convention on Assistance in the Case of a Nuclear Accident Or Radiological 1986 Emergency
- 1990 International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC)

This era generally marked the shift in focus of international agreements to control pollution, conserve habitats and protect the global commons. Transboundary pollution agreement changed to global pollution agreement. Control of direct emission into lakes and other water bodies shifted to comprehensive river basin management system regimes. The idea of preservation of species was broadened to include conservation of whole ecosystems. Similarly, agreements that took effect only at national borders began to restrain resource use and control activities within national borders such as world heritage sites, wetlands and biologically diverse areas. Such a shift signifies the withering away of notions of sovereignty in favour of a broader consciousness towards environmental issues.

Stockholm Declaration itself became a reality where countries joined to identify and address the world's environmental problems. The central issue was to address the conflict between economic development and environmental protection inherent to the sustainable development debate. It is also worth mentioning that developing countries at this stage were worried that the international effort to protect the environment would come at the expense of their own development as the developed countries had already undergone the process of industrialization much before any international obligations were enforced.

One document underlying the conference was the Founex Report on Development and Environment which recognized the aim to reconcile the concept of economic progression and environmental protection laying the foundation for the concept of sustainable development by bridging the policy and conceptual differences that separated developed and developing countries. Simiarly, Principle 21 of the

Stockholm Declaration provides that states have the sovereign right to exploit their own resources however have a correlative responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of others.

This period also resulted in the increase of NGO participation. The United Nations accredited nearly 250 NGOs for the Stockholm Declaration. Furthermore, over 1100 agreements were signed in this period.

In the latter half of this period approaching the Rio Conference, countries sped up the process that began in 1972. There was a clear moving away from the first come first serve or sovereignty approach to environmental matters and a movement towards a notion of shared responsibility. States had originally asserted the right to pollute at self-determined levels. However, after occurrences such as the depletion of the ozone layer and the Chernobyl Nuclear incident, the international community began to realize the need for concerted efforts through international agreements.

As aforementioned, given that over 1100 agreements were signed in this period, there was also a realization that agreements were too specific and causing treaty congestion. Furthermore, there was also the realization that international environmental regulation needed to be more cost efficient as all treaties and conventions required their own respective secretariats to be set up. It was in this backdrop that the concept of a framework agreement with protocols emerged. Agreements were now being understood needing to be more and more intrusive on national sovereignty and generally more detailed.

The United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro

The year 1992 marked the 20th anniversary of the Stockholm Conference. The Brundtland Report prepared for the Rio Conference advocated the concept of sustainable development and states ratified the principle of sustainable development officially accepting the process which began at Founex.

The Rio Conference produced four primary documents 1) the Rio Declaration 2) UN Framework Convention on Climate Change (UNFCCC) 3) 1992 Convention on Biodiversity 4) Agenda 21

The conference also adopted a "Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and

Sustainable Development of all types of Forests which led to the negotiation on the Convention on Desertification.

Post Rio, the field of International Environmental Law became more robust and comprehensive with specific links to trade, human rights and national security. Emphasis on implementation and compliance also increased compared to prior periods. As the Stockholm Conference marked the beginning of a conscience driving the international community towards a deeper understanding of the imperatives of environmental regulations, the Rio Conference marked the epoch where the understanding further transcended the notion of environmental regulation in a more local context and towards a more macro approach involving the understanding of climate.

In this regard it is also noteworthy that this period also marks the beginning of the United Nations Climate Change Conferences under the framework of the UNFCCC known otherwise as the Conference of the Parties (COP). The first conference was held in Berlin from 28th March to 7th April, 1995. It is noteworthy that the COP takes place on an annual basis where the members attempt to move towards climate integration and reduction in greenhouse gas emissions and other important issues. One of the most significant of such meetings is known as COP21 held in Paris, France, from 30th November to 12 December, 2015 which resulted in the Paris Climate Agreement, dealing with greenhouse gas emissions mitigation, adaptation and international climate financing. The Agreement is the single biggest achievement of the International Community with respect to the Climate Change negotiated by a total of 196 countries. As of June 2017, 195 members have signed the agreement and 148 of which have also ratified the Agreement.

Similarly, the last conference i.e. COP22 was held in Marakesh, Morocco, from 7 – 18 November 2016, the focal point of which was addressing concerns of water scarcity and water-related sustainability.

PART II - LIST OF INTERNATIONAL AGREEMENTS PAKISTAN IS CURRENTLY A SIGNATORY TO

Sr. No.	Agreement	Description	Pakistan's Status
Biodiversity-related Conventions			
1)	**Convention on Biological Diversity (CBD)**	The Convention on Biological Diversity is about the Conservation and wise use of different biological resources (Plants and Animals). It was adopted in 1992 at the Rio de Janeiro, Brazil and entered into force on January, 1993.	Pakistan signed CBD in June 1992 at United Nations Conference on Environment and Development held at Rio de Janeiro, Brazil and ratified it on 26th July 1994.
2)	**Cartagena Protocol on Bio-safety**	The Bio safety Protocol (Protocol to CBD) deals with the safe handling, storage and trans-boundary movement of the Genetically Modified Organisms (GMO). Cartagena Protocol was adopted on June 2001, in Cartagena, Spain and entered into force on September 11th, 2003.	Pakistan signed the Cartagena Protocol in June, 2001 and has ratified it in May, 2009.
3)	**Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**	This convention deals with co-operation among countries for the protection of certain endangered species of the wild animals and plants, and prevent their over exploitation	Pakistan signed the Convention in 1973 and ratified it in April 1976.

		through international trade. The Convention was adopted on 3rd March 1973 and entered into force on 1st July 1975.	
4)	**Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention)**	The Ramsar convention deals with the protection of water bodies of international importance and attached Biodiversity, along with promoting wise use of allied resources. The Convention was adopted in 1971 at Ramsar, Iran and entered into force in 1975.	Pakistan signed the Ramsar Convention in 1971, and The convention entered into force in Pakistan on 23 November 1976 . There are 19 Ramsar sites in Pakistan.
5)	**Convention on the Conservation of Migratory Species**	Convention on the Conservation of Migratory Species deals with the conservation and protection of the migratory species.	Pakistan signed this convention in 1981 and ratified it in December 1987.
Atmosphere / Climate Change (UNFCCC)			
6)	**United Nations Framework Convention on Climate Change (UNFCCC)**	This convention highlights the broad guidelines to protect the Climate of the Planet. It was adopted in 1992 and came into force in 1994.	The Government of Pakistan signed the UNFCCC in 1992 and ratified it in June 1994.
7)	**Kyoto Protocol to UNFCCC**	The Kyoto protocol looks at mitigation of climate change so as to reverse the pace of climate change; and	Pakistan signed the Protocol in December 1997 and ratified it in January 2005.

		promote the carbon sequestration and carbon credits i.e. Certified Emission Reduction (CER) trading. The Protocol was adopted in 1997 and came into force in 2005.	
8)	**Vienna Convention for the Protection of the Ozone Layer**	Vienna Convention for the protection of the Ozone Layer highlights the need to protect the Ozone layer for conserving environment for the present and future generations. The Convention was adopted on 22nd March 1985 and came into force in 1988.	Pakistan signed the Convention on March 22nd 1985 ratified it in December 1992.
9)	**Montreal Protocol on Substances that deplete the Ozone Layer**	The 1987 Montreal Protocol on Substances that deplete the Ozone Layer under which parties have to take appropriate measures to protect human health and the environment from human activities which change or are likely to change the ozone layer, by reducing the emissions of certain substances that deplete or change the Ozone Layer. The Protocol was adopted in 1987 and entered into force in January, 1989.	Pakistan signed the Protocol in January 1989 and ratified it in December 1992.

Land Convention / Environmental Cooperation Conventions			
10)	**United Nations Convention to Combat Desertification (UNCCD)**	This Convention attempts to combat desertification and mitigate the effects of drought in countries experiencing serious drought/ desertification. It is supported by international cooperation and takes and integrated approach for sustainable development in the affected areas. The Convention was adopted in Paris on 17th June 1994 and entered in force on 26th December 1996.	Pakistan signed the Convention on 15th October 1994 and ratified it on 24th February, 1997.
Chemicals and Hazardous Wastes Conventions			
11)	**Rotterdam Convention on prior Informed Consent (PIC) for certain Hazardous Chemicals and Pesticides in International Trade**	This Convention promotes shared responsibility and cooperation among parties in the international trade of certain hazardous chemicals in order to promote human health and protect the environment from potential harm, and to contribute to their environmentally sound use. The Convention	Pakistan signed the Rotterdam Convention in September, 1999 and ratified it on 14th July 2005.

		was adopted on 10th September 1998 at Rotterdam, and entered into force on 24th February 2004.	
12)	**Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal**	Basel Convention deals with the controlled trans-boundary movement of Hazardous Wastes and their disposal. The Convention was adopted on 22nd March 1989, and entered into force on 5th May 1992.	Pakistan signed the Convention in May 1992 and ratified it in October 1994.
13)	**Stockholm Convention on Persistent Organic pollutants (POPs)**	This Convention protects human health and the environment from the harmful impacts of persistent organic pollutants (POPs). It was adopted on 22nd May 2001 in Stockholm, Sweden and came into force on September, 2003.	Pakistan signed the convention on 6th December 2001 and ratified it on 17th April 2008.
Regional Seas Conventions and related Agreements			
14)	**United Nations Convention on the Law of the Sea (UNCLOS)**	This Convention is about the peaceful uses of the seas and oceans, the equitable and efficient utilization of its resources, the conservation of their living resources, and the study, protection and preservation of the marine environment.	Pakistan signed the Convention in December 1982 and ratified it in February 1997.

		The Convention was adopted in 1982 and entered into force in 1994.	
15)	**Convention Concerning the Protection of the World Cultural and Natural Heritage**	The General Conference of the United Nations Educational, Scientific and Cultural Organization meeting in Paris from 17 October to 21 November 1972, at its seventeenth session, Noting that the cultural heritage and the natural heritage are increasingly threatened with destruction not only by the traditional causes of decay, but also by changing social and economic conditions which aggravate the situation with even more formidable phenomena of damage or destruction. It is important to remember that the objectives and priorities of MEAs vary significantly from one agreement to another, even within a cluster. The common aspects include the protection of human beings and the environment; sustainable	Pakistan signed the convention on 16th November 1972 and ratified it on 23rd July 1976.

		development; sustainable use of natural resources; and the protection of environment in such a way as to ensure its sustainable use.	

MODULE 3 - HISTORY OF ENVIRONMENTAL REGULATION IN PAKISTAN

PART I - GENERAL HISTORY

At the domestic level in Pakistan, the environment has never been a major concern nor has it been directly regulated for the better part. The earliest statute directly relating to the environmental protection was enacted in 1997 as mentioned later. From the very inception of Pakistan, environment and matters related thereto never fell within the federal domain of legislation. One may look at the legislative powers of the Federation under the Government of India Act, 1935 and the subsequent constitutions of 1956, 1962 and 1972 and find that the federal legislative list always lacked any entry remotely related to the subject.

On the other hand, the provincial domain, even though lacking an entry directly relating to the environment, contained entries relating to public health and sanitation, forests and protection of wild birds and animals. However, despite such subjects being expressly provided within the provincial domain, the provincial legislature failed to legislate on such subjects in the context of environmental protection and conservation. Once this is seen in the larger context of the international scheme of things, it is not surprising to see that no environmental legislation was passed. It is evident that the legislative entries provided under the constitutions mimicked the subject upon which international agreements of the time were based.

The Constitution of 1973, however, was a break away from the past scheme of things. As the world entered the era of modern environmental law with the United Nations Stockholm Conference of 1972, the constitutional scheme of Pakistan also reflected this change, at least in theory. It was for the first time in the Pakistani legal scheme that the term *'environment'* was introduced. Entry 24 of the Concurrent Legislative List related to 'Environmental pollution and ecology'. The result of this was that both the Federal and Provincial legislatures had the power to enact legislation with respect to the subject. It was in this period that the first statute concerning environmental regulation i.e. Pakistan Environmental Protection Act, 1997, was enacted by the Parliament and made applicable to the whole of Pakistan.

Subsequently, with the passing of the 18th Amendment in October of 2010, the concurrent legislative list was abolished and 'Environmental pollution and ecology' was devolved on to the provinces. One important feature of the 18th amendment was that despite devolution, the Pakistan Environmental Protection Act, 1997, amongst other laws, was given protection and continued in force as a transitional measure in terms of Article 270AA of the Constitution till the provinces themselves legislated on the matter.

The Province of Punjab, in 2012, passed the Punjab Environmental Protection (Amendment) Act, 2012, making appropriate amendments in the Pakistan Environmental Protection Act, 1997 in order to adopt it at the provincial level. Similarly, the province of Balochistan passed it environmental protection legislation in 2012. The Provinces of Sindh and Khyber Pakhtunkhwa passed their own environmental protection acts in 2014.

PART II - OTHER AVENUES OF LEGAL RECOURSE

Prior to the enactment of specific environmental protection legislation, parties had little recourse to a court of law to redress their grievances in the context of environmental law. Parties could either approach the Civil Courts in relation to tortious claims, or they could seek remedies indirect remedies under various statutes such as the Easements Act, 1882, or the Factories Act, 1934. The main concerns of such environmental litigation are that in the absence of any specific environmental legislation or protections, litigants had to rely upon general bodies of civil law for their grievances. The Courts in such matters applied an issue by issue approach granting to privately owned property and values rather than extending protection to publicly owned ecological values and community protection.

Environmental Tort Law

Tort Law in the context of environmental regulation can be bifurcated into two main streams relating to nuisance or negligence to be filed before the Civil Courts. The issue in such an approach was in the nature of the claim filed as aforementioned.

Tort of Nuisance

The tort of nuisance may be divided into two categories, public and private nuisance. In cases of private nuisance, filing of claims are contingent on the proof of interference with a person's use or enjoyment of his property or any right therein. For instance, an individual may first have to establish a right under a provision or principle of law such as Section 7 of the Easements Act 1882 which states as follows:

*"**Easements restrictive of certain rights exclusive right to enjoy.** Easements are restrictions of one or other of the following rights (namely):--*

(a) The exclusive right of every owner of immovable property (subject to any law for the time being in force) to enjoy and dispose of the same and all products thereof and accessions thereto.

(b) Rights to advantages arising from situation. The right of every owner of immovable property (subject to any law for the time being in force) to enjoy without disturbance by another the natural advantages arising from its situation."

Once such a right has been established will the claim move on to the next step. This raises several concerns. Firstly, the litigation relating to the private nuisance is, in essence, a dispute relating to private rights which falls short of the imperatives of environmental regulation. Even though at first glance even environmental regulation may seem as though it is protecting one's right to enjoy of his property, but it must be appreciated that the same is merely an effect of the regulation whereas the real rationale behind such regulation is to go beyond private rights and resolves concerns for the larger environment. The issue with the tort of nuisance is that it does not focus specifically on environmental concerns but only operates as a general law the effect of which may be environmental regulation in some cases.

Shortcomings of such litigation is that there is no adherence to the principles inherent to environmental justice. The standard of proof in such cases is merely that of balance of probabilities rather than the precautionary approach required for environmental protection and preservation. Similarly, there are no specific standards one must abide by. That is to say that the litigation is only centered around private rights rather than adherence to and violation of environmental standards that have been created after objective and technical assessment and are based upon scientific understanding of the environment. The effect of this is not only that there is a lack of uniformity in judgments and foreseeability of outcomes, but also that the

litigation in such a context is one step removed from the solution to environmental concerns. For instance, approvals from authorities that the tortfeasor may have obtained are potential defences available to the tortfeasor and may operate to negate the claimants claim with respect to nuisance.

Furthermore, under the Code of Civil Procedure, 1908, cases of public nuisance either need to be initiated by the Advocate General or persons having obtained the consent of the Advocate General in terms of Section 91. Such conditions act as impediments for claimants who does not have the right to file a claim directly but must first establish his prima facie standing to file the claim. Suits for public nuisance are only competent if the subject matter relates to a right that relates to the public interest. It must be pointed out that such a right must belong to the public in general, and not a particular class of people. The effect of this is that the standard required for the institution of a claim let alone a successful claim is much higher than the standard that is required for effective adjudication of environmental matters.

Tort of Negligence

Similarly, in cases of negligence, the claim is contingent upon several factors. Firstly, the person responsible for the alleged injury must owe a duty of care towards the person bringing a claim. Secondly, the person responsible must have breached that duty. Thirdly, damage must have resulted from such breach of duty. The problem here is that the tortfeasor has the defence of unforseeability of the consequences. That is to say, if the tortfeasor establishes that despite damage actually having occurred, he could not have reasonably foreseen such damage to occur, he is absolved of any damages. That such an approach negates the fundamental principles advocating the precautionary approach and the polluter pays approach inherent to environmental regulation.

Criminal Liabilities under General Law

Parties can also pursue remedies under criminal law provided for under Chapter XIV of the Pakistan Penal Code, 1860, relating to "Offences Affecting the Public Health, Safety, Convenience, Decency and Morals" and the Chapters X and XI of the Criminal Procedure Code, 1898. The primary issue with such remedies is that

the standard of proof required in such cases is that of beyond reasonable doubt whereas environmental regulation is based on principles such as the precautionary principle which advocate very low standards of proof and the notion that in cases of doubt, courts must always rule in favour of environmental preservation. Furthermore, such a remedy at best provides a mechanism for stopping the act, however, damages or compensation required as a result of the act are beyond the scope of the remedies provided under the Pakistan Penal Code and the Criminal Procedure Code.

Similarly, under the Factories Act 1934, Chapter III provides for 'Health and Safety' which obligates factories to, *inter alia*, maintain cleanliness (Section 13) and make effective arrangements for disposal of wastes and effluents (Section 14). It is noteworthy that contravention of such obligations only entails a nominal fine in terms of Section 60.

MODULE 4 - PRINCIPLES AN ENVIRONMENTAL COURTS SHOULD FOLLOW IN MATTERS THAT COME BEFORE IT

The field of environmental law is guided by numerous principles that emanate from the field of international law and find basis in both hard and soft law ranging from international agreements to international conventions and declarations. Though the principles are countless, their essence can be reduced to twelve substantive principles that promote environmental justice through the environmental rule of law. Namely, the following:

i) The Principles of Sustainable Development
ii) The Precautionary Principle
iii) The Polluter Pays Principle
iv) The Right to Nature & the Responsibility to Protect Nature
v) Ecological Sustainability and Resilience
vi) Ecological Functions of Property
vii) Intra-Generational and Inter-Generational Equity
viii) Gender Equity
ix) Participation of Minorities and Vulnerable Groups
x) The Rights of Indigenous and Tribal Peoples
xi) Non-regression
xii) Progression

PRINCIPLE 1 - Principles of Sustainable Development

Even though several other principles are elaborated hereinafter, sustainable development may be considered the *grundnorm* of environmental justice and the environmental rule of law. The principle forms the backbone of and acts as the guiding principle for the remaining subsets. It is, therefore, important to understand that adherence to the principle is not just a means to promote the environmental rule of law but its application is also an end in itself.

Although similar notions had been explored in earlier international cooperative efforts such as the Stockholm Declaration of June 1972, the term *'sustainable development'* was first defined in the report of the World Commission on Environment and Development titled *"Our Common Future"* otherwise known as the Brundtland Report. Chapter 2 of the Brundtland Report titled *'Towards Sustainable Development'* states as follows:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- *The concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and*
- *The idea of limitations imposed by state of techonology and social organization on the environment's ability to meet present and future needs."*

Understanding the term, therefore, entails a balancing interest between the right to development and the right to life of the current as well as future generations. In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations. However, it must also be pointed out that the principle also requires special attention be given to the least fortunate of the current generation.

The principle acknowledges that economic development entails physical changes in ecosystems that may be necessary for the progression of mankind. However, it advocates an approach that is not just centered around humanity but in fact reimagines the discourse of development towards a more holistic approach that balances the needs of mankind with the rights of nature acknowledging the

interdependence of between both. It pays attentions to two things. Firstly, in case of non-renewable resources, such as fossil fuels, minerals and the like, sustainable development envisages that the rate of depletion should be counter-balanced with the following:

i) the criticality of that resource;
ii) the availability of technologies for minimizing its depletion; and
iii) the likelihood of substitutes being available.

As is evident, such an approach seeks to ensure the minimum depletion of a resource that is necessary for progression and development. Secondly, in the case of renewable resources such as forests, fishes and the like, the principle advocates that such resources must not be depleted at a rate that surpasses the rate of regeneration and natural growth of the resource itself. The essential reason why such an approach is adopted is because no resource is truly renewable. It is only by ensuring that the rate of depletion does not exceed the rate of regeneration can it be ensured that the resource will remain renewable. Furthermore, given that such resources are almost always part of complex and interlinked ecosystems, the exploitation must be subject to the understanding and factoring in of the system-wide effects of the exploitation. Species of plants and animals are renewable only before extinction, as such, sustainable development requires the conservation of plants and animal species so as not to limit the options of future generations.

It is also worth mentioning that just as the notion of sustainable development forms the backbone of all principles of environmental justice, the Brundtland Report forms the backbone of the Rio Declaration. The Rio Declaration is a document produced by the United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro in June 1992. The document was signed by over 170 countries and declared 27 principles intended to guide its signatories towards a sustainable future.

<u>Sustainable Development in the Pakistani Context</u>

The term *'sustainable development'* occurs in the PEPA at several places. First and foremost, the term is provided in the preamble of the act showing that it forms the very base of the law itself which reads as follows:

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

That furthermore, Section 2(xlii) of PEPA has also adopted the definition of Sustainable Development provided by the Brundtland Report. Similarly, the term is then again used not only within the mandatory functions of the Punjab Environmental Protection Council but also within the core guiding principles for the Punjab Environmental Protection Agency.

The jurisprudence developed by the Pakistani also gives great credence to the principle and has taken great measures to ensure it is not only upheld but progressively developed.

The Honourable Lahore High Court in a recent judgment titled **Muhammad Ayaz versus Government of Punjab**[39] has acknowledged that the principle is embedded in the purpose and overarching objective of the PEPA. The judgment was rendered by the Honourable Court in exercise of its constitutional jurisdiction under Article 199 of the Constitution, details the scope of Section 16 (Environmental Protection Order) of the PEPA. The primary question before the Honourable Court was whether the EPA could enforce its orders under the EPO where a person fails to comply with measures prescribed thereunder.

That similarly, the August Supreme Court of Pakistan, while dealing with the issue of cutting of trees for canal widening in the city of Lahore, has dealt with the principle of sustainable development in **Re: Cutting of Trees for Canal Widening Project, Lahore**[40]. The August Supreme Court rightly began the judgment with the quote, *"Any city gets what it admires and what it pays for and ultimately deserves. And we will probably be judged not for the monuments we build but the monuments we destroy."* – Ada Louise Hustable. The brief background of the matter is that the August Supreme Court had taken suo motu notice of the canal widening project upon receipt of a letter by the Lahore Bachao Tehreek. Amongst several other concerns, the August Court specifically addressed the issue of whether the project was in line with the concept of sustainable development.

In addition to relying on the definition of sustainable development provided by the Brundtland Report in 1972, the August Court also relied on associated terms such as *'sustainable urban development'* and *'sustainable communities'*. Sustainable Urban Development has been defined during the preparatory meetings for the URBAN21 Conference as follows:

[39] 2017 CLD 772
[40] 2011 SCMR 1743

"Improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components without leaving a burden on the future generations. A burden which is the result of a reduced natural capital and an excessive local debt. Our aim is that the flow principle, that is based on an equilibrium of material and energy and also financial input/output, plays a crucial role in all future decisions upon the development of urban areas."

That similarly, sustainable communities have been defined as *"towns and cities that have taken steps to remain healthy over the long term. Sustainable communities have a strong sense of place. They have a vision that is embraced and actively promoted by all of the key sectors of society, including businesses, disadvantaged groups, environmentalists, civic associations, government agencies, and religious organizations. They are places that build on their assets and dare to be innovative. These communities value healthy ecosystems, use resources efficiently, and actively seek to retain and enhance a locally based economy. There is a pervasive volunteer spirit that is rewarded by concrete results. Partnerships between and among government, the business sector, and nonprofit organizations are common. Public debate in these communities is engaging, inclusive, and constructive. Unlike traditional community development approaches, sustainability strategies emphasize: the whole community (instead of just disadvantaged neighborhoods); ecosystem protection; meaningful and broad-based citizen participation; and economic self-reliance."*

The definitions aforementioned clearly demonstrate that the principle of sustainable development is a guiding principle that embodies not just quantitative factors but also qualitative factors. It acts as a mode of analysis that executive authorities should employ while decision making and simultaneously one that judicial bodies should employ in order to ensure that executive decisions are in line with sustainable ends. Employing a similar mode of analysis, the August Court held that the project was in consonance with sustainable development upon being assured:

a) that the green belt on both sides of the Canal Road would be retained and the entire area would be declared/notified as Heritage Park, through an Act of the Legislature;
b) that minimum possible area from the green belt be affected on account of the widening of the Canal Road;
c) that the widening of the road was necessitated to cater to the needs of the current and future generations;
d) that the existing traffic flow and the likely increase in the volume of traffic on the road was kept in view while designing the project;

e) that stringent conditions were attached by the EPA-Punjab while granting environmental approval to the project which included strict adherence to the Environmental Management Plan in order to minimize any negative impacts on soil, ground water, air and biological resources of the project area;
f) that strict compliance with the National Environmental Quality Standards would be observed;
g) that carrying out of extensive tree plantation, especially indigenous species in and around the project area in consultation with the PHA (Parks and Horticulture Authority) and to make all arrangement for the transplantation of existing trees; and
h) that the plantation of four (4) trees having 6-7 feet height for every single uprooted tree. – Para 39

It is important to note that the matter was against taken up by the August Supreme Court in its judgment titled **Lahore Bachao Tehrik versus Dr. Iqbal Muhammad Chauhan**[41]. Even though the term sustainable development does not find specific mention in the judgment, the judgment paid tribute to the principle by acknowledging that traffic congestion is against the public interest and widening of the canal is an essential feature of urban development and life. However, the true significance of the judgment is in the fact that the concern of the petitioner, *inter alia*, was that widening of the canal would inevitably lead to the cutting of trees, reduction of green areas which would sufficiently impact the ecology of the area. In this regard, the August Court observed that it had been assured that for every tree cut in the widening process, ten would be planted in its place. Such an arrangement is a worthy example of innovation that the judiciary can display as an environmentally conscience organ of the state.

The Honourable Lahore High Court on another occasion explored the interplay of traffic congestion with sustainable development in the matter relating to the construction of the signal free junction at Azadi Chowk in its judgment titled **Young Doctors Association versus Government of Pakistan**[42]. While relying on the August Supreme Court's treatment of the Canal Widening Project, the Honourable Lahore High Court held that since the project sought to remedy traffic congestion issues only after observance of proper legal and environmental requirements, it did not violate the principle of sustainable development but was, in fact, furthering it. However, it is still interesting to note that the concerns of the

[41] 2015 SCMR 1520
[42] PLD 2015 Lahore 112

petitioners were taken into account and the Honourable Court gave specific directions to the authorities in order to minimize the negative externalities of such a project in paragraph 18 of the judgment.

Sustainable Development in the Indian Context

The Supreme Court of India has dealt with the concept in the Sardar Sarovar Dam case titled **Narmada Bachao Andolan versus Union of India**[43]. The judgment is significant because it deals with several factors integral to judicial conscience within the field of environmental and administrative law. One such important factor is that of administrative discretion. In this regard the Court observed that *"there are three stages with regard to the undertaking of an infrastructural project. One is conception or planning, second is decision to under the project and the third is the execution of the project. The conception and the decision to undertake a project are to be regarded as a policy decision. Once such a considered decision is taken, the proper execution of the same should be undertaken expeditiously. It is for the Government to decide how to do its job. When it has put a system in place for the execution of a project and such a system cannot be said to be arbitrary, then the only role which a court may have to play is to see that the system works in the manner it was envisaged."* Para 227

The Court then went on to say that the *"Courts, in exercise of their jurisdiction, will not transgress into the field of policy decision. Whether to have an infrastructural project or not and what is the type of project to be undertaken and how it has to be executed, are part of policy-making process and the courts are ill-equipped to adjudicate on a policy decision so undertaken. The court, no doubt, has a duty to see that in the undertaking of a decision, no law is violated and people's fundamental rights are not transgressed upon except to the extent permissible under the Constitution."*- Para 229

What must be gathered from the Court's analysis is that it appreciated the technical nature of projects and environmental concerns, and therefore gave deference to administrative experience in this regard. By way of analogy, this highlights the importance of the role of environmental protection agencies and the proper exercise of their functions. However, it is also important to note that Environmental Tribunals as established under the PEPA requires not only a judicial member but also technical members having knowledge of environmental matters placing a higher burden on Environmental Tribunals while assessing projects.

In the context of sustainable development the Court observed as follows:

[43] (2000) 10 SCC 664

"It is when the effect of the project is known then the principle of sustainable development would come into play which will ensure that mitigative steps are and can be taken to preserve the ecological balance. Sustainable development means what type or extent of development can take place which can be sustained by nature/ecology with or without mitigation." Para 119

Similarly, the Court also observed that *"environmental concern has not only to be the area which is going to be submerged but also its surrounding area. The impace on environment should be seen in relation to the project as a whole. While an area of land will submerge but the construction of the dam will result in multifold improvement in the environment of the areas where the canal waters will reach. Considering the benefits which have been reaped by the people all over India with the construction of the dams, the Government cannot be faulted for deciding to construct the high dam on River Narmada with a view to provide water not only to the scarcity areas of Gujarat but also to the small areas of the State of Rajasthan where shortage of water has been there since time immemorial"* – Para 236

"The loss of forest because of any activity is undoubtedly harmful. But these large dams also cause conversion of wasteland into agricultural land and making the area greener. Large dams can also become instruments in improving the environment." – Para 242

The Majority's analysis on the issue of sustainable development clearly shows that it undertook a balancing interest and ruled in favour of the project continuing once it was satisfied that the benefits of the project greatly outweighed all of its negative effects. It may, however, be pointed out that the minority opinion while employing the precautionary approach said that environmental clearance could only have been given after a carrying out a more detailed assessment of the impacts of the project.

Recognizing the need to protect the Taj Mahal and its surroundings while promoting development, the Supreme Court of India's view of sustainable development in **M.C. Mehta versus Union of India**[44] was as follows:

"The Taj, apart from being cultural heritage, is an industry by itself. More than two million tourists visit The Taj every year. It is a source of revenue for the country. This Court has monitored this petition for over three years with the sole object of preserving and protecting The Taj from deterioration and damage due to atmospheric and environmental pollution. It cannot be disputed that the use of coke/coal by the industries emit pollution in the ambient air. The objective behind this litigation is to stop the pollution while encouraging development of industry. The old concept that development and ecology cannot go together is no longer acceptable. Sustainable development is

[44] AIR 1997 SC 734

the answer. The development of industry is essential for the economy of the country, but at the same time the environment and the eco-systems have to be protected. The pollution created as a consequence of development must commensurate with the carrying capacity of our eco-systems." – Para 25

In furtherance of its view, the Court passed directions to 292 nearby industries to shift further away from the Taj Mahal and to convert to using gas as its industrial fuel as opposed to coal in a specified period of time. It is noteworthy that the Court further directed that all industries not converted to gas after the period lapses were to be shut down. What is praiseworthy is that the Court's view of sustainable development not only made it pass such orders but also that the nuances of the order pay homage to other principles of environmental law. For instance, the Court ordered that the shifting process shall be initiated after conducting proper hearing of the industry and those concerned advocating the principle of public participation. Furthermore, the Court also passed directions to ensure that the security and livelihood of workmen employed in these industries is not affected as a result of the shifting process upholding the principle of protection of minority interests. Para 29.

Similar to the litigation relating to the Sardar Sarovar Dam, the Supreme Court of India in the case of safety and environmental aspects relating to the Tehri Dam titled **M.D. Jayal versus Union of India**[45] observed as follows:

"This is a development strategy that caters the needs of the present without negotiating the ability of upcoming generations to satisfy their needs. The strict observance of sustainable development will put us on a path that ensures development while protecting the environment, a path that works for all peoples and for all generations. It is a guarantee to the present and bequeath to the future. All environmental related developmental activities should benefit more people while maintaining the environmental balance. This could be ensured only by the strict adherence of sustainable development without which life of coming generations will be in jeopardy.

The right to development cannot be treated as a mere right to economic betterment or cannot be limited to as a misnomer to simple construction activities. The right to development encompasses much more than economic well-being, and includes within its definition the guarantee of fundamental human rights. The 'development' is not related only to the growth of GNP....The right to development includes the whole spectrum of civil, cultural, economic, political and social process, for the improvement of peoples' well-being and realization of their full potential. It is an integral part of human right. Of course, construction of a dam or a mega project is definitely an

[45] 2003 Supp(3) SCR 152

attempt to achieve the goal of wholesome development. Such works could very well be treated as integral component for development.

Therefore, the adherence of sustainable development principle is a sine qua non for the maintenance of the symbiotic balance between the rights to environment and development. Right to environment is a fundamental right. On the other hand right to development is also one. Here the right to 'sustainable development' cannot be singled out. Therefore, the concept of 'sustainable development' is to be treated an integral part of 'life' under Article 21. The weighty concepts like inter-generational equity State of Himachal Pradesh v. Ganesh Wood Products, [1995] 6 SCC 363, public trust doctrine M C Mehta v. Kamal Nath, [1997] 1 SCC 388 and precautionary principle (Vellore Citizens), which we declared as inseparable ingredients of our environmental jurisprudence, could only be nurtured by ensuring sustainable development."

PRINCIPLE 2 - The Precautionary Principle

This principle, termed by Roman law as *In Dubio Pro Natura* (When in doubt, in favour of nature) is enunciated in Principle 15 of the Rio Declaration and states as follows:

"In order to protect the environment, the precautionary approach shall be widely applied by State according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

Although the concept was encapsulated in several idioms or aphorisms such as *'better safe than sorry'* or *'an ounce of prevention is worth a pound of cure'*, a publication of the World Commission on the Ethics of Scientific Knowledge and Technology (COMEST)[46] on the concept states its formal conceptualization can be traced back to a German draft bill aimed at securing clean air. Subsequently, the German Environmental Policy also stated as follows:

"Responsibility towards future generations commands that the natural foundations of life are preserved and that irreversible types of damage, such as the decline of forests, must be avoided. Thus: 'The principle of precaution commands that the damages done to the natural world (which surrounds us all) should be avoided in advance and in accordance with opportunity and possibility. Vorsorge further means the early detection of dangers to health and environment by comprehensive, synchronized (harmonized) research, in particular about cause and effect relationships..., it also means acting when conclusively ascertained understanding by science is not yet available. Precaution means to develop, in all sectors of the economy, technological processes that significantly reduce environmental burdens, especially those brought about by the introduction of harmful substances." - German Federal Ministry of Interior (1984).

Furthermore, a working definition proposed by the COMEST publication is as follows:

"When human activities may lead to morally unacceptable harm that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. Morally unacceptable harm refers to harm to humans or the environment that is

[46] http://unesdoc.unesco.org/images/0013/001395/139578e.pdf

- *threatening to human life or health, or*
- *serious and effectively irreversible, or*
- *inequitable to present or future generations, or*
- *imposed without adequate consideration of the human rights of those affected.*

The judgment of plausibility should be grounded in scientific analysis. Analysis should be ongoing so that chosen actions are subject to review.

Uncertainty may apply to, but need not be limited to, causality or the bounds of the possible harm.

Actions are interventions that are undertaken before harm occurs that seek to avoid or diminish the harm. Actions should be chosen that are proportional to the seriousness of the potential harm, with consideration of their positive and negative consequences, and with an assessment of the moral implications of both action and inaction. The choice of action should be the result of a participatory process."

In essence, the precautionary principle can be seen as a rule relating to the standard of proof by approaching it from the standpoint of ethics and applying it in a value-sensitive manner. It does away with the generally accepted 'beyond reasonable doubt' standard and the 'balance of probabilities' standard, and instead advocates an approach where the *prima facie* or reasonable, rational and scientific establishment of a causal link between an action and negative consequences are sufficient proof against the action.

A useful case study in this case is that of 'asbestos'. Mining of the substance first began in 1879 and the first cases of consequential diseases such as mesothelioma were reported in Europe in the early 1900s. In 1911, experiments on rats gave reasonable grounds to believe that asbestos dust is harmful and thereafter, in the 1960s, mesothelioma cancer was detected in directly and indirectly exposed individuals around the world. Despite the following, it took nearly 90 years for asbestos to be banned by the EU in 1999. The precautionary principle, based on the stringency of the definition adopted, advocates an approach where the use of asbestos should have been banned in the 1960s if not in 1911. The question of asbestos has come up before the Honourable Sindh High Court in the case of **Dadex Eternit Limited versus Syed Haroon Ahmed**[47]. The significance of the case is two-fold. Firstly, even though the complaint was filed under the wrong provisions of law, choosing not to get bogged down in technicalities the Honourable Court ruled that substance of the complaint and not the nomenclature

[47] PLD 2011 Sindh 435

would matter. However, more importantly, given the nature of the case, the Honourable Court upheld the interim order of the environmental tribunal directing the accused company to prepare an environmental management plan to address the environmental issues raised.

The Precautionary Principle in the Pakistani Context

In the Pakistani jurisdiction, the principle was first applied by the Honourable Supreme Court in the celebrated case of Shehla Zia[48]. Although the case is often cited as interpreting the right to life enshrined in Article 9 of the Constitution as not merely meaning physical existence but, in fact, the right to a quality life including adequate nutrition, clothing and shelter; it is largely unknown in its application of the precautionary principle. The Honourable Supreme Court in the uncertainty of scientific data drawing a causal link between electromagnetic fields and leukemia, advocated the precautionary approach and stated as follows:

"The rule of precautionary policy is to first consider the welfare and safety of the human beings and the environment and then to pick up a policy and execute the plan which is more suited to obviate the possible dangers or make such alternate precautionary measures which may ensure safety."

The Honourable Sindh High Court in the case of **Pakistan Defence Officers Housing Authority versus the Federation of Pakistan**[49] also applied the principle in the context of environmental impact assessments. One issue before the Honourable Court was whether the project in question required an IEE or an EIA. The Honourable Court while advocated the precautionary principle held that the principle goes to the core of the Pakistan Environmental Protection Act, 1997, and ruled as follows:

"In my view, it is clear from the observations of the learned Division Bench that this conclusion follows from the subject matter of the 1997 Act, which (as per its long title) is the "protection, conservation, rehabilitation and improvement of the environment, for the prevention and control of pollution, and promotion of sustainable development". The project must be tested on and held to the more stringent standard (i.e., EIA) even if this is more onerous and imposes a greater burden on the proponent. In other words, the rule of interpretation normally applied, namely that a statute should be so construed as places the least burden on the concerned person does not hold in respect of the 1997 Act. The purpose of the rules of interpretation is, in the end, to discover and apply the legislative intent. The legislative intent behind the 1997 Act is clear: the protection, conservation, rehabilitation and improvement of the environment. This is simply too sensitive a matter to require

[48] PLD 1994 SC 693
[49] 2014 CLD 1279

anything but cautious, conservative and careful treatment. It is better to err on the side of caution and test the project on, and hold it to, the more stringent standard even if this is more onerous for the proponent. The 1997 Act is beneficial legislation enacted for the welfare of the public at large (or any relevant section thereof). If, in ensuring that its objectives are achieved, a particular person (i.e., the proponent of a given project) is put to greater inconvenience or a more onerous burden is cast on him, then so be it. In my view, a principle of general application can be derived from the above cited decision: if a project can be regarded as falling within two different entries, one set out in Schedule I and the other in Schedule II, then it must be regarded as falling within the latter and hence requiring an EIA." – Para 18

Another instance where the Honourable Sindh High Court has advocated the precautionary approach was the case of **Rabbiya Associates versus Zong (China Mobile)**[50]. The issue before the Honourable Court related to the grant of an injunction against the installation of BTS towers on the rooftop of a building which was granted. However it is important to note that in addition thereto, the Honourable Court directed that proper rules and regulations are to be framed by all civic agencies, the PTA impose mandatory conditions that grant of NOC to BTS/mobile towers/antennas shall be subject to final inspection, efforts should be made by the PTA to promote sharing of infrastructure by mobile operators and that the EPA shall ensure that such installations are only installed after environmental impact assessment in accordance with the provisions of the law.

A similar case concerning the sealing of a BTS tower due to the environmental impact of its diesel generator came before the Environmental Tribunal Lahore in **Pakistan Mobile Communication versus D.G. EPA**[51]. Even though the majority opinion did not decide the case on merits but simply disposed the matter on the assurance that the diesel generator will be removed, the minority opinion differed and advocated the precautionary approach. The minority ruled against the de-sealing of the BTS Tower on the ground that the purpose of the environmental protection order in question related to the stopping of pollution generation activities and the same could not be ascertained or determined without proper hearing. Therefore, finding that the de-sealing may cause adverse environmental effects, the minority ruled that the balance of convenience fell in favour of the general public and dismissed the application for de-sealing.

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[50] PLD 2011 Sindh 132
[51] 2011 CLD 1280

The August Supreme Court has, in the case of **Farooq Hamid versus LDA**[52], also adopted the precautionary approach. The brief facts are that the construction of a multi-storeyed building by the name of 'Boulevard Heights' was being constructed and the excavation resulted in damage to the neighboring properties. Upon deeper inquiry, the August Court found that such construction projects were being carried on without proper observance of legal formalities. In addition to requiring an EIA of the project, the August Court also directed the provincial government to immediately take steps to ensure the protection of neighbors and occupants of such high rise buildings.

The precautionary approach also finds support from the ruling of the Honourable Sindh High Court in **Shehri C.B.E. versus Government of Pakistan**[53]. The matter pertained to the environmental approval of a joint power and desalination plant. It is important to note that power plants fell within the category of projects that only required an IEE whereas desalination plants found no specific mention in the list of projects requiring an EIA, instead, only treatment plants required an EIA. Given that the project was two-fold, the Honourable Court ruled that the project would also require an EIA despite its main activity being power generation. Furthermore, the Honourable Court also found that treatment plants cannot be read restrictively and should include the term desalination plants given the spirit of the Pakistan Environmental Protection Act, 1997. The approach adopted in this case clearly shows that the Honourable Court was aware of the purpose of the 1997 Act and advocated an approach where all efforts should be made in order to protect the environment. Furthermore, in outlining the purpose and scope of the EIA the Honourable Court stated as follows:

"Environmental Impact Assessment as described in PEPA, 1997, involves an environmental study, comprising collection of data, prediction of qualitative and quantitative impacts, comparison of alternatives, evaluation of preventive, mitigatory and compensatory measures, formulation of environmental management and training plans and monitoring arrangements, and framing of recommendations, and such other components as may be prescribed. In terms of Regulation 11, in evaluating a project, the agency is required to-consult such committee of experts as may be constituted for the purpose and. may also solicit views of the sectoral Advisory Committee, and the Director-General may constitute a committee to inspect the site of the project and submit its report on such matters as may be specified and that the review shall be based on quantitative and qualitative assessment of the documents and the data furnished by the proponent, comments from

[52] 2008 SCMR 468
[53] 2007 CLD 783

the public and Government Agencies received tinder Regulation 10, and views of the committees. In terms of Regulation 9, the agency may also require the proponent of the project to submit such additional information as may be specified or may return the IEE or EIA to the proponent for revision, clearly listing the points requiring further study and discussions. It can thus be seen that the assessment involves an in-depth examination and incisive inquiry and cannot be dealt in a perfunctory, arbitrary and whimsical manner."

That the aforementioned judgment of the Honourable Lahore High Court titled **Muhammad Ayaz versus Government of Punjab**[54], recognized the principle as a tool for ensuring sustainable development. While relying on other judgments and international conventions explaining the principle, the synthesis put forward by the Honourable Court was that the principle focused on empowering regulators to act in anticipation of environmental harm and ensure that it does not occur.

That similarly, the Honourable Lahore High Court in **Imrana Tiwana versus the Province of Punjab**[55], on the scope and meaning of the EIA acknowledged that the precautionary principle is embedded in the essence of the EIA. The Honourable Court stated that *"the EIA as a tool was created to be used at the planning stage in line with the precautionary principle – a principle initiated by the Rio Declaration for better and sustainable development."* Para 35.

<u>The Precautionary Principle in the Indian Context</u>

Vellore Citizen's Welfare Forum versus Union of India[56] may be termed as the most seminal judgment on the precautionary principle. In addition to recognizing the precautionary principle as part of the environmental law of India, the Indian Supreme Court further defined the term as follows:

(i) Environment measures - by the State Government and the statutory Authorities must anticipate, prevent' and attack the causes of environmental degradation.
(ii) Where there are threats of serious and irreversible damage lack of scientific certainly should not be used as the reason for postponing, measures to prevent environmental depredation.
(iii) The "Onus of proof" is on the actor or the developer/industrial to show that his action is environmentally benign.

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[54] 2017 CLD 772
[55] PLD 2015 Lahore 522
[56] AIR 1996 SC 2715

In addition to reformulating the definition of the precautionary principle while retaining its essence, what is most significant about the ruling is the third limb of the definition. It is important to understand in this context that the precautionary principle must in its application put the presumption against the environmental change. The rationale behind such a rule is that it is the action that seeks to change the status quo, hence, it is the burden of the actor to show that the action is worth taking and would not negatively affect the environment.

Building on the Vellore Judgment, the Indian Supreme Court in **Andra Pradesh Pollution Control Board vs. M.V. Nayudu**[57], discussed not only the burden of proof requirement provided under the Vellore ruling but also highlighted the uncertainty of scientific research and its relation to the precautionary principle. In this regard, the Indian Supreme Court observed that the principle replaced an earlier principle known as the assimilative capacity principle and stated as follows:

"A basic shift in the approach to environmental protection occured initially between 1972 and 1982. Earlier the Concept was based on the `assimilative capacity' rule as revealed from Principle 6 of the Stockholm Declaration of the U.N.Conference on Human Environment, 1972. The said principle assumed that science could provide policy-makers- with the information and means necessary to avoid encroaching upon the capacity of the environment to assimilate impacts and it presumed that relevant technical expertise would be available when environmental harm was predicted and there would be sufficient time to act in order to avoid such harm. But in the 11th Principle of the U.N. General Assembly Resolution on World Charter for Nature, 1982, the emphasis shifted to the `Precautionary Principle', and this was reiterated in the Rio Conference of 1992 in its Principle 15 which reads as follows:

> *"Principle 15: In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage; lack of full scientific certainity shall not be used as a reason for proposing cost-effective measures to prevent environmental degradation."*

In regard to the cause for the emergence of this principle, Charmian Barton, in the article earlier referred to in Vol.22, Harv. Envtt. L.Rev. (1998) p.509 at (p.547) says:

"There is nothing to prevent decision makers from assessing the record and concluding there is inadequate information on which to reach a determination. If it is not possible to make a decision with "some" confidence, then it makes sense to err on the side of caution and prevent

[57] AIR 1999 SC 812

activities that may cause serious or irreverable harm. An informed decision can be made at a later stage when additional data is available or resources permit further research. To ensure that greater caution is taken in environmental management, implementation of the principle through Judicial and legislative means is necessary."

The Indian Supreme Court in **Narmada Bachao Andolan versus Union of India**[58], building further on the concept of sustainable development, discussed its interplay with the precautionary principle as follows:

"The precautionary principle suggests that where there is an identifiable risk of serious or irreversible harm, including, for example, extinction of species, widespread toxic pollution is major threats to essential ecological processes, it may be appropriate to place the burden of proof on the person or entity proposing the activity that is potentially harmful to the environment.

It appears to us that the precautionary principle and the corresponding burden of proof on the person who wants to change the status quo will ordinarily apply in a case of pulluting or other project or industry where the extent of damage likely to be inflicted is not known. When there is a state of uncertainty due to lack of data or material about the extent of damage or pollution likely to be caused then, in order to maintain the ecology balance, the burden of proof that the said balance will be maintained must necessarily be on the industry or the unit which is likely to cause pollution. On the other hand where the effect on ecology or environment of setting up of an industry is known, what has to be seen is that if the environment is likely to suffer, then what mitigative steps can be taken to off set the same. Merely because there will be a change is no reason to presume that there will be ecological disaster. It is when the effect of the project is known then the principle of sustainable development would come into play which will ensure that mitigative steps are and can be taken to preserve the ecological balance. Sustainable development means what type or extent of development can take place which can be sustained by nature/ecology with or without mitigation."

In addition to the Indian Supreme Court, the National Green Tribunal of India (the "**NGT**") has also developed jurisprudence relating to the precautionary principle. In **Jeet Singh Kanwar versus Union of India**[59], the issue before the NGT pertained to the grant of environmental clearance to the installation and operation of a coal based thermal power plant. The NGT's analysis struck a balance between industrial activity and environmental protection as required by the principle of sustainable development. However, the NGT went on to hold that the balancing act required proper evaluation of both aspects, namely, degree of environmental degradation which may occur due to the industrial activity and degree of economic growth to be

[58] (2000) 10 SCC 664

[59] Order dated 16-04-2013

achieved while acknowledging the *Vellore* principle that the person who wants to change the status quo has to discharge burden of proof to establish that the proposed development is of a sustainable nature.[60]

That similarly, the NGT in **Janajagrithi Samiti versus Union of India**[61], directed the Karnataka Ppower Transmission Corporation Limited not to fell trees nor to destroy the bio-diversity in an 8.3 kilometer stretch in order to erect 400 KV double circuit transmission system. The NGT's rationale behind the ruling was that irreparable loss would occur within the rich and rare bio-diversity of the Western Ghats and cause restrictions in habitat connectivity and corridor value of the forest.[62]

However, the NGT, in its application of the principle in the context of sustainable development upheld the grant of environmental clearance to a coal based thermal power plant in BB Nalwade versus Ministry of Environment and Forest (Order dated 29-11-2011). That the NGT, while holding that the project did not violate sustainable development, instead of applying the precautionary approach, relied on the scientific studies and statistical information in upholding the viability of the project and its impact on the environment. In this regard, the NGT went on to state that *"production of electricity is very essential for industrial growth apart from domestic need. In the light of the existing power scenario in the country, the project under consideration when operated within the eco-legal frame work may contribute significantly to sustainable industrial development in the area under consideration."*

That furthermore, other important judgments reiterating the aforesaid principles are **MC Mehta versus Union of India**[63] and **MC Mehta versus Union of India**[64].

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[60] Acces to Environmental Justice in India with Special Reference to National Green Tribunal: A Step in the Right Direction. Gitanjali Nain Gill, available at Ontario International Development Agency. ISSN 1923-6654 (print) ISSN 1923-6662 (online). Available at http://www.ssrn.com/link/OIDA-Intl-Journal-Sustainable-Dev.html

[61] Order dated 07-03-2013

[62] Ibid.

[63] AIR 1997 SC 734

[64] AIR 2004 SC 4016

PRINCIPLE 3 - The Polluter Pays Principle

This principle is enshrined in Principle 16 of the Rio Declaration and states as follows:

"National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."

The principle was also adopted in 1972 by the Organization for Economic Cooperation and Development (OECD) as an economic principle for allocating the costs of pollution control in order to ensure sustainable development. Being an economic principle, the OECD approach to the principle also states that apart from the bearing the costs of prevention and control, the polluter should also generally not be given assistance for pollution control in the form of grants, subsidies or tax allowances.

Although originally, in 1972, the principle was that of partial internalization, in recent years, the principle has even been extended to the inclusion of the following:

- costs of administrative measures
- costs of damage caused
- accidental pollution

It is, however, noteworthy that the concept permits the passing on of such costs to the consumers. The polluter may share this cost with other potential polluters or pass the same on to its consumers through its pricing structure. Furthermore, the principle was originally formulated as an economic principle and has only subsequently become a legal one. As such, one application of the principle entails that it is not one of equity or retribution i.e. it is not designed to punish polluters but in fact to incorporate the environmental costs in the decision making process. A result of this approach is that there is no longer a cost free use of the environment and, in turn, alleviate the economic burden on state authorities.

However, the legal application of the principle in recent years, in addition to being based on restitution, is also retributory in nature. The jurisprudence relating to the principle is negligible. The principle does find mention in a few rulings of the courts

of Pakistan, however, the principle has rarely been expounded. The Honourable Lahore High Court in **Muhammad Ayaz versus Government of Punjab**[65] recognizes it as a necessary tool for sustainable development.

That furthermore, the majority of the Environmental Tribunal Lahore in **DG EPA versus Walid Junaid Steel Mills**[66] dismissed a complaint against an industrial unit accused of pollution on the ground that the unit seemed to be closed and not operational. However, interestingly, the minority opinion, differed by applying the polluter pays principle. The minority view was that at the time of the original complaint, there was a *prima facie* allegation of polluting on part of the accused and closure of unit was not sufficient ground for the proceedings to be discontinued as the polluter had to be held accountable for past pollution, if so found guilty.

That in a similar case, **DG EPA versus Qasim Glass Bottles**[67], the majority again dismissed the claim on account of the unit not being operational. However, in this case, the minority having found sufficient connection between the accused and the commission of the offence, charged the polluter PKR 500,000 on account of past pollution. It must, however, be stated that the jurisprudence in Pakistan has failed to prescribe any standards of evidence by which quantification of pollution can be attributed to a single party.

The Polluter Pays Principle in the Indian Context

The Indian Supreme Court in **Indian Council for Enviro-Legal Action versus Union of India**[68] defined the principle as *"Once the activity carried on is hazardous or inherently dangerous, the person carrying on such activity is liable to make good the loss caused to any other person by his activity irrespective of the fact whether he took reasonable care while carrying on his activity. The rule is premised upon the very nature of the activity carried on"*. However, it is important to note that the Court's view in this regard was also that the Court is not limited to the claim put forward in its application of the principle but has the power to assess the actual costs of the situation.

That similarly, the Indian Supreme Court in the *Vellore* case ruled as follows:

"Consequently the polluting industries are "absolutely liable to compensate for the harm caused by them to villagers in the affected area, to the soil and to the underground water and hence, they are bound to take all necessary measures to remove sludge and other pollutants lying in the affected

65 2017 CLD 772
66 CLD 1168 2011
67 2011 CLD 1024
68 (1996) 3 SCC 212

areas". The "Polluter Pays" principle as interpreted by this Court means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also the cost of restoring the environmental of the damaged environment is part of the process of "Sustainable Development" and as such polluter is liable to pay the cost to the individual sufferers as well as the cost of the reversing the damaged ecology The precautionary principle and the polluter pays principle have been accepted as part of the law of the land."

Acknowledging the above-mentioned judgments, the Indian Supreme Court in **M.C. Mehta versus Kamal Nath**[69] stated that *"one who pollutes the environmental must pay to reverse the damage caused by his acts."* In doing so, the court directed, *inter alia*, that the polluter must pay compensation as the cost of restitution of the environment and ecology of the area.

[69] AIR 2000 SC 1997

PRINCPLE 4 - The Right to Nature & the Responsibility to Protect Nature

Although several constitutions such as those of the Republic of Maldives[70], the Kingdom of Bhutan[71] and the Republic of Nepal[72] contain a right to environment separate and distinct from the right to life, such rights always stem from the rights of mankind itself where the obligation or responsibility to protect nature stems from the right to self-preservation that mankind may have.

In the context of Pakistan, there is only a right to life under Article 9 of the Constitution and no right to environment, however, the jurisprudence, as developed by the Superior Courts, has gone on to read the right to life expansively so as to include the right to a quality life and the right to natural resources. The public trust doctrine, as applied by the Courts, in itself gives semblance of a right to nature and additionally obligates the state to act as the guardian of nature on behalf of the public.

The backbone of such an interpretation was contained in the **Shehla Zia case**[73] wherein the Honourable Supreme Court interpreted the rights under Article 9 to include not mere physical existence but, in fact, the right to a quality life including adequate nutrition, clothing and shelter. Similarly, the Honourable Supreme Court has, in the **Salt Mines case**[74], held the right to life as including the right to have clean unpolluted water.

Furthermore, the Balochistan High Court, in the **Stone Crushing Plants case**[75] has, while setting out guidelines for stone crushing plants within the limits of Quetta City, further recognized that the right to unpolluted air as an inherent part of the right to life. The Honourable Court has also dilated upon the limitations on the right to business and trade under Article 18 in the context of Article 9, stating that the latter would prevail.

[70] Article 22 of the Constitution of the Republic of Maldives, 2008
[71] Article 5 of the Constitution of the Kingdom of Bhutan, 2008
[72] Article 30 of the Constitution of Nepal, 2015
[73] PLD 1994 SC 693
[74] 1994 SCMR 2061
[75] 2015 YLR 2349

Similarly, the Sindh High Court has, in the **Nestle Case**[76] recognized under the public trust doctrine that it is the Government's responsibility to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial purposes. Although the case related to grant of an injunction and not a complete decision upon merits, the principle enunciated therein can still be relied upon.

The jurisprudence mentioned hereinabove can arguably be used to ensure a right to nature through the enforcement of the right to life under Article 9. However, it is reiterated that such a right only stems from the rights of humans beings themselves and their right to enjoy nature. The question that this raises is, whether the responsibility to protect nature is only an obligation on an individual due to the rights of mankind in general and its reliance on nature for survival or does nature itself have an inherent right independent of mankind.

Flora and fauna, clubbed together as wildlife, has to some degree always been granted rights by virtue of it being considered as living. In this regard it is important to note the **Houbara Bustard Case**[77] wherein the Honourable Supreme Court acknowledged that human beings, as stewards of the earth, have a duty to preserve and conserve natural resources and species. Although, such a duty also stems from the rights of human beings themselves, the Honourable Court also acknowledged the reflexive nature of such preservation and conservation with the survival of the human race itself. Although, this does not entirely advocate for an independent set of rights of nature itself, it leaves room to argue that nature, in itself has a right to exist and flourish.

However, the question remains whether such rights are or may be accorded to the supposedly insentient and inanimate objects in nature distinct from flora and fauna. It is noteworthy, in this regard, that the first constitution to recognize such a right is the **Constitution of the Republic of Ecuador, 2008,** chapter seven of which states that *"nature has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes."* Furthermore, the constitution also goes on to grant the people the legal authority to enforce these rights on behalf of the ecosystems.

In more recent development, the Whanganui River, New Zealand, has now been granted the same legal rights as a human being. The Maori Tribe began its struggle

[76] 2005 CLC 424
[77] 2016 SCMR 48

as far back as 1873 to ensure such protections are extended and only now, have the said rights been granted to the river by the country's lawmakers through appropriate legislation.

In the Indian context, the High Court of Uttarakhand in **Mohd. Salim versus State of Uttarakhand**[78] has granted the Ganges and Yamuna Rivers and their tributaries the status of a juristic person. Furthermore, in doing so, the Court declared the Director NAMAMI, the Chief Secretary of Uttarakhand and the Advocate General of the State of Uttarakhand the human face of the rivers in *loco parentis* obligated to promote the health and well-being of the rivers.

That furthermore, the High Court of Uttarakhand in **Lalit Miglani versus State of Uttarakhand**[79], only a few days after the aforementioned judgment, also declared the Gangotri and Yamunotri glaciers along with rivers, streams, rivulets, lakes, air, meadows, dales, jungles, forests wetlands, grasslands, springs and waterfalls in Uttarakhand the same rights as those given to the Ganges and Yamuna rivers.

It is such developments that evidence the growing judicial conscience with respect to environmental matters but also progression in the human experience of nature. With the advent of the anthropocene and man-made climate change, a new conscience is developing where mankind realizes its responsibility to protect nature not because of nature's importance to mankind, but because nature has an independent right to exist and flourish. Increasingly, individuals have filed petitions on behalf of inanimate objects such as the River Ganges in **MC Mehta versus Union of India**[80] to stop the polluting of the river by the neighboring tanning industries. Similarly, in **T.N. Godavarman versus Union of India**[81], the petitioner brought the matter before the court for the protection of the Nilgiris forest against illegal timber operations. The advantage of such an approach is that it gives a voice to the inanimate. Even though, in strictly legal terms, the party bringing suit is pleading its own rights, the inevitable outcome is that environmental jurisprudence is guided in a direction where polluters are informed of their responsibility to protect nature.

[78] W.P. (PIL) No. 126 of 2014
[79] W.P. (PIL) No. 140 of 2015
[80] AIR 1988 SC 1037
[81] AIR 1997 SC 1228

PRINCIPLE 5 - Ecological Sustainability and Resilience

Charles L. Redman[82], defines resilience as the capacity of a system to experience shocks while retaining functions, feedback capabilities, and therefore identities. He further goes on to state that the resilience theory emphasizes that change is as normal a condition for social-ecological systems stability, and a system may exist in multiple states. The goal of a resilience based approach is to allow a system to respond to changing conditions so that there are minimal losses to the system and its essential functioning. From this definition, it is clear that resilience is a descriptive and qualitative assessment of character and a system, that despite exogenous forces, qualitatively maintains the same, is said to be resilient.

Certain crucial aspects of resilience identified are as follows[83]:

i) Latitude: the maximum amount a system can be changed before losing its ability to recover (before crossing a threshold which, if breached, makes recovery difficult or impossible).
ii) Resistance: the ease or difficulty of changing the system; how "resistant" it is to being changed.
iii) Precariousness: how close the current state of the system is to a limit or "threshold."
iv) Panarchy: because of cross-scale interactions, the resilience of a system at a particular focal scale will depend on the influences from states and dynamics at scales above and below. For example, external oppressive politics, invasions, market shifts, or global climate change can trigger local surprises and regime shifts.

In light of the foregoing, it is to be understood that given the qualitative nature of assessment with respect to resilience entails that resilience is not in of itself a desired consequence in ecological systems. It is therefore, to be understood that resilience must be seen in conjunction with the normative judgments in relation to sustainability goals with respect to basic ideas of inter-generational and intra-generational justice in order to assess its desirability. A working paper from the

[82] School of Sustainability, Arizona State University
[83] Walker, B., C. S. Holling, S. R. Carpenter, and A. Kinzig. 2004. Resilience, adaptability and transformability in social–ecological systems. Ecology and Society **9**(2): 5. [online] URL: http://www.ecologyandsociety.org/vol9/iss2/art5/

University of Lüneburg[84] goes on to illustrate the aforementioned relationship between the two concepts as follows:

"In traditional models of bistable systems only two relationships of resilience and sustainable development are possible:

i) a situation in which the system is resilient in a desired state such that the systems' resilience has to be maintained for sustainable development, and
ii) a situation in which the system is resilient but is currently not in a desired state, such that resilience prevents a sustainable development."

From the perspective of climate justice, the concept of resilience, in addition to being viewed through a qualitative lens, must also be viewed from a human impact and requirement lens.

[84]http://www.leuphana.de/fileadmin/user_upload/Forschungseinrichtungen/ifvwl/WorkingPapers/wp_146_Upload.pdf

PRINCIPLE 6 - Ecological Functions of Property

This is a concept the development of which is attributed to the Superior Tribunal de Justiça (STJ), one of Brazil's highest courts. This principle articulates the notion that private rights are constrained by an obligation to maintain those natural systems that are necessary for the public to enjoy its constitutionally guaranteed right to an ecologically balanced environment.

The ecological function of property is in fact developed from its 'social function' contained in **Clause 23 of Article 5 of the Constitution of the Federative Republic of Brazil**. The Brazilian Constitution guarantees right to property under Clause 22 of Article 5, however, Clause 23, as aforementioned places a limitation by stating that property shall observe its social function. Similarly, Article 225 provides that *"all have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and community shall have the duty to defend and preserve it for present and future generations."* It is to be noted that the ecological function of property is a concept developed by the combined application the aforementioned provisions and as such, a property right is, under Brazilian law, seen as a relative right rather than an absolute right.

Similarly, in the context of Pakistan, the right to property acquire, hold and dispose property under Article 23 is not an absolute right and is, as such, subject to the constitution and any reasonable restrictions impose by law in the public interest. Therefore, the right to life and environmental restrictions imposed by law can be used to limit property rights and require a balancing of an individual's right to use his property with the rights of the public. In essence, rather than viewing an environmental regulation as a taking of private property, unsustainable or destructive use of land can in turn be seen as an encroachment or taking of the public's ecological interest in the land.

The concept is also analogous to the Public Trust Doctrine which holds that a right held by the general public to essential natural resources that are held in trust by the government and cannot be wholly reduced to private use or consumption. In the context of Pakistan, as aforementioned, the doctrine has been applied in the Nestle case where the court held that natural resources life air, sea, water and forests are

like public trust, such resources being a gift of nature should be made freely available to everyone irrespective of their status.

PRINCIPLE 7 - Intra-Generational and Inter-Generational Equity

Reiterating the definition of sustainable development, as conceived by the Brundtland Report and adopted in the PEPA, that *"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*, it is easy to understand that inter-generational equity is an integral part of sustainable development. However, another concept that needs to be explored is that of intra-generational equity.

In this regard, it is first and foremost important to understand the nature of the climate change phenomenon and consequentially, that of climate justice. Historical differences in the contributions of various states and stakeholders towards aggravating climate change give rise to the idea of common but differentiated responsibilities which is an integral part of documents such as the Rio Declaration and the Framework Convention on Climate Change. This disparity between contribution and vulnerability, in essence raises an ethical question about allocation of responsibility in order to truly further the cause of climate justice.

Intra-generational equity functions on two levels, the global and the national. At the global level, the disparity between contributions towards climate change raises the ethical question of distribution of resources between nations. This distribution of resources is not necessary due to the fact that the affectees of climate change might not necessarily be the actual contributors to the phenomenon, but also because poverty deprives people of the choice to be environmentally sound and binds them to activities that fuel environmental degradation. As a result, although wealthier nations have historically contributed more towards environmental degradation compared to the developing world, the developing world is henceforth, more likely to continue its contribution given that most developed nations, given their vastness of resources, are moving towards more eco-friendly methods. Intra-generational equity at a global level requires developed nations extend support of resources towards the developing nations to lessen their contribution and assist their transition to eco-friendly measures.

At a national level, intra-generational equity requires that the equitable distribution of resources and support with varying degrees of responsibilities with respect to

mitigation and adaptation efforts within the national demographics. In essence, where inter-generational equity entails that future generations receive the same access to resources as the present generation is receiving, intra-generational equity entails that individuals in the same generation receive equal access to resources left by the previous generation. Additionally, a segment of the present generation should not be exposed to disproportionate environmental risks and burdens. In this regard, the Nestle case is reiterated which held that natural resources like air, sea, water and forests are like public trust, such resources being a gift of nature should be made freely available to everyone irrespective of their status.

When further viewed in terms of the environmental examination and impact assessments, questions of intra- & inter-generational equity require a movement beyond the traditional cost benefit analysis. Impact assessments should, in fact, view the impact of any project in a manner that assesses the projects impact spatially across various demographics and also temporally through generations rather than in a cost and profit model. Only then can responsibilities be truly assigned and the actual level of contributions towards environmental degradation be calculated.

The Honourable Peshawar High Court in **Ali Steel Industry versus Government of Khyberpakhtunkhwa**[85] observed as follows:

"The corpus of environmental laws have a singular purpose of protecting life and nature including the International Environmental Principles of sustainable development, precautionary principle, environmental impact assessment, inter and intra¬-generational equity and public trust doctrine. Our existing jurisprudence, since the landmark judgment of Honourable Apex Court in case of Mst. Shehla Zia v. WAPDA reported in PLD 1994 SC 693 rests environmental justice on right to life enshrined under Article 9 to mean a right to a healthier and cleaner environment. Time has come to move on. To us environmental justice is an amalgam of the constitutional principles of democracy, equality, social, economic and political justice guaranteed under our Objectives Resolution, the fundamental right to life, liberty and human dignity given under Article 14 which include the international environmental principles of sustainable development, precautionary principle, environmental impact assessment, inter and intra-generational equity and public trust doctrine. Environment and its protection has come to take center stage in the scheme of constitutional rights. Right to environment that is not harmful to the health or well-being of the people and an environment that protects the present and future generations is an essential part of political and social justice and even more integral to the right to life and dignity under our Constitution."

[85] 2016 CLD 569

Inter-generational equity in the context of sustainable development has been acknowledged to include heritage. In **Guruprasad Rao versus State of Karnataka**[86], the Indian Supreme Court recognized that the *"When seen in this light, the protection of the ancient monuments for the benefit of future generations has to be balanced with the benefits which may accrue with mining and other development related activities. In our view, the recommendations and suggestions made by the Committee for creation of Core Zone and Buffer Zone appropriately create this balance. While mining activity is sure to create financial wealth for the leaseholders and also the State, the immense cultural and historic wealth, not to mention the wealth of information which the temple provides cannot be ignored and every effort has to be made to protect the temple."* This view was further endorsed by the Honourable Lahore High Court in **Kamil Khan Mumtaz versus the Province of Punjab**[87]**,** the orange line case.

In **State of Himanchal Pradesh versus Ganesh Wood Products**[88], the Indian Supreme Court invalidated a forest based industry while recognizing that the current generation has no right to deplete resources and imperil the safety and well-being of future generations.

That furthermore, the High Court of Uttarakhand in **Lalit Miglani versus State of Uttarakhand**[89] also held that *"past generations have handed over the 'Mother Earth' to us in its pristine glory and we are morally bound to hand over the same Mother Earth to the next generation."*

[86] (2013) 8 SCC 418
[87] PLD 2016 Lahore 699
[88] (1996) 6 SCC 363
[89] W.P. (PIL) No. 140 of 2015

PRINCIPLE 8 - Gender equity

The United Nations Framework Convention on Climate Change (UNFCC) acknowledges that climate change has a greater impact on those sections of the population, in all countries that are more reliant on natural resources for their livelihood. Furthermore, these groups are often the ones with the lowest capacity to respond to natural hazards such as droughts, landslides, floods and hurricanes. The UNFCC further recognizes that women are an overwhelming majority of this group and their unequal participation and representation in the decision-making processes. This compounds inequalities and often prevents women from fully contributing towards climate policy and implementation. Yet the place of women within all structures makes them potentially valuable contributors due to their local knowledge and ability to lead efforts of sustainable resource management and sustainable practices at the household and community levels. It is noteworthy that the 21st session of the Conference of Parties held at Paris also acknowledged the need for gender equity and carried out studies of gender composition comparisons of constituted bodies under the UNFCC, the Kyoto Protocol and Party delegations between 2014 and 2015 in order to promote a greater gender balance in advancing a more gender sensitive climate policy.

PRINCIPLE 9 - Participation of Minorities and Vulnerable Groups

As aforementioned, the nature of climate change and environmental degradation is such that certain groups are affected disproportionately compared to their contributions to the phenomenon. As with gender equity issues, as aforementioned, minority groups are also vulnerable groups who are greatly impacted but have little say in climate or environmental policy. The public participation requirement in the environmental impact assessments is potentially an adequate method of ensuring that the views of minorities and other vulnerable groups are seen in the context of intra- & inter-generational equity to ensure that projects undertaken and environmental policy in general accounts for the concerns of such vulnerable groups.

It is also worth mentioning that the importance of such public participation was also noted in the case of Shehla Zia wherein the Honourable Supreme Court, in addition to promoting a precautionary approach, directed that public notice shall be given and as a result public objections shall be invited and entertained prior to installing, constructing any grid station or transmission line.

That similarly, in **Pakistan Defence Officers Housing Authority versus Federation of Pakistan**[90] the Sindh High Court while holding that the requirement of public participation is mandatory held as follows:

"In view of the foregoing discussion, I am of the view that DHA has been able to establish a prima facie case. There has been a serious breach of the applicable statutory provisions. The project required an EIA but the Agency has purported to accord approval to an IEE. The mandatory requirements relating to public participation and hearing, and solicitation of comments from the concerned Government Agencies have not been complied with. The Project has a direct and close connection with DHA administered areas, and these will be affected by the Project. Prima facie, DHA will be directly affected by the Project, and was also a concerned Government Agency. It was entitled by mandate of law to give its input before the Agency made a determination. Prima facie, the determination on the environmental issues is not in accordance with law but in serious breach and disregard thereof. DHA may well suffer irreparable loss and injury if the Project results in a manifold increase of traffic, and possibly unsustainable load, on its roads and in particular the

[90] 2014 CLD 1279

26th Street. The Project is of such a nature that it will permanently alter the flow of traffic and the use of roads and attendant facilities. These factors are of direct concern to DHA and it may well suffer irreparable injury as a result thereof. The balance of convenience is also in favour of DHA and against the proponent of the Project, KMC, and its financier, Bahria Town. All the ingredients for interim relief are therefore in place. Needless to say, the observations herein are tentative in nature and should this Suit go to trial, it will be decided on its merits completely uninfluenced by anything said here." – Para 26

The importance of the principle was further stressed by the Sindh High Court in **Dadex Eternit Limited versus Syed Haroon Ahmed**[91] where the Honourable Court stated as follows:

"In a judgment reported in PLD 2002 Lahore 555 (Anjum Irfan v. LDA and others), it has been held that mere promulgation of law of Environmental Protection does not yield good results unless the law is strictly implemented in letter and spirit without fear, favour and nepotism. Active participation and involvement of public is necessary to enforce pollution control regime. Unless masses are educated, awareness and sensitization campaign is launched by Government and non-Governmental Organizations in active collaboration with media in discharge of its social responsibilities objective of the Pakistan Environmental Protection Act, 1997 will remain a dream to accomplish. After launching a successful campaign for the restoration and Independence of Judiciary role of the Bar Associations and Bar Councils has enhanced to educate legal fraternity and public in general. Pakistan Environment Protection Act, 1997 cannot be enforced without the involvement and active participation of masses in the implementation of environmental programmes as the same is must for the success of the pollution control." – Para 30

The Honourable Sindh High Court in **Salma Iqbal Chudrigar versus Federation of Pakistan**[92], while deciding the question of a proposed flyover being built, relied on, *inter alia*, **Shehri CBE versus Government of Pakistan**[93] and ruled that even though the flyover was being built in the public interest for its welfare, the requirements of section 12 of the Pakistan Environmental Protection Act, 1997, relating to IEE and EIA including the requirement of public hearing had to be fulfilled. It is also worth mentioning that the Honourable Court also ordered that in case the EIA finds any adverse impact, DHA, the proponent, would be found liable for compensation to the affected persons in light of the polluter pays principle. It is

[91] PLD 2011 Karachi 435
[92] 2009 CLD 682
[93] PLD 2007 Karachi 293

also worth mentioning that a similar requirement of public participation has been upheld by the August Supreme Court in **Farooq Hamid versus LDA**[94].

In similar matters pertaining to construction in urban areas, the courts have consistently held that the requirements of Section 12, including the requirement of public notice and public hearings are mandatory including **Muhammad Tariq Abbasi versus Defence Housing Authority**[95], **Shehri CBE versus LDA**[96], **Queens Road Lane versus City District Government**[97] **& Abdul Qayyum versus DG EPA**[98].

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[94] 2008 SCMR 468
[95] 2007 CLC 1358
[96] 2006 SCMR 1202
[97] 2006 CLC 272
[98] 2005 CLD 1523

PRINCIPLE 10 - Indigenous and Tribal Peoples

Indigenous and tribal peoples are generally the first to face the direct effects of climate change due to their proximity, dependence and close relation to the environment and natural resources. Examples of global indigenous people and their climate change vulnerabilities include:

- Rural dwellers of the high altitude Himalayas who are severely affected by glacial melts resulting in overflow in the short run and less water in the long run and snow cover shrink;
- Indigenous Amazonians who are suffering from deforestation and forest fragmentation. Similarly, droughts in the Western regions of the Amazon forest are resulting in forest fires;
- Indigenous people of the Arctic who depend on hunting polar bears, walrus, seals, herding reindeer, fishing not only for food but also as a basis of their social and cultural identity. As a result of this the people are facing not only shortages of traditional food sources but also changing weather patterns are raising issues of human health and safety concerns.

PRINCIPLE 11 - Non-regression

Although it is often argued that the principle of non-regression was implicit in Principle 11 of the Rio Declaration which stated as follows:

"States shall enact effective environmental legislation. Environmental standards, management objectives and priorities should reflect the environmental and development context to which they apply. Standards applied by some countries may be inappropriate and of unwarranted economic and social cost to other countries, in particular developing countries."

However, the principle itself was explicitly framed in the follow up on the Rio Declaration two decades later known as the Rio+20, the outcome document of which was titled "The Future We Want"[99]. Paragraph 20 of the same stated as follows:

"We acknowledge that since 1992 there have been areas of insufficient progress and setbacks in the integration of the three dimensions of sustainable development, aggravated by multiple financial, economic, food and energy crises, which have threatened the ability of all countries, in particular developing countries, to achieve sustainable development. In this regard, it is critical that we do not backtrack from our commitment to the outcome of the United Nations Conference on Environment and Development. We also recognize that one of the current major challenges for all countries, particularly for developing countries, is the impact from the multiple crises affecting the world today."

After its formulation in Rio+20, the principle has become an important touchstone of sustainable development and climate justice which ensures not only the effective implementation of the commitments under Principle 11 of the Rio Declaration and furtherance of sustainable development, but the phrasing of paragraph 20, as aforementioned also ensures prevention from "backtracking" of the existing levels of environmental progression.

[99] https://sustainabledevelopment.un.org/futurewewant.html

PRINCIPLE 12 - Progression

Progression is a principle of sustainable going hand in hand with that of non-regression. As non-regression is a bar on backtracking, the principle of progression is a principle that casts an obligation on states, sub-national entities and regional integration organisations to progressively revise and enhance laws and policies related to environmental conservation and protection on a regular basis, based on the most recent scientific knowledge and policy developments to ensure than sustainable development is achievable across the board.

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Justice Ayesha A. Malik