



Citizens' Guide to Environmental Rights, Duties and Obligations

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List of Acronyms

EIA: Environmental Impact Assessment

EPA: Environmental Protection Agency

EPO: Environment Protection Order

ICCPR: International Convenant on Civil and Political Rights

IEE: Initial Environmental Examination

KANUPP: Karachi Nucelar Power Plant

KV: Kilovolt

KWSB: Karachi Water and Sewerage Board

LDA: Lahore Development Authority

NEQS: National Environmental Quality Standards

NGO: Non - Governmental Organization

NWFP: North - West Frontier Province

PEPA: Pakistan Environmental Protection Act, 1997

PLD: Pakistan Law Digest

PPC: Pakistan Penal Code

SLGO: Sindh Local Government Ordinance, 2001

WAPDA: Water and Power Development Authority

JUSTICE SALEEM AKHTAR Former Radge Sugreme Court of Pukistan President Environment Law Association

M-53/II/I Kh-e-Inehad, Phase VII, Defence Housing Authority Karschi-75500, Pakistan. Tel: 92-21-5848904, 5843-657 Fax: 92-21-5350931

Foreward

Environment is life and to protect life is the natural instinct of all living creatures in the universe. Then why are we so ignorant and unconcerned about the environment? It is this realization which has compelled WWF-Pakistan to publish this book. Its main objective is to create public awareness about environmental laws, rights, duties, obligations and authorities responsible for implementation of laws.

The unrestricted exploitation of the environment by developed countries compelled the international community to voice its concern to protect the environment by making the Stockholm Declaration, 1972. Thereafter it took on the shape of a movement to protect each country according to its need and commitment, to introduce provisions in its constitution and legislate domestic laws. International law developed environmental principles to protect the environment which helped the development of domestic laws. Thanks to the superior judiciary of Pakistan and other South Asian countries which by judicial activism protected environmental rights ,particularly in Pakistan ,giving them the status of fundamental rights and not only created awareness but provided a fertile ground for the development of green laws.

This book is a laudable effort to educate civil society and create awareness among the masses. No living society can exist without protecting the environment which is a trust in their hands for future generations. There are innumerable provisions of law concerning the environment that are not part of the environmental protection Act,1997. To collect such legal provisions in one place is a Herculean effort exercise which has been accomplished with perfection.

The author, resource persons and editors are renowned persons with knowledge and commitment to the cause of the environment. They have made valuable contributions in the field of environmental law, making it simple, understable and comprehensive. Such efforts should be continued and this book should be the first of a future series.

JUSTICE SALEEM AKHTAR

Former Judge

Supreme Court of Pakistan

President Emeritus

Pakistan Environment Law Association

Preface

WWF-Pakistan is implementing its Indus for All Programme (IFAP) in four priority ecosystems of the Indus Ecoregion. As part of its long-term vision for biodiversity conservation and livelihoods improvement in the Indus Ecoregion, the Programme intends to create environmental awareness and strengthen the capacity of all the stakeholders, especially civil society organisations and rural communities working and living in the ecoregion.

This guide will explain the national legal framework, and in particular the rights and duties regarding the environment specified in the following:

- Constitution of Pakistan, 1973;
- 2. Pakistan Environmental Protection Act, 1997;
- 3. Other related environmental legislation; and
- 4. The Devolution Plan, 2001

At present, there is a severe lack of awareness on environmental laws and rights as environmental law is a comparatively new area of focus in Pakistan. There are no comprehensive laws on protection and conservation of environment apart from a framework of legislation that largely includes the Pakistan Environmental Protection Act, 1997, and some other related laws on natural resource management. The existing legal framework has provided for various rights and privileges to civil society but there is little public information and awareness regarding these laws. In addition, lack of information and poor implementation allows open flouting of the law. For instance, bans on illegal hunting, poaching, logging, and unsustainable fishing are violated with impunity without redress or enforcement of punitive measures. Therefore, this guide attempts to:

- Create awareness;
- Build the capacity of citizens, especially in the rural communities and to educate them about their rights and empower them, and;
- Prevent further degradation of environment and promote conservation and sustainable development.

With the hope that this document will help in the promotion and conservation of the environment.

Huma Ikramullah Kashif Author

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Prologue

While Pakistan has several laws that are designed to safeguard and manage environmental resources, very little information is available about these laws. Moreover, any information that might be available is both difficult to understand and not available in one place. This 'Citizens' Guide to Environmental Rights, Duties and Obligations' has been designed to meet this need. It also aims to inspire and engage individuals, communities and organisations to join forces and save Pakistan's natural resources.

Published by WWF – Pakistan's Indus for All Programme this publication is an attempt to bring these laws and their application in a single easy to read compilation. While the guide offers comprehensive coverage of the range of environmental legislation in Pakistan, it also highlights environmental concerns peculiar to the province of Sindh. To ensure greater accessibility, this guide will also be published in Sindhi.

We hope that you will find this handbook useful not only as tool for research but also as a means of advocacy. For instance, you will discover that while 'environmental tribunals' have been established under the law, very few of them are accessed for environmental justice because there is little information available for the layperson on their function and how to access them.

As ever, we are interested in hearing from you about how you, as individuals, as organizations and as communities have successfully used this handbook. For more information about the Indus for All Programme and how to contact us please visit our website at: www.foreverindus.org.

Dr. Ghulam Akbar Regional Director WWF - Pakistan

Chapter 1

The Basics of Environmental Law

1.1 Why do we need to protect the environment?

The term "environment" refers to everything that is around us: land, water, and atmosphere, places of special importance, plant and animal life that influence human life and the well-being of communities.

A healthy lifecycle requires access to clean air and water, safe living areas and sufficient and healthy food. A bad environment affects vulnerable populations both economically and socially as they are the first to suffer.

Section 2(x) of the Pakistan Environmental Protection Act, (PEPA), 1997 defines the environment as:

- (a) Air, water and land;
- (b) All layers of atmosphere;
- (c) All organic and inorganic matter and living organisms;
- (d) The ecosystem and ecological relationships;
- (e) Buildings, structures, roads, facilities and works;
- (f) All social and economic conditions affecting community life; and
- (g) The inter-relationships between any of the factors in sub clauses (a) to (f).¹

This overarching definition of environment covers not only natural resources but also the impact of human activity on ecological systems.

1.2 Indus Ecoregion and Associated Natural Resources

WWF defines an ecoregion as:

A large area of land or water that contains a geographically distinct assemblage of natural communities that:

- share a large majority of their species and ecological dynamics;
- (b) share similar environmental conditions, and
- (c) interact ecologically in ways that are critical for their long-term persistence.

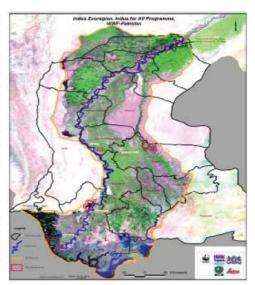
1.2.1 Significance of the Indus ecoregion

The Indus Ecoregion is one of the 40 priority ecoregions in the world identified by the Global 200. The Global 200 ranks the earth's most biologocally outstanding terrestrial, freshwater and marine ecosystems into ecoregions and so far 238 ecoregions have been identified all over the world. The analysis and rankingwas jointly carried out in 1997 by WWF with the help of institutions such as the National Geographic Society, Birdlife International, and the United Nations Environment Programme. The Indus Ecoregion lies in the lower Indus basin in Pakistan.

¹ Section 2 (x), Pakistan Environment Profection Act, 1997

It covers approximately 65 per cent of the Sindh Province while a small north-western part of the ecoregion extends into Balochistan. The fifth largest delta in the world, the Indus delta forms the southern part of the Indus Ecoregion and covers an area of 472,800 ha. Its 129,000 ha of mangroves, mostly *Avicennia marina*, comprise 97 per cent of the total mangrove area in the country. This is said to be the seventh largest mangrove forest in the world.

The delta supports a number of species of migratory waterfowl (including the threatened Dalmatian Pelicans), fish (including Palla - *Tenualosa ilisha*), and dolphins (Plumbeous dolphin, Finless porpoise, and Bottlenose dolphin).



1.2.2 Environmental Problems Associated With the Indus Ecoregion²

Threats, Causes and Effects to the Indus Ecoregion

Threats 1: Reduction of freshwater flow into the Indus delta

Causes

- ☐ Upstream diversion
- ☐ Lack of political constituency of en vironment
- ☐ Increased water demand from different sectors

Effects

- □ Loss of habitat
- Loss of mangroves
- ☐ Sea intrusion
- ☐ Reduction of fish species
- □ Loss of livelihood

Consequences: Rising poverty

Threats 2: Water Pollution

Causes

- ☐ Disposal of untreated industrial effluent
- Population growth
- Lack of political will and institutional deficiencies
- ☐ Extensive use of chemicals in agriculture inputs

Effects

- ☐ Loss of habitat and biodiversity
- Marine/riverine pollution
- Degradation of wetlands such as Manchhar Lake
- Contamination of ground water

Consequences: Displacement and migration, poor human health



A view of mangrove degradation in Keti Bunder



Industrial effulents

² Khan, M.Z., et al. 2008. Indus Ecoregion Communication and Awareness Strategy. Indus for All Programme. WWF – Pakistan, p.1

Threats 3: Illegal Hunting and Logging
Causes
 Weak policy enforcement (legal enforcement
☐ Lack of awareness
☐ Land encroachment
Effects
☐ Loss of riverine forest ecosystem
☐ Extinction of species
Consequences: Inequitable access
to natural resources.



A bird shot for sale



Air pollution from smoke

Threats 4: Climate Change Causes

- □ Development paradigm
- □ Emission of greenhouse gases

Effects

- □ Irregular weather patterns
- □ Rising temperatures
- Land degradation in coastal areas
- Loss of livelihood of the deltaic communities

Consequences: Droughts, floods, cyclones and sea storms

Threats 5: Population Growth Causes

- Low literacy rates
- Religious and cultural taboos
- Poorly planned human settlements

Effects

- □ Food insecurity
- Increased energy requirements
- Increased housing demands
- Increased pressure on natural resources
- Rapid urbanisation



Children near Chotiari Reservoir

Consequences: Destruction of rich cultural and biological heritage, development disparity

Threats 6: Poor Governance

Causes

- □ Vertical decision-making
- □ Ineffective communication across government tiers
- Weak civil society institutions

Effects

- Unequal resource distribution
- Lack of ownership by communities over natural resources

Consequences: Vicious cycle of poverty and resource degradation

Threats 7: Poorly designed infrastructure

Causes

- ☐ Lack of adequate research
- Low priority assigned to environmental concerns
 Effects
- Alteration/loss of habitats e.g. loss of coastal lagoons, construction of Chotiari Reservoir Consequences: Social disharmony



Chotiari Reservoir

Threats 8: Desertification

Causes

- Water logging and salinity
- □ Sea intrusion
- Low ground water recharge

Effects

- □ Loss of productive land
- □ Loss of livelihood

Consequences: Weaker societies



An area near Chotiari Reservoir

Threats 9: Overexploitation of fisheries resources Causes

- □ Weak law enforcement
- Unsustainable and harmful fishing practices
- □ Lack of awareness

Effects

 Reduction in fish stocks such as Palla (Tenulosa illisha)



C Zafar Khar

Fishing with illegal nets

1.2.3 Why is it Important to Preserve the Indus Ecoregion?

There are over 400 settlements in the Indus Ecoregion with a population of one million people, whose livelihood largely depends on fishing. Some patches of riverine forests are found along the Indus that flows through the ecoregion and falls into the Arabian Sea. In addition, the ecoregion contains significant wetlands of which eight have been designated as Ramsar sites – wetlands of international importance. The significant wildlife species of the area include the Indus dolphin, Hog deer, gavial, Marsh crocodile and Grey partridge. The area has a rich cultural and religious heritage, as it traces back to Mohenjodaro, one of the earliest civilisations in the world that flourished along the River Indus.

This ecoregion should be conserved for its unique biological diversity, socio-economic significance and rich cultural heritage.³

¹ Khan, M.Z., et al. 2008. Indias Ecoregion Communication and Awareness Strategy. Indias for All Programme. WWF - Pakistan.

1.3 Which Laws are Relevant to the Environment?

There are four categories of law in Pakistan that support the relationship of people with the environment:

	The Constitution of Pakistan, 1973, especially the "Fundamental Rights"
	contained in the Constitution;
	The Common Law of Torts;
o	Ordinances; and
	Acts of Parliament (also referred to as legislation).

Certain Articles in the Fundamental Rights in the Constitution of Pakistan, 1973 protect our rights to a healthy environment. The following chapter will explain the environmental rights protected under the Constitution of Pakistan, 1973.

The Law of Torts deals with a breach of a duty independent of a contract between citizens which gives rise to a civil cause of action and for which compensation is recoverable. It deals with how people interact with each other in the context of environment. It protects the individual's right to use property and delineates how this right should not interfere with the rights of other people.

Legislation regulates how people use environment by directing how people access or use natural resources, like fish and wood that are found in environment. They also impose penalties on those who cause harm to environment. This chapter looks at strategies that individuals and communities can use to protect their environmental rights.

The Constitution, the Common Law of Torts, ordinances and acts of Parliament do not work in isolation from each other and can be used to identify rights and how best to protect them. For example, if community members are up against serious health problems as a result of air pollution, you may find that they are protected under the Constitution, the common law, and various other laws in the Constitution.

IMPORTANT!

CIVIL SOCIETY ORGANISATIONS SHOULD KNOW ABOUT ENVIRONMENTAL LAWS SO THAT THEY CAN CREATE AWARENESS AMONG PEOPLE IN THEIR COMMUNITY ABOUT THEIR CONSTITUTIONAL RIGHTS.

Chapter 2

The Constitution of Pakistan, 1973

2.1 Constitution of Pakistan, 1973 and Protection of Environment

In a landmark judgment made by the Honourable Justice Saleem Akhtar in the Shehla Zia case, the Supreme Court held that all citizens of Pakistan have the fundamental right to a clean environment, covered by the Right to Life" and Right to Dignity under Articles 9 and 14 of the Constitution, respectively.

Article 9 of the Constitution provides that "no person shall be deprived of life or liberty save in accordance with law." In the Shehla Zia case, the Supreme Court of Pakistan ruled that the word "life" covers all aspects of human existence. Although the word "life" has not been defined in the Constitution, the Court held that it did not just mean vegetative or animal life alone nor did it mean mere existence from conception to death. The Court held that "life" included all such amenities and facilities that a person born in a free country is entitled to enjoy with dignity both legally and constitutionally. The Supreme Court also accepted the importance of the Rio Declaration on Environment and Development⁵ and the precautionary principle included in Principle 15 therein.

2.2 Case Law: Shehla Zia and others vs. WAPDA®

In this case the Supreme Court ruled against the construction of a 132Kv grid station in the green belt of a residential locality in Islamabad.

On behalf of the residents of the affected area, a letter was sent to the Supreme Court raising two questions: whether any government agency could proceed with a project that endangers the life of citizens without their consent; and whether zoning laws vest rights in citizens which cannot be altered or withdrawn without the latter's consent. The Supreme Court invoked the Principle of Prudence and Precaution and issued a notice to Wapda.

The Court then appointed a commissioner to study Wapda's plan and record the likelihood of any adverse effects on the health of the residents and if necessary suggest any alteration or addition before the construction and location of the grid station. The Court also directed the government to appoint a commission including a scientist of international repute whose views could be taken into account before any new grid station was constructed. The Court further directed that in future, prior to the installation or construction of any grid station or transmission line, Wapda must issue public notices in the media in case of objections, and may finalise the plan once the objections are accounted for.⁷

^{*}PLD 1994 5C 693

¹ The United Nations Conference on Environment and Development, also known as the Earth Summit was a major conference held in Rio de Janeiro from June 3 to June 14, 1992.

^{*}PLD 1994 SC 693

Supporting Judgements, Nuc. Mehta v. Union of India AIR 1988 SC 1115, Nuc. Wehta v. Union of India AIR 1988 SC 1037, Kharak Singh v. State of UP AIR 1963 SC 1295, Muran v. Illinois (1876) 94 US 113 per Field, Jacp 142, Francis Corali v. Union Territory of Delhi AIR 1981 SC 746, Rural Litigation & Entitlement. Kendra and others v. State of UP and others AIR 1985 SC 652, Shri Sachidanand Pandey and another v. State of West Bengal and others AIR 1987 SC 1109.

2.3 Selected Environmental Cases



2.3.1 Case Law: General Secretary, West Pakistan Salt Miners Labour Union, Khewra, Jhelum vs. Director Industries and Mineral Development, Punjab, Lahore 8

The right to have clean water

In this case the petitioners sought the rights of area residents to have access to clean water as pollution emitting from the coal mining activities were carried out in the same water catchment area. It was alleged that if the mines continued their activities with impunity, the watercourse, reservoir and the pipelines would be contaminated.

Referring to the Shehla Zia case, the Supreme Court issued a number of directions to the concerned parties and departments. It also ordered the mouth of the mine to be shifted within four months to a safe distance from the stream and the reservoir, so that these water sources were not polluted by mining debris, carbonised materials and wastewater from the mines. The Court appointed a five-member commission to make sure that these orders were carried out.

2.3.2 Case Law: Environmental Pollution in Balochistan 9

Preventing areas from being used as a dumping ground for hazardous and nuclear waste

Mr. Justice Saleem Akhtar of the Supreme Court took *suo moto* action in this case after reading a report in a daily newspaper on the purchase of Balochistan's coastal areas for dumping nuclear and industrial waste. The judgment reasoned that:

"The coast land of Balochistan is about 450 miles long. To dump waste material including nuclear waste from the developed countries would not only be hazardous to human health but also to environment and the marine life in the region In my view if nuclear waste was dumped on the coastal land of Balochistan, it was bound to create environmental hazard and pollution. This act will violate Article 9 of the Constitution"

The Court viewed this action as a violation of Article 9 of the Constitution and ordered the Chief Secretary of Balochistan to conduct an inquiry to determine whether coastal land in that province or in any area within the territorial waters of Pakistan had been or was being allotted to any person for converting them into a dump site. The Court ordered that if this was the case then full particulars should be supplied to the Court.

The Supreme Court then ordered that the allotting authority of the coastal land to insert a condition in the legal document that the allottee shall not use land for dumping, treating, buying or destroying by any device, waste of any nature including industrial or nuclear waste in any form and that the Balochistan Development Authority should obtain a similar undertaking from those who had already been allotted land.

⁸ Human Rights No. 120 of 1993,1994 SCMR 2061

⁹ Human Rights No. 31-K /92 (Q) ,PLD 1994 SC 102

2.3.3 Case Law: The Karachi Administration Women's Welfare Society Human Rights Case 10

The right to a clean and healthy life

In 1992 the Karachi Administration Women's Welfare Society wrote a letter to the Supreme Court stating that a violation of the fundamental rights of people had been committed due to the use of open storm water drains for the disposal of sewage, resulting in contamination caused by damaged drains and pipes, posing a threat to the people of the area.

The Supreme Court converted the letter into a human rights case and ordered a commission which reported that the petition was valid. As a result the Supreme Court ordered remedial measures to be taken, including repair of water and sewerage pipes.



2.3.4 Case Law: United Welfare Association, Lahore against the Lahore Development Authority 11

The right to have an area free of pollution

A writ petition was filed in the Lahore High Court in which the Court's intervention was sought to remove asphalt plants from certain localities in Lahore on account of the serious health hazards they posed to residents of the locality. After considering the recommendations of a Friend of the Court, the Director General of the Lahore Development Authority issued orders to shift the asphalt plants.

2.3.5 Case Law: Anjum Irfan vs. LDA and others 12

The right to have an area free of pollution

In February 2001, the Lahore High Court appointed Dr. Pervez Hassan as amicus curae (a friend of the court) to assist the Court in this writ petition. Dr. Pervez Hassan filed certain proposals for controlling vehicular and other pollution in Lahore on 14 June, 2002. Citing the Shehla Zia case, the Lahore High Court directed the government to frame rules and regulations to ensure a strict implementation of the Pakistan Environmental Protection Act, 1997 to combat the menace of air, water and noise pollution. The Court advised that new industries must be forced to install devices used for checking and controlling pollution. The Court further suggested various measures for combating pollution which included efficient utilisation of solar energy; planting of more trees; introducing electric rail cars; emphasising the role of the media in creating awareness among the masses; and ensuring proper coordination among all concerned government departments.

¹¹ No. 9-k,1992 (unreported case before the Supreme Court)

¹¹ Writt Petition No. 9297 of 1991 before the Lahore High Court

¹¹ PLD 2002, 555

2.4 The Right to Life and Dignity of Man

Under the Constitution of Pakistan, 1973, Article 9 of the Constitution, the Right to Life, states that:

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

Article 14 of the Constitution, Dignity of Man, states that:

"The dignity of man and subject to Law, the privacy of home, shall be inviolable."

Articles 9 and 14 of the Constitution of Pakistan, 1973 have two important consequences:

- To protect our health and well-being; and
- To make the state, business, and all citizens, responsible for preventing pollution and other damage to the environment and to promote conservation and sustainable development. Every government authority, national, provincial and local should take reasonable steps, in its current functions as well as future plans, to prevent pollution, promote conservation and ensure sustainable development.

What do 'health' and 'well-being' mean?

Protection of our health includes protection from pollution (air, water, food and soil). It includes protection from dangers at the workplace and from less obvious dangers to health such as noise pollution.

Protection of well-being has a wider ambit than protection of health. It includes protection from nuisances and invasion of privacy and dignity.

2.5 Rights Relevant To Environment

Constitutional rights can be used to support reasonable environmental demands. Other fundamental rights in the Constitution of Pakistan which support environmental demands include:

- □ Equality before Law and Equal Protection of Law (Article 25)
 □ Freedom of Movement and Residence (Article 15);
- ☐ Freedom of Speech (Article 19);
- ☐ Right to Property (Article 23);
- Right of Access to Public Places (Article 26); and Protection of language and culture (Article 28).

Pakistan is a signatory to the International Covenant on Economic, Social and Cultural Rights which requires the government to bring all laws in line with the aim of achieving these rights.

EXAMPLE

A committee comprising the residents of an informal settlement needs legal advice. They experience inadequate water supply, poor sanitation and lack of refuse removal facilities. Many people, especially children, have fallen sick.

What rights are affected?

	the	health	of the	residents i	is threatened	(violation of	environmental	rights,	Article
=11	9);								

- the well-being of the residents is threatened (violation of environmental rights, Article 9);
- the right of children to be protected from degradation is infringed (violation of Article 9);
- the right of access to water is violated (Article 9);
- the potential for the outbreak of diseases like cholera violates the right to life (Article 9); and
- the rights to privacy and dignity are violated by lack of toilets (Article 14).

An informal settlement without water or sanitation could pose a threat to the public health of the residents. You could argue that the failure of a local authority to provide toilets, water, sanitation and refuse removal violates the above mentioned articles of the Constitution of Pakistan, 1973.

2.6 Equality before Law and Equal Protection of Law

An important point for environmental activists to remember is the provision in Article 25 which states that;

- "(1) All citizens are equal before law and are entitled to equal protection of law.
- (2) There shall be no discrimination on the basis of sex alone."

Indirect discrimination is most hazardous as polluting industries, built in poor neighbourhoods, can cause an environmental threat to the health and safety of the residents.

Environmental justice is the opposite of environmental discrimination. Environmental justice means that both positive and negative impacts on the environment are equally shared by all communities.

Civil society organisations should help affected parties make appropriate decisions with regard to affected land in thier communities. They should also see to it that such decisions do not amount to indirect discrimination.

EXAMPLE

Residents of a poor township face the problem of irregular rubbish collection by the local authority. They are aware that garbage collection in the nearby wealthy neighbourhood falling under the jurisdiction of the same local authority is done at least once a week. This is a clear case of inequality and you could argue that the actions of the local authority violate the constitutional right to equality.

The following questions arise:

- Does the action differentiate between people or categories of people?
- If the action does differentiate, is there a rational connection between the action and a legitimate government purpose? That is, does the government (or local authority in our case study) have a good reason for the action?
- Does the differentiation amount to unfair discrimination?

2.7 The Right of Access to Information

Article 19 of the Constitution guarantees every citizen the right to freedom of speech and expression. This right ensures receiving information subject to the restrictions specified in the Constitution. The Freedom of Information Ordinance, 2002 gives effect to this right.

The right to information is essential for the public. Many public and private infrastructure plans require public consultation before they are approved and implemented. The level of participation depends on the timely access to information.

For instance, the public has a right to know about possible plans for the construction of a new railway line or factory in their neighbourhood in advance.

They also have the right to petition against this construction if they believe it will adversely affect their quality of life.

EXAMPLE

People in your community, who own land near the sea, find out that a developer has applied to the local government for permission to build a steel mill in the area. Although the community has tried to get information about the steel mill from the developer, they are unsuccessful. They are concerned that the development of the steel mill could cause pollution and other environmental problems in the area. They approach you for advice.

A number of queries arise. One, you need information to establish what environmental rights may have been infriges so that people are aware of their rights.

Two, you and/or the community can demand this information from the developer as well as from any (relevant) government department or local authority if the developer ignores the demand for information.

The best way to protect this right of access to information is to write an application to the court for an order issued to the developers of the steel mill to provide you and the community with the neccesary information.

2.8 Are Laws Inconsistent with the Fundamental Rights Void?

According to Article 8(1) of the Constitution of Pakistan, 1973:

"Any law, or any custom or usage having the force of law, in so far as it is inconsistent with the rights conferred by this Chapter, shall, to the extent of such inconsistency, be void."

This applies to state, non-state bodies and individuals, if applicable.

In theory, Article 8 of the Constitution of Pakistan, 1973 offers us protection against those who cause pollution or other damage to the environment because of the above-mentioned Articles in the Fundamental Rights of the Constitution of Pakistan.

Chapter 3

The Common Law of Tort

3.1 The Law of Tort

The Law of Tort means a breach of some duty independent of a contract between citizens giving rise to a civil cause of action and for which compensation is recoverable.¹³

Nuisance and Neighbour Laws

Nuisance and Neighbour Laws are both sub-categories of the broader common Law of Tort. This means that the requirements for a successful tort action discussed below apply to Neighbour Law and the Law of Nuisance.

The Law of Tort, Nuisance and Neighbour laws can be used to protect environmental rights relating to:

- □ noise pollution
- □ air pollution
- □ water pollution

3.2 Actions that Cause Harm

In the Law of Tort, a duty is imposed by the law and owes to the community at large. In tort the wrongdoer has to compensate the offended party and put him, as far as possible, back in the same position as if the tort had not occurred. The person committing the wrong is called a tort-feasor or wrong-doer and the wrongful act is called a tortious act.¹⁴

For instance if, X is driving his car rashly on the highway and he negligently collides with another car causing an accident. The owner of the damaged car can sue X for his negligent driving. The owner of the damaged car can also claim the cost of repairing the damage to the car as well as compensation for any of his or her injuries. This claim would be made under the Law of Tort.

3.3 Requirements for a Successful Tortious Claim¹⁵

The claimant must prove:

- ☐ That the action of the other person was wrong;
- That the person doing the action was negligent, i.e. that the other person was at fault;
- ☐ That the claimant suffered a loss in terms of monetary value referred to as damages; and
- That the damages suffered due to the action of the negligent person caused monetary loss.

The requirements of wrongfulness and negligence are very important here.

¹¹ Ranchihoddas, R. and V.R. Manharlal. 1997. "The Law of Torts as Administered in Pakistan". The Law of Torts. Published by Mansoor Book House, Lahore, p.2.

¹⁴ Ibid, p. 2.

¹¹ lbid, p. 4.,

3.3.1 Was the Action Wrong?

The law tries to determine here as to which actions are seen as wrong by the community as a whole. The act referred to should be able to point out unjustified infringement of the legally protected rights of another person.16

3.3.2 What is a Legal Right?

Rights are divided into a) private rights and b) public rights.

a) Private rights

Private rights are a particular person's own or personal rights. These rights are:

- □ Rights of reputation
- □ Rights of bodily safety and freedom
- □ Rights to property

b) Public Rights

Public rights are common to all citizens, for example the right to public parks, rivers, etc.

Therefore, the liability of tort arises only when the wrongful act is a violation of a legal private right and not a public right. If a public right is violated and every member of the public makes a formal complaint against any violation of this nature, then there would be no limit to the number of cases which will arise.

3.3.3 Was the Action Negligent?

A person's liability to pay a claim usually depends on whether or not the court establishes that they acted negligently. In order to test whether the person was negligent, Pakistani courts applies the reasonable person test. In applying the test, the court asks:

- Would a reasonable person, in the position of the person doing the action, have foreseen that the action would cause harm?
- Would the reasonable person have taken steps to avoid the harm?

The court may find the action of a wrong-doer as negligence done to the claimant and he or she will have to pay the claimant a sum of money compensating for the damage. However, payment of damages will only be ordered if the court finds:

- That the reasonable person would have foreseen that the action would cause harm;
- That the reasonable person would then have taken steps to avoid the harm; and
- That the person who actually did the action did not take steps to avoid the harm.

3.3.4 Legal Remedy

The essential remedy for tort is an action for damages but there are other remedies such as injunction, and specific restitution. However, it is principally the right to damages that brings wrongful acts within the category of torts. 17

¹⁶ lbid, p. 2. 17 lbid, p. 11.

3.4 How does this help you with an environmental issue?

If you have suffered a loss as a result of the actions of another person you can use the law of tort to claim compensation for that loss. A lawyer who will prepare the case and present it in court.

EXAMPLE

X owns a small farm and keeps a few sheep and a cow. He makes a small living from these animals. The farm is near the National Highway. A truck carrying fertilizer spins out of control and overturns on X's land, spilling the load of fertilizer in a small water reservoir on his property. As a result the reservoir becomes contaminated or polluted. X's animals animals drink from this reservoir.

As X is not at home at the time of the accident, the animals drink from the contaminated water and become sick and die. X needs advice on whether he can claim compensation from the owner of the fertilizer company.

The general rule of tort says that X can claim compensation from someone who has done him harm, but X will have to fulfil all the requirements for a successful tort. This means that he will have to establish:

- That the action of the driver was wrongful;
- That the driver, and through the driver the company, was negligent; and
- That as a result of the driver's negligent action X suffered a substantial monetary loss.

3.5 The Law of Nuisance

The Law of Nuisance is divided into three categories:

- Public Nuisance where someone's action causes an inconvenience to the general public
- Private Nuisance where an action by one person interferes with another person in the ordinary use of his or her property
- Statutory Nuisance where a legislative authority declares an action or process to be a nuisance, (e.g. Parliament or a Minister empowered by Parliament)

The Law of Private Nuisance can help people with problems experienced in their private capacity.

3.5.1 The Law of Private Nuisance

Under this law, if the right of a land owner to enjoy his or her land in physical comfort, convenience and well-being, is interfered due to, for instance, smoke, gas, fumes or noise generated by another person, the land owner can take legal action to protect his right.

EXAMPLE

Y lives in a small town next to an unused quarry. The local authority uses the quarry to dump all household waste generated from residents.

Y falls ill due to living so close to the waste and develops boils and shingles. He approaches you for advice.

What rights are affected?

- Article 9 of the Constitution gives people the right to health and well being;
- The Common Law of Nuisance says that your client has the right to enjoy his land free of any unreasonable infringement.

In this case it would be possible to argue that the local authority's action in setting up the waste disposal site unreasonably infringes upon Y's right to enjoy his property in physical comfort, convenience and well-being.

In the case of private nuisance the person usually liable is the one who owns the land from which the nuisance originates. The following people may be liable:

- The owner or occupier of the land who actually causes the nuisance;
- The person who did not cause the nuisance originally, but who has control of the land or has taken over control of the land; and
- The person who has taken over the land is only liable if that the nuisance is ongoing i.e. he or she became aware of the nuisance and failed to take reasonable steps to stop or limit the nuisance.

3.6 The Law of Neighbours

It is a general rule of law that a landowner's property should not be used in a way that causes harm to another person and any activity carried out on the property should not in any way infringe the rights of a neighbour.

If the landowner fails to comply with this obligation reasonably and fairly, it amounts to all forms of polluting activities.

EXAMPLE

B lives on a cattle farm in a quiet rural area. His neighbour has set up a device to scare wild animals away from his kitchen vegetable garden which makes unbearable noises at regular intervals during the day and night. B's family cannot sleep because of the noise, and his cattle have become restless and uncontrollable. B asks for advice.

What rights are affected?

Here we can see the interaction of the three branches of law that we have discussed so far:

	Article 9 of the Constitution of Pakistan gives people the environmental right to a healthy life which is being infringed by noise pollution;
	The Common Law of Nuisance says that B has the right to enjoy his land; and
	The Common Law of Neighbours says that B is entitled to require his neighbour to act responsibly with regard to his rights.
In	this case it would be possible to argue that:
	The Neighbour Law gives B the right to forbid his neighbour from causing unreasonable levels of noise;
	The interests which the neighbour is trying to protect (a vegetable garden) are very limited;
	The methods used are not in proportion to the disturbance created by the device; and
	Therefore, the neighbour's use of property is neither reasonable nor fair to B.

3.7 Case Law: Haji Fareed Khan vs. Mamon-ur-Rashid Khan and others¹⁸

In this case, the Peshawar High Court held that the Civil Court can entertain a plaint claiming the recovery of damages. In this suit the plaintiff had filed the suit for permanent injunction and recovery of damages. An application was moved by the defendant contending that the Civil Court had no jurisdiction to entertain a suit in relation to environmental problems. Moreover, in the presence of the Pakistan Environmental Protection Act, 1997, the Trial Court had proceeded wrongly to assume jurisdiction and entertain the suit.

At the time the Environmental Tribunals had been constituted with exclusive jurisdiction to try serious offences under the Pakistan Environmental Protection Act, an aggrieved person could file a complaint with the Tribunal after giving 30 days notice to the federal agency or provincial agency. However, the plaintiffs instead of approaching the Tribunal had directly approached the Civil Court without justifiable reason. The defendant's contentions were rejected because having reviewed the facts and circumstances of the case and the relief claimed by the plaintiffs the Trial Court was quite justified in entertaining the suit.

Chapter 4

Ordinances and Acts of Parliament

4.1 Ordinances and Acts of Parliment

Ordinances are laws promulgated or issued by the President of Pakistan¹⁹ and the Governor20 of each Province, respectively. Ordinances have the same force and effect as an Act of parliament but normally remain in force for a limited period of time-three months in the case of Governor ordinances (Article 128) and four months in the case of Presidential ordinances (Article 89). During this period, the President or Governors may withdraw an ordinance, or it may be disapproved or modified by the relevant legislative body. If the ordinance is Presidential, it must be approved by the National Assembly; if it is a Governor's ordinance, it must be approved by Provincial Assembly. Generally, an ordinance lapses if the relevant assembly fails to adopt it within the specified period. In some cases, most notably when assemblies have been dissolved or suspended, some ordinances have been given the status of a legislative act by means of special continuance-in-force orders which have exempted them from the provisions of Articles 89 and 128. Ordinances protected in this way do not need to be ratified by a legislative body. On occasion, continuation-in-force orders have in turn been repealed by a later, elected government; in other cases the protections have been formalised by the legislature, as with the Constitution (Seventeenth Amendment) Act 2003.

Laws made by Parliament,²¹ called legislation, must not conflict with the Constitution, because the Constitution is the supreme law of Pakistan. If legislation infringes on one of the rights guaranteed by the Constitution this infrigement can form the basis of challenging the validity of said legislation in court.

4.2 The purpose of Environmental Legislation

The Parliament tries to determine the rights and duties of people with regard to the environment through environmental legislation. For example, legislation ensures that polluters are liable for clean-up. Legislation also sets out the rights people have, for instance, use of natural resources, such as fishing and logging quotas, etc.

4.3 The Pakistan Environmental Protection Act, 1997 (PEPA)

The Pakistan Environmental Protection Act, 1997 (PEPA), can be regarded as the most important piece of environmental legislation in Pakistan. It provides a framework for environmental law reform and covers three important areas:

¹⁹ Article 89, Constitution of Pakistan, 1973

Article 128, Constitution of Pakistan, 1973

[&]quot; Articles 70 to 77 , Constitution of Pakistan, 1973

4.3.2 What is covered by Pakistan Environmental Protection Act, 1997 (PEPA)?

The Pakistan Environmental Protection Act, 1997 (PEPA) can only be applied to future problems or those problematic decisions and actions that were implemented after 3rd December, 22 1997. It cannot be applied to environmental problems arising before this date unless the problem still persists.

4.4 Institutions established under the Pakistan Environmental Protection Act, 1997

The following Institutions are established under the Pakistan Environmental Protection Act, 1997

4.4.1 Pakistan Environmental Protection Council 23

The Pakistan Environmental Protection Act (PEPA), 1997 has established a Pakistan Environmental Protection Council, headed by the Prime Minister while the Minister in charge of the Ministry of Environment is the Vice Chairperson. It inter alia consists of the Chief Ministers of all the Provinces, Provincial Environment Ministers, members of Chambers of Commerce and Industry and the Chamber of Agriculture, members from the medical and legal profession and concerned NGOs. The Council is the supreme policy-making body established by the Act and has been vested with vast powers under the Pakistan Environmental Protection Act, 1997.

4.4.2 Pakistan Environmental Protection Agency 24

Section 5 of PEPA establishes the Pakistan Environmental Protection Agency (EPA) for day to day administration of the Act. The Agency was created under Section 5 of the 1983 Ordinance. However, under the 1997 Act, its functions, powers and responsibilities have been increased. The Pakistan Environment Protection Council is the supreme policy-making body and the Pakistan Environmental Protection Agency is responsible for the administration and effective implementation of the Act and the rules and regulations made under it. The EPA is headed by a Director General appointed by the Federal Government. For its effective working it is staffed with legal, administrative and technical personnel appointed by the Federal Government.

4.4.2.1 Provincial Environmental Protection Agency 25

Section 8 of the Act establishes a Provincial Environmental Agency in each province. Each Provincial Environmental Protection Agency is headed by a Director General. For the effective implementation of the Act the Federal Government has the power to delegate the powers and functions of the Federal Environment Protection Agency to the Provincial Environmental Protection Agencies. Provincial Environmental Protection Agencies can also be conferred powers by their respective provincial governments.

4.4.3 Provincial Sustainable Development Fund

Section 9 of the PEPA has established a Provincial Sustainable Development Fund and Section 10 of the Act has established a Provincial Sustainable Development Fund Board to support, finance, and strengthen environment friendly projects for the rehabilitation, conservation and improvement of the environment.

³⁵ Sc 3(1) of Pakistan Environmental Protection Act, 1997

³⁴ Section 5 of Pakistan Environmental Protection Act, 1997

Section 8 of Pakistan Environmental Protection Act, 1997

4.4.4 Environmental Tribunals

Under Section 20 of the Act, Environmental Tribunals have been constituted in each Province. These Environmental Tribunals are headed by a Chairperson of the Environmental Tribunal and two members, one legal and one technical, appointed by the Federal Government. The Chairperson is a person who is or has been qualified for appointment as a judge of the High Court and the technical and legal members are persons who have the required qualification. To complete the quorum it is necessary that the Chairperson and at least one member should be present. Environmental Tribunal Rules, 1999 lay down the qualification of the Chairperson of the Tribunal and members of the Tribunal.

4.5 When can you use Pakistan Environmental Protection Act, 1997 to File a Complaint?

PEP	A states that you (an individual or a group?) can take legal action to enforce an
envi	ironmental law or a principle of PEPA:
□ T	To protect your own interest;

- ☐ To protect someone else's interests who cannot do so;
- ☐ On behalf of a group of people whose interests are affected;
- ☐ If the legal action is in the public interest; and
- ☐ If the legal action is in the interest of protecting the environment.

4.6 Where can you complain under Pakistan Environmental Protection Act, 1997?

For the purpose of settling any environmental dispute, the Act has established the Environmental Tribunal and Environmental magistrates.

4.6.1 Powers of Environmental Tribunal 26

Section 20 of PEPA constitutes Environmental Protection Tribunals. Section 21 vests these Tribunals with exclusive jurisdiction to try certain contraventions of PEPA. These contraventions include:

- 1. Discharge or emission of effluent, waste, air or noise pollutants in excess of National Environmental Quality Standards (NEQS);27
- 2. Violation of requirements of Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA);28
- 3. Import of prohibited hazardous waste; and²⁹
- Violation of Environment Protection Orders (EPOs).³⁰

These contraventions are explained in detail overleaf:

²⁶ Sc 17(1) of Pakistan Environmental Protection Act, 1997

²⁷ Section 11 PEPA.

²⁸ Section 12 PEPA.

³⁰ Section 16 PEPA

4.6.1.1 Discharge or emission in excess of National Environmental Quality Standards

Any person who discharges or allows the discharge of any effluent waste, air pollutant or noise in an amount exceeding the National Standards (prescribed in the rules and regulations) or ambient standards for air, water or land (set under section 6(1)(g) PEPA) commits an offence.

The National Environmental Quality Standards (NEQs) have been set by the Environmental Protection Agency under Section 6(1)(g) of PEPA, 1997. They set the maximum allowable limits for air, effluent and waste pollution. The standards are different for industries emission and smoke emission for motor vehicles.

Pollution charge for Industry (Calculation and Collection) Rules, 2001 have been established by the Federal Government. They lay down the procedure for the calculation of the pollution charge.

The Federal Government levies a pollution charge on the person who discharges or emits effluent waste, air or noise above the National Environmental Quality Standards. A person who pays the pollution charge does not commit an offence and the person who does not pay the fine or pollution charge commits an offence.

4.6.1.2 Initial Environmental Examination and Environmental Impact Assessment

Section 12 of PEPA provides that no person can commence construction or operation of a project unless: i) an IEE has been undertaken, or in the event the project is likely to have adverse environmental impacts,³² ii) an EIA has been carried out and filed with the Environment Agency. Under Section 12, a public hearing is necessary to complete an EIA; therefore, PEPA stipulates what kind of information about the environment must be released by the government or private persons.

The information must relate to:
the condition of environment;
any actual or future threats to environment; and
how dangerous wastes are made, stored or got rid of

The government has established certain regulations under the EIA sections for any individual or company that intends to carry out a project (e.g. to build a hotel, or a factory) to first compile a report on how the development will affect environment.

The Environment Protection Agencies decide whether the project can proceed or not. It has the power to approve (with or without conditions) or reject the IEE or EIA report. On the basis of this the government decides whether to allow or refuse the project.

To understand the screening process provided under the Act it is necessary to refer to the following definition:

³¹ Section 17(7) PEPA

³² Adverse environmental impact is defined in s. 2(1) PEPA.

Section 2(xxiv) PEPA: Initial Environmental Examination

"A preliminary environmental view of the reasonably foreseeable qualitative and quantitative impacts on 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."

As defined above, this is a preliminary report and not a detailed study of how the project will affect the environment.

Section 2(xi) PEPA: Environmental Impact Assessment

"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".

Section 2(xxxv) PEPA: Defintion of a Project

"Project" means any activity, plan, scheme, proposal or undertaking involving any change in environment. It includes:

- (a) Construction or use of buildings or other works;
- (b) Construction or use of roads or other transport systems;
- (c) Construction or operation of factories or other installations;
- (d) Mineral prospecting, mining, quarrying, stone-crushing, drilling and the like;
- (e) Any change of land use or water use; and
- (f) Alteration, expansion, repair, decommissioning or abandonment of existing buildings or other works, roads or other transport systems, factories or other installations.

Section 2(xxxvi) of PEPA: Definition of Proponent

"Proponent" means the person who proposes or intends to undertake a project. The Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations 2000³³ are federal regulations, framed under Section 33 of PEPA. They require that specified types of irrigation projects undergo prior environmental assessment. Schedule I lists the types of projects related to water and dams (part F) that must undergo a prior IEE. Schedule II lists those projects related to water and dams (part E) that require a prior EIA.

4.6.1.3 Prohibition on the import of Hazardous Waste

This is a blanket prohibition (contained in Section 13 of PEPA) on the import of hazardous waste into Pakistan, its territorial waters, the exclusive economic zone or Pakistan's historic waters. Hazardous waste has been defined in the PEPA, 1997 as waste that contains hazardous substance and includes hospital and nuclear waste. (Hazardous substance has been described in section 4.6.3.1.

4.6.1.4 Environment Protection Order 34

The federal and provincial EPAs exercise vast powers to protect the environment. The most powerful of these is the power to issue an Environmental Protection Order (EPO). An Environmental Protection Order (EPO) protects and prevents harm to the environment and is given when the Environmental Protection Agencies feel that conditions exist which might cause an adverse environmental effect. This order can be instrumental where damage has not yet occurred but is likely to occur.

4.6.2 Who can complain to the Environmental Tribunal? 35

- 1. An aggrieved person
- 2. The federal Environmental Protection Agency;
- 3. The Provincial Environmental Protection Agency;
- 4. A Government Agency; and
- 5. A Local Council.

4.6.2.1 Procedure of Complaint by an Aggrieved Person³⁶

Step 1

The aggrieved party must first file a written complaint with the Federal Agency or the Provincial Agency.

Step 2

If after thirty (30) days from the date of the written complaint, no response is received from the Federal or Provincial Environmental Protection Agency where the complaint has been filed then the aggrieved person has the right to file a complaint before the Environmental Tribunal.

4.6.2.2 Procedure of Complaint by the Federal or a Provincial Environmental **Protection Agency**

The Federal Agency or a Provincial Environmental Protection Agency can also file a written complaint with the Environmental Tribunal and approach the Tribunal same without having to wait for 30 days.

4.6.2.3 Penalties for offences tried by the Environmental Tribunal 37

If a person commits any of the offences mentioned above in Sections 11, 12, 13 or 16 (offences triable by Environmental Tribunal) he or she shall be punishable with a fine may lived up to one million rupees the case of a continuing contravention an additional fine maybe levied up to one hundred thousand rupees for each day of the continuing violation.

In a case where the Environmental Tribunal is satisfied that as a result of the commission of the offence monetary benefits have accrued to the offender, the Environmental Tribunal may order the offender to pay, in addition to the fines mentioned above, additional fines equivalent to the amount of the monetary benefits.

³⁴ Section 16 PEPA. ³⁵ Section 21(3) PEPA.

 ³⁶ Ibid.
 ³⁷ Sc 17 (1) of Pakistan Environmental Protection Act, 1997

In the event a person has been previously convicted for any violation under this Act, the Environmental Tribunal may in addition to the punishment imposed:

- (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 the offender to imprisonment for a term which may extend to two years;
- (c) order the closure of the factory;
- (d) order confiscation of the factory, machinery and equipment, vehicle, material or substance, record or document or other object used or involved in contravention of the provisions of the Act;
- (e) order the offender to restore the environment at his own cost to conditions prior to this contravention or close to such conditions as may be reasonable in the circumstances to the satisfaction of the Federal Agency or 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 a contravention.

The act also provides that for a period of three years from it's starting date the sentence of imprisonment will be passed only in respect of persons who have been previously convicted more than once for any contravention of Sections 11,13,14 or 16 involving hazardous waste.

The Director General of the Federal Agency or Provincial Agency may on the application of the accused compound an offence under the Act with the permission of the Environmental Tribunal in accordance with the prescribed procedure.

Where in the opinion of the Director General of the Federal Agency or Provincial Agency a person has contravened the provisions of the Act, he may send a notice in writing to the offender requiring him to pay to the Federal Agency or the Provincial Agency as the case maybe an administrative penalty for each day the contravention continues. An offender who pays the administrative penalty for a contravention will not be charged under this Act with an offence with respect to such a contravention.

The above mentioned provisions of the powers of the Director General of the Federal or Provincial Agency do not apply to a person who has been previously convicted of an offence or who has compounded an offence under this Act or who has paid an administrative penalty for a contravention of any provision of this Act.

4.6.2.4 Appeals to and from the orders of the Environmental Tribunal

If an order is issued by the Federal or Provincial Environmental Protection Agency against the interest of the person submitting his plea, then where can an appeal be made against this order?

In such a case, the aggrieved person can appeal to the Environmental Tribunal within thirty days (30) days of the harmful or wrong order.³⁸

However, if a person is aggrieved by the final order or by the language of the Environmental Tribunal then where can this decision be appealed?

In such a case the aggrieved person, within thirty (30) days of the order or sentence of the Environmental Tribunal, can appeal to the High Court.³⁹

4.6.3 Powers of Environmental Magistrates 40

Section 24 of PEPA, 1997, empowers First Class Judicial Magistrates to act as Environmental Magistrates. Environmental Magistrates deal with the following minor 4.6.3.1. Handling of Hazardous Substances

Section 14 prohibits the generation, collection, transportation, treatment, disposal, storage or handling of hazardous waste except under a license issued by the EPA or in accordance with the provisions of any domestic law or relevant international convention. This relates in particular to the Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal, Basel, 1989.

Definition of Hazardous Substance

Section 2 (xviii) of PEPA has defined hazardous substance as:

(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 characteristic causes or is likely to cause, directly or in combination with other matters; an adverse environmental effect: and

(b) Any substance which may be described as a hazardous substance.

Under the Pakistan Environmental Protection Act, 1997 a pesticide is not a hazardous substance but all other substances which cause an adverse environmental effect are

substance but an other substances which cause an adverse environmental effect are
hazardous substances. The following activities are prohibited in relation to hazardous
□ıbstances.
□ Generation;
□ Collection;
□ Transportation;
□ Treatment;
☐ Disposition;
□ Storage;
□ Handling;
□ Import; and
Consignment.

However, the above mentioned activities can be carried out if,

Section 22 PEPA.
 Section 23 PEPA.
 Section 17(2) PEPA.

- 1. A license has been issued by the Federal Environmental Protection Agency; or
- 2. There exists a law or an international treaty or agreement to which Pakistan is a party and it is allowed under the terms of that treaty.

4.6.3.2 Motor vehicle emissions in excess of National Environmental Quality Standards

Section 15 applies to motor vehicles and prohibits noise or all pollutants in an amount exceeding the National Quality Standards or ambient standards for air, water or land.

4.64 Who can complain to the Environmental Magistrate?4
An aggrieved person
The federal Environmental Protection Agency
A provincial Environmental Protection Agency
A government Agency; and
A local Council

4.6.4.1 Procedure of Complaint by Aggrieved 42

An aggrieved person has to file a written complaint with the Environmental Magistrate.

4.6.4.2 Procedure of Complaint by Federal or Provincial Environmental Protection Agency 43

The Federal or any of the Provincial Environmental Protection Agencies can also file a written complaint with the Environmental Magistrate.

4.6.4.3 Penalties for offences tried by Environmental Magistrates

If a person violates Section 14 or 15 (offences triable by the Environmental Magistrate) he shall be punishable with a fine which may extend to one hundred thousand rupees and in case of a continuing contravention, additional fines, will be levied to one thousand rupees for every additional day of contravention.

In a case where the Environmental Magistrate has established that as a result of the commission of the offence, monetary benefits have been accrued to the offender, the Environmental Magistrate may order the offender to pay, in addition to the fines mentioned above, an additional fine equivalent to the amount of the financial benefits.

In case a person has been previously convicted for any violation under this Act, the Environmental Magistrate may in addition to the punishment awarded:

- (g) 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;
- (h) sentence him to imprisonment for a term which may extend to two years;
- (i) order the closure of the factory;

⁴¹ Section 24 PEPA.

⁴² Section 24 (3) (b) PEPA. ⁴³ Section 24 (3) (a) PEPA.

- (j) order confiscation of the factory ,machinery and equipment, vehicle, material or substance, record or document or other objects used or involved in contravention of the provisions of the Act:
- (k) order such a person to restore environment at his own cost to the conditions existing prior to such contravention or close to such conditions as may be reasonable in the circumstances to the satisfaction of the Federal Agency or the Provincial Agency; and
- (I) order that such sum be paid to any person as compensation for any loss, bodily injury, damage to his health or property suffered by the contravention.

The Director General of the Federal Agency or a Provincial Agency may on the application of the accused compound an offence under the Act with the permission of the Environmental Magistrate in accordance with the prescribed procedure.

Where in the opinion of the Director General of the Federal Agency or a Provincial Agency a person has contravened the provisions of the Act, he may send a written notice to the offender requiring him to pay to the Federal Agency or the Provincial Agency, as the case maybe, the administrative penalty for each day the contravention continues. A person who, pays the administrative penalty for a contravention will not be charged under this Act with an offence with respect to such contravention.

The above mentioned provisions of the powers of the Director General of the Federal or Provincial Agency do not apply to a person who has been previously convicted of offence or who has compounded an offence under this Act or who has paid an administrative penalty for a contravention of any provision of this Act.

4.6.4.4 Appeal against an order of Environmental Magistrate 44

If an order is passed by the Environmental Magistrate which is harmful or wrong then where can a person appeal against this order?

In such a case, the aggrieved person who has received this order can appeal to the Sessions Court within thirty days (30) days of the date of conviction.

4.6.4.5 Offences committed by Companies 45

The Pakistan Environmental Protection Act, 1997 provides that where a violation has been committed by a body corporate, and it is proved that such an offence has been committed with the consent or connivance or, is attributed to any negligence on the part of, any director, partner, manager, secretary or other officer of the body corporate, he shall be deemed guilty of such contravention along with the body corporate and shall be punished accordingly:

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

⁴⁴ Section 25 PEPA

⁴⁵ Sc 18 of Pakistan Environmental Protection Act, 1997

For the purposes of this Section, "body corporate" includes a firm, association of persons or a society registered under the Societies Registration Act, 1860 (XXI of 1860), or under the Cooperative Societies Act, 1925 (VII of 1925).

4.6.4.6 Offences Committed by Government Agencies, Local Authorities or Local Councils

According to Section 19 of PEPA, in case of a violation of the Pakistan Environmental Act,1997 committed by any government agency, local authority or local council, and it is proved that such contravention has been committed with the consent or connivance of, or is attributable to any negligence on the part of the head or any other officer of the government agency, local authority or local council, he shall also be deemed guilty of such contravention and shall be liable to prosecution.

EXAMPLE

An explosion releases hazardous substances in the river or sea. Residents are warned on the radio and TV not to drink water from the river and asthmatics told to seek urgent medical treatment. People are told about the nature and effects of the explosion. The health depart ment and municipal emergency services are told how to treat people who get sick from the gar

The Pakistan Environmental Protection Act, 1997 (PEPA) requires the company that caused this incident to:

Minimise	(reduce)	the risk	and to d	lean up th	ne mess; and,

Find out how the incident has affected public health.

If this report is not filed or these actions are not taken a complaint can be filed with the EPA.

4.7 Rules under the Pakistan Environmental Protection Act, 1997

The Pakistan Environmental Protection Act, 1997 is a framework legislation and therefore procedural aspects and details are regulated by Rules. These include: 46

or or or or processing as processing and regulation and realistic
Environmental Sample Rules, 2000
Sindh Sustainable Development Fund (Utilization, Procedure, Board) Rules, 2000
Self-Monitoring & Reporting by Industries Rules, 2001
Pollution Charge for Industry (Calculation and Collection) Rules, 2001
Environmental Tribunal Rules, 1999
Hospital Waste Management Rules, 2005
Provincial Sustainable Development Fund Board (Procedure) Rules, 2001

⁴⁶ Section 31 PEPA

4.7.1 Rules in draft form framed under the Pakistan Environmental Protection Act, 1997

- 1. Hazardous Substances Rules, 2003
- 2. Compounding of Offences and Payment of Administrative Penalty Rules, 2003
- 3. Amendments to PEPA, 2001

4.8 Regulations under the Pakistan Environmental Protection Act,1997 47

- ☐ The Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations 2000
- ☐ National Environmental Quality Standards Certification of Environmental
- ☐ Laboratories Regulation, 2000
- □ National Environmental Quality Standards, 1993
- □ NEQS Amendments, 2000

Chapter 5

Laws and Ordinances Relating to the Environment

The laws and ordinances listed here specifically deal with environmental problems in the Province of Sindh. The laws discussed below and their analysis has been taken from the Environmental Law in Pakistan governing natural resources and processes and institutions that affect them. ⁴⁸ Each volume reviews and analyses the law governing natural resources, as well as the processes and activities that impact natural resource management. The full text of all legal instruments surveyed can be found at www.law.iucnp.org. The process of compiling, writing and editing this series will have taken more than five years by the time it is complete.

5.1 Freedom of Information Ordinance, 2002

The Freedom of Information Ordinance was passed to ensure transparent access to information and improved access to public records. It also serves to make the Federal Government more accountable to its citizens.

The Ordinance gives individuals the right to access all types of recorded information held by public authorities regardless of the date of the information, subject to certain limited exemptions. Anyone making a request must be informed whether the public authority holds the information and, if so, it should be provided within 20 working days.

Section 2(h) defines "public body" as

Any Ministry, Division or attached department of the Federal Government;
The Secretariat of the Parliament (the National Assembly and Senate);
Any office of any Poard Commission Council or other body established by or u

 Any office of any Board, Commission, Council or other body established by or under a Federal Law; or

Any Court or Tribunal

The Government implemented the Act on 1st January, 2005.

The following record of all public bodies are hereby declared to be public record,⁴⁹ namely:-

- (a) policies and guidelines;
- (b) transactions involving acquisition and disposal of property and expenditure under taken by a public body in the performance of its duties;
- (c) information regarding grant of licenses, allotments and other benefits and privileges and contract and agreements made by a public body;

⁴⁸ IUCN. 2005. Environmental Laws in Pakistan Governing Natural Resources and Processes and Institutions That Affect Them. Part 5: Sindh. Published by IUCN-The World Conservation Union Pakistan.

⁴⁰ See Section 7, Freedom of Information Ordinance, 2002.

- (d) final orders and decisions, including decisions relating to members of public; and
- (e) any other record which may be notified by the Federal Government as public record for the purposes of this Ordinance.

Access to information is as important as the right to just administrative action. Many government decisions have a direct or indirect impact on the environment. For example, a particular industrial process may cause dangerous emissions that must be monitored by the industrial unit. If people in the area are affected by the emissions, they should have access to information that may help them decide in the event they want to challenge the decision to allow the industry to continue. The constitutional right, the right to specific environmental information under PEPA, and the Freedom of Information Ordinance, 2002 should all work together to safeguard the public's right to information that will allow the protection of environmental rights.

The Aarhaus Convention enforced by the United Nations in October, 2001 is regarded as the most ambitious venture in environmental democracy undertaken under the auspices of the United Nations. The Aarhaus Convention seeks to strengthen the role of the public and environmental organisations in protecting and improving the environment for the benefit of future generations. Through its recognition of citizens' environmental rights to information, participation and justice, it aims to promote greater accountability and transparency in environmental matters.

The Convention, in addition to protecting the environment, may also be seen as an instrument promoting democracy. Specifically, it aims to:

- 1. Allow members of the public greater access to environmental information held by public authorities, thereby increasing transparency and accountability of government;
- 2. Provide an opportunity for people to express their opinion and concerns on environmental matters and ensure that decision makers take due account of these;
- 3. Provide the public with access to review procedures when their right to information and participation have been breached, and in some cases to challenge more general violation of environmental laws.

In practical terms, this means, for instance, that local residents must be given a say in new road schemes. Members of the public also have a right to know what state their environment is in and, in some circumstances, sue governments or polluters that attempt to hide environmental violations. However, the application of the Freedom of Information Ordinance is extremely limited and if a public body refuses information, a recourse is to approach the Ombudsman.

5.2 Land Reform and Agricultural Resources

5.2.1 Sindh Co-operative Farming Societies (Regularisation of Grants of Land) Ordinance, 1978

This Ordinance regularises grants of government land made between January 1, 1958 and December 31, 1964 to cooperative farming societies in the Kotri Barrage command area (Section 2).

5.2.2 Land Reforms Act, 1977

Under this federal law, all powers in relation to a Province are delegated to the Government of that Province.



Agriculture farming near Pai Forest

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

5.2.3 Sindh Land Reforms Rules, 1977

These Rules, framed under the Land Reforms Act, 1977, specify the powers of land commission officials (Sections 3–5 and 12). They outline procedures for applications and proceedings under the Act (Sections 6–8), and for appealing decisions taken by the land commission (Section 9).

5.2.4 Land Reforms Regulation, 1972 (Martial Law Regulation No. 115)

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

Qazalbash Waqf v. Chief Land Commissioner PLDA 1990 SC 99.

The preamble to this law states that the restrictions are imposed "in the public interest", which may be interpreted to include conservation. Forest officers with a warrant may arrest anyone suspected of committing an offence under this Act or rules pursuant to it (Section 6). They may also seize firewood or charcoal involved in the offence. The provincial government may make rules to implement the provisions of this Act (Section 8). The maximum penalty for contravening the provisions of this law is imprisonment for a term of 30 days and or fine of 500 rupees (Section 4).

5.3.8 West Pakistan Registration of Boats for Extraction of Coastal Forest Produce Rules 1963

These Rules were framed under Section 41, read with Section 42, of the Forest Act, 1927. They require that all boats used to transport forest produce from the Coastal Afforestation Division be registered with the forest department (Section 3), and spell out procedures for registration (Sections 4 and 5).

5.3.9 Land Preservation Act, 1900

This Punjab law, extended to Sindh by means of the Sindh Adaptation of Laws Order 1975, allows the provincial government to provide for the prevention of soil erosion and the conservation of sub-soil water (Section 3).

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

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

5.4 Fisheries

There is no provincial legislation on the protection, preservation or development of fisheries to ensure environmental conservation. Provincial laws for the most part serve to regulate the commercial aspects of the fisheries sector. The Sindh Fisheries Ordinance, 1980, for example, does not require that exploitation be integrated with the conservation and sustainable use of fish resources, although some clauses restricting fishing



Palla Fish, a delicacy of Sindh

Following consolidation, the rights of landlords and tenants in the newly created holdings remain the same as before consolidation (Section 16).

Government officials and others appointed under this Ordinance to carry out consolidation functions enjoy indemnity from prosecution for an action taken "in good faith" (Section 27), and civil courts may not entertain a suit or application related to consolidation proceedings under this Ordinance (Section 26).

The Board of Revenue has the power to make rules governing a wide range of operational and Procedural matters (Section 29).

5.2.8 West Pakistan Requisitioned Land (Continuance) Act, 1958

This Act allows the government to continue using immovable property requisitioned under various laws that expired or were repealed (Section 3). In case of continued requisition, the government is required to pay compensation to the owners (Section 6). The purpose for which land is requisitioned is not explicitly stated in this law and the definition provided for the term 'requisitioned land' refers to the Defence of India Act, 1939 which had expired by that time.

Besides validating prior requisition, the law allows the government to acquire requisitioned land under specified conditions (Section 5): if works have been carried out on the land at state expense, and such works continue to be required for state purposes (Section 5(3)(a)); or where the cost of restoring the land to its original condition is excessive in relation to the value of the land at that time, and the owner refuses to accept the land "released" from requisition without payment of compensation (Section 5(3)(b)).

5.2.9 Sindh Tenancy Act, 1950

This Act regulates the relationship between landlords and agricultural tenants. It clearly defines the conditions under which various tenancy arrangements persist (Sections 4–15). The law provides certain safeguards with regard to land and agricultural labour. For example, tenants who have "improved" the land are entitled to compensation if they are evicted (Section 15). For the purposes of this law, the term 'improvement' is defined as any work which increases the "material value" of the land, including the construction of irrigation and drainage works, and reclaiming, levelling or terracing (Section 2(12)). The extraction of free labour is declared to be unlawful (Section 22). The provincial government may make rules to govern a number of matters related to tenancy agreements including the mutual rights and obligations of landlords and tenants (Section 35).

5.2.10 Sindh Rural Credit and Land Transfer Act, 1947

This law provides detailed terms and conditions under which agricultural land may be sold, leased or mortgaged. It places restrictions on "permanent alienation" in cases where holdings fall below a specified limit (Section 3), although exceptions may be granted (Section 4). Similar restrictions based on the minimum size of holdings are placed on mortgages (Section 8).

5.2.11 Colonization of Government Lands Act, 1912

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

The provincial government may declare any land it owns to be a colony (Section 4), or withdraw this designation (Section 5). The Board of Revenue, meanwhile, may grant land situated within a colony "to any person on such conditions as it thinks fit" (Section 10(1)). Following a 2005 Sindh amendment, detailed conditions are specified concerning the "disposal" of land in government colonies (Section 10- A), allowing the government to determine the market price for such land (Section 10-B(1)) and providing for matters such as leasing (Section 10-C).

The law deals at length with the rights of government tenants, including provisions related to the acquisition of ownership rights over land included in a tenancy (Section 30). In cases where a tenant has acquired ownership, the government nevertheless retains all rights to such land with respect to distributary channels as well as mines, quarries and mineral deposits located in such land (Section 30, read with Schedule II, item 1). To this end, the government is entitled to enter the land and carry out exploration and excavation (Schedule II, item 2). It is, however, obliged to pay compensation for damages caused to the land as a result of these activities (Schedule II, item 3).

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

Under the law, certain protections are in place for government land that is "not included in any tenancy", or has not been allotted for a "residential enclosure", or is used in common by a community (Section 33). It is an offence to clear or break up such land for cultivation without permission from a revenue official (Section 33(a)). Permission must also be obtained to carry out excavation or construction, to build water channels, and to fell or "otherwise destroy" standing trees on such land (Sections 31(b)–31(e)).

5.2.12 Land Preservation Act, 1900

This Punjab law was adopted for West Pakistan and subsequently amended and extended to Sindh by means of the Sindh Adaptation of Laws Order, 1975. The Act allows the provincial government to provide for the prevention of soil erosion and the conservation of sub-soil water (Section 3). In areas notified under Section 3, the provincial government may regulate or temporarily prohibit activities such as clearing, breaking up or cultivating land not ordinarily under cultivation (Section 4(a));

quarrying stone or burning lime in places where stone or lime has not ordinarily been quarried or burned (Section 4(b)); cutting trees or timber, or removing forest produce other than grass, except for agricultural purposes (Section 4(c)); setting fire to trees, timber or forest produce (Section 4(d)); and herding or pasturing goats and sheep (Section 4(e)).

The government may examine forest produce taken from notified areas (Section 4(f)) and regulate, restrict or prohibit the granting of permits to the inhabitants of surrounding areas to take trees, timber or forest produce, pasture animals, erect buildings or carry out cultivation (Section 4(g)). The government may apply similar restrictions to specified villages that fall within a notified area (Section 5).

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

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

Violating orders issued under this Act for a notified area is a punishable offence (Section 19). Moreover, offences committed with respect to forest produce under various Sections of the Forest Act, 1927 are also deemed to be offences committed under the Land Preservation Act (Section 20).

The law sets out procedures for claims, compensation and appeals (Sections 14 and 16). The determination of compensation is to be "guided, so far as may be" by the provisions of the Land Acquisition Act (Section 15(1)) and may be awarded in the form of cash, land, a reduction in revenue or "in any other form" (Section 15(2)).

The provincial government has the power to make rules under the Act (Section 22). The law grants indemnity from prosecution to the provincial government as well as "any public servant" for acts committed "in good faith" (Section 21).

5.2.13 Land Acquisition Act, 1894

This law regulates the acquisition of land for public purposes. The Act does not define the term "public purposes" except stating that it "includes the provision of village-sites" (Section 2(f)) but a broader interpretation has not been excluded. Land may also be acquired by a "Company which is engaged or is taking steps for engaging itself in any industry or work which is for a public purpose" (Section 40(1)(aa)). In addition, the law allows for the "temporary occupation and use" of waste or arable land for a maximum period of three years (Section 35). Compensation is to be provided in cash, in the form of an alternative land allocation, or through other equitable arrangements (Section 31).

Detailed procedures to be followed prior to and during acquisition, and in the determination of compensation, are specified (Sections 4–16, 23 and 24 (f). The government may, however, bypass normal procedures to take possession of land required for a company in case of "urgency" (Section 17(1)). Similarly, railway authorities are permitted to take immediate possession of land in specified situations, including in case of an "unforeseen emergency" (Section 17(2)), but these provisions serve to ensure the unhindered flow of railway traffic.

The law provides for a preliminary enquiry to survey land and assess its suitability, allowing government officers to bore into the subsoil, dig trenches, and cut down or clear standing crops and "jungle" areas (Section 4). Powers under this Act, including the power to make rules (Section 55), lie with the provincial government while specified acquisition procedures are administered by local government officials. The federal government may refer to the courts in disputes over acquisition (Section 18).

5.2.14 Land Improvement Loans Act, 1883

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

5.2.15 Transfer of Property Act, 1882

This Act deals with transfer of property. It contains detailed provisions related to the sale, mortgage, lease, exchange and gift of movable and immovable property, as well as the rights, liabilities and obligations of parties involved in such transactions.

For the purposes of this law, the term "immovable property" does not include "standing timber, growing crops or grass" (Section 3). In transactions involving land easements annexed to the land as well as "all things attached to the earth" are included in the transfer (Section 8). Where "bonafide holders" have made "improvements" to property, they are entitled to claim compensation in cases where they are subsequently evicted by "any person having a better title" (Section 51). Such title holders also have the right to enter the land in question to gather any crops that might have been sown. The term "improvement" is not defined in the law.

5.3 Forests and Timber

Since independence, the Forest Act, 1927 has been in force throughout most parts of the country. A federal statute, it operates as a provincial law and awards wide powers to the provinces. Provincial assemblies may amend this law or enact new forestry legislation for their respective provinces. It was only as recently as 2002 that the NWFP, adopted new forest legislation. In Sindh, however, forests continue to be governed by the 1927 Act.



(A Tamarix aphylla (L.) H. Karst)

Existing laws governing the forestry sector are designed to regulate the exploitation of forests and plant resources, and contain no clear provisions regarding sustainable use or conservation. The forestry sector in Sindh is primarily administered through departmental rules and regulations. No centralised system of compilation exists, which makes these legal instruments difficult to locate.

Although responsibility for plantations has been devolved to the district level under the Sindh Local Government Ordinance, 2001, forests remain under the jurisdiction of the provincial government. Forest resource management and related functions are carried out by forestry and revenue officials, as well as other officers nominated by the provincial government.

Existing forest laws do not elaborate on species or conservation status. The law contains limited definitions, leaving substantial room for the details to be worked out through statutory rules that are frequently not made public or are not accessible by citizens.

5.3.1 Forest Act, 1927

Enacted 80 years ago, the Forest Act, 1927 remains the basic charter for forest management across most of Pakistan. Technically, this legislation operates as a provincial law. However, only the government of NWFP has enacted its own legislation. Other provinces and the Northern Areas continue to manage forest resources under the Forest Act, 1927.

Designed to protect forest areas and regulate forest produce, the Forest Act provides for the creation of various classes of forests and allows provincial governments to "reserve" state-owned forest land, assume control of privately owned forest land, and declare any government-owned forest land to be a protected area. The law prohibits grazing, hunting, quarrying, clearing for the purpose of cultivation, removing forest produce, and felling or lopping trees and branches in reserved or protected areas.

Standing forests and wasteland on government-owned land, or over which the government enjoys proprietary rights, may be declared reserved by the government through notification in the official gazette (Section 3). Clearing land, felling trees, cultivation, grazing livestock, trespassing, mining and collecting forest produce are prohibited in reserved forests, along with hunting, shooting, fishing, setting traps or snares and poisoning the water (Section 26). These offences are punishable with a maximum of six months' imprisonment and or a fine of 500 rupees, and offenders may also be required to pay compensation for damage caused. Section 26 also prohibits setting fires in a reserved forest, and allows the government to suspend for an indefinite period all rights in a reserved forest where a fire has been set, either deliberately or by negligence. The courts may levy fines on those found to be encroaching in a reserved forest and order the removal of such encroachments (Section 26-A).

Penalties under the 1927 Act were significantly revised in certain specified cases by means of a 1994 amendment applicable to the province of Sindh. In the case of offences related to reserved forests (Section 26(1)), penalties depend on the value of the timber or forest produce involved, and extend to two years' imprisonment and a fine of 30,000 rupees. In addition, tools, equipment and vehicles used to commit the offence as well as produce taken illegally are to be confiscated (Section 26(4)). The courts are permitted to grant a reward to individuals providing information related to a forest offence or assisting in the apprehension of an offender, and such sums are to be paid out of the fines realized (Section 26(5)). Moreover, government expense incurred for the removal of encroachments or the demolition of illegal structures is to be recovered from the offenders (Section 26(6)).

The government may assign rights over a reserved forest to a village community (Section 28). Such forests are known as village forests. The government retains the power to make rules to regulate the management of village forests.

All government-owned forests and wasteland not included in a reserved forest are designated as protected forests (Section 29). The government may declare trees or classes of trees to be reserved, close entire forests or parts of a forest, and prohibit mining, clearing and the removal of forest products (Section 30).

The government may also suspend the rights of private persons in such forests, "provided that the remainder of such forest be sufficient, and in a locality reasonably convenient, for the due exercise of the rights suspended in the portion so closed" (Section 30(b)). This suggests that the government does not have absolute power to close private forests and must take into account the interests of right holders.

In protected forests, cutting or damaging trees, quarrying, cultivation and setting fires are offences punishable with up to six months in prison and or a fine of 500 rupees (Section 33). Interestingly, hunting, shooting, fishing and poisoning the water in protected forests are not listed as offences. Instead, these activities are included in a detailed list of matters regarding which the government may make rules (Section 32). As with reserved forests, the government may suspend all rights to a protected forest if damage has been caused by fire either wilfully or through negligence (Section 34).

The courts may impose penalties for trespassing a protected forest and evict trespassers (Section 33-A).

The 1994 amendment also levies maximum penalties for offences committed with respect to protected forests (Section 33). Penalties are based on the value of timber or forest produce involved in the offence and may extend to two years' imprisonment and a fine of 30,000 rupees (Section 33(1)), along with the confiscation of equipment and illegally taken produce (Section 33(3)). The courts may grant a reward to persons providing information about offences or assisting in the apprehension of an offender (Section (34)), and the government may recover from the offender expenses incurred in the removal of illegal structures (Section 33(5)).

In addition to government-owned forests and wasteland, the Forest Act also allows the authorities to regulate privately-owned forests and land. This may be done when the protection of privately owned forests "appears necessary" for any of the following purposes: protection from floods or landslides; preserving soil; maintaining watersheds; safeguarding roads, bridges and railways; and the "preservation of the public health" (Section 35). In such cases, the government is authorised to regulate or prohibit grazing, setting fires and clearing land for cultivation. The government may also carry out works on this land and, if necessary, acquire such land "for public purposes" (Section 37).

The law allows forest officials and police officers a wide range of powers, including the authority to arrest suspected offenders without a warrant (Section 64), release detainees on bond (Section 65) and act to prevent a forest offence from being committed (Section 66). The government may award forest officials additional powers to enter and survey land, issue search warrants, hold inquiries into forest offences, compel the attendance of witnesses and record evidence (Section 72).

The Forest Act introduces collective responsibility for forest management, requiring all right holders in reserved and protected forests to furnish evidence to the authorities about forest offences committed in their areas, and to prevent or extinguish forest fires (Section 79).

Meanwhile, forest officers performing their duties with respect to the provisions of the Forest Act are permitted to requisition police assistance (Section 79-A). The provincial government has wide-ranging powers to make rules governing the harvesting of timber and non-timber forest products, and duties to be levied on timber and other forest produce (Section 39).

The provincial government also controls the transit of timber and forest products, including inter and intra-provincial transport, whether by land or water (Sections 41 and 42). The federal government controls the import, export and international transport of timber and non-timber forest products (Section 41A). Under the 1994 Sindh amendment, maximum penalties for offences related to the transit of timber (Section 42(1)) have been increased to four years' imprisonment and a fine of 20,000 rupees, as well as the confiscation of equipment and vehicles used in the commission of the offence (Section 42(1-A)).

Penalties related to marking timber and interfering with forest boundaries (Section 63) have also been increased by the 1994 amendment, and extend to eight years' imprisonment or a fine of up to 40,000 rupees, along with compensation for damage caused to the forest, forest produce or timber. Incidents of cattle trespass in a reserved forest, or in a protected forest that has been closed to grazing area are handled under the Cattle Trespass Act, 1871 (Section 70).

The provincial government may make rules and delegate its powers to forest officers, who carry out the tasks of policing and enforcement in addition to the responsibility for surveying, mapping and implementing rules issued under the law (Section 72). Except for the authority to regulate the movement of timber across customs frontiers, which remains with the federal government (Section 41-A), powers under the Forest Act are exercised by the provincial government.

5.3.2 Sindh Plantation, Maintenance of Trees and Public Parks Ordinance, 2002

This Ordinance requires the local government to prepare and implement plans for tree plantation and the development of public parks (Sections 3 and 4). Plantation may be carried out on vacant or occupied land, and the government is empowered to issue a notice requiring owners to carry out plantation for the purpose of "preserving or enhancing the amenity of any vacant land or land" (Section 6).

The term 'land' is defined in Section 2(v) to include occupied and unoccupied land in a "town or village", land "let" for agriculture or pasture, as well as land supporting buildings or structures. An "occupier", meanwhile, is defined in Section 2(vi) to include the owner of land. This suggests that the law applies both to public land and private property. Similarly, provisions of Section 6 related to plantation apply to "any vacant land" as well as occupied land while Section 7 regarding the removal of trees on specified conditions applies exclusively to occupied land.

Written permission must be sought from the concerned local government agency before felling or damaging trees growing on "any land" but exceptions are allowed in cases where the cutting of trees in the "public interest" or where required by "any law" (Section 5).

The term 'public interest' is not defined, and the protections of the law are further weakened by broad exemptions that may be granted by the provincial government for "any class of land or any occupier or class of occupiers" (Section 13).

Under the provisions of this Ordinance the government may also authorise the felling of trees, provided that such trees are deemed to be "in an inflammable state", or likely to prove "dangerous to life or property", or found to be obstructing or impeding traffic (Section 7).

A separate clause deals specifically with parks and public places, where felling, damaging, or moving shrubs and trees is prohibited (Section 9). The maximum penalty for contravening the provisions of this Ordinance is a fine of 25,000 rupees (Section 13). According to the provisions of Section 14, government agencies and officials enjoy indemnity from prosecution for anything done under this Ordinance.

The provincial government is empowered to make rules for the purposes of this Ordinance, including matters related to the plantation of trees and the maintenance of public parks, and procedures for maintaining a "record" of trees (Section 15).

5.3.3 Coastal Development Authority Act, 1994

This Act establishes an Authority that is responsible for the development, improvement and beautification of the coastal areas of Thatta and Badin districts (Section 7(1)). The Authority may plan and execute schemes related to a number of sectors including forests (Section 7(2)(c)).

5.3.4 Cutting of Trees (Prohibition) Act, 1992

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

All powers under this Act lie with provincial governments, including the power to make rules (Section 10) and to demarcate zones in border areas (Section 8). Provincial government officers have the power to enter, survey and map the land, and to "blaze any tree" (Section 9). Authorized officials are permitted to act in order to prevent the commission of an offence and to take "such measures as may be prescribed under the rules" for this purpose (Section 7). The maximum penalty under this law is a fine of 5,000 rupees (Section 4) but tools used to commit an offence as well as trees taken illegally may also be subject to confiscation (Section 6).

5.3.5 Sindh Wildlife Protection Ordinance, 1972

This Ordinance enables the provincial government to establish protected areas and specifies activities that are prohibited in such areas. The exploitation of forests within a wildlife sanctuary is prohibited, except for the purpose of "reducing fire hazards [sic], epidemic or insect attacks or other natural calamities" (Section 14(2)). In national parks felling, tapping, collecting, burning, damaging or destroying any plant or tree is prohibited (Section 15(4)(iii)). At the same time, the Ordinance requires that forests inside a national park are "so managed and forest produce [so] obtained as not to impair the object of the establishment of the national park" (Section 15(3)), suggesting that the extraction and use of forest products is permitted. The protections afforded by this Ordinance are subject to broad exemptions since the provincial government may authorise any of these activities for scientific purposes, for example "aesthetic enjoyment or betterment of scenery" in a sanctuary (Section 14) or for the "betterment" of a national park (Section 15).

In 2001, the protection clauses of the 1972 Ordinance were further limited through the promulgation of two Amendment Ordinances. New provisos were added to Sections 14(3) and 15(4), allowing the government to permit the laying of underground pipelines "using construction techniques other than blasting" in a wildlife sanctuary or national park, and exempting from the provisions of Sections 14 and 15 "any activity" in sanctuaries or national parks that is connected with the "exploration or production of oil or gas". Such operations must not "permanently disturb" wildlife or the environment, and must be undertaken in accordance with an environmental impact assessment (EIA), as defined in PEPA 1997. No mention is made of how the impact of such activities on forests is to be mitigated.

5.3.6 Sindh Land Revenue Act, 1967

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

5.3.7 Sindh Firewood and Charcoal (Restriction) Act, 1964

This Act prohibits the burning of firewood and charcoal in factories, brick kilns, lime kilns and other "fire places or class of fire places" notified by the government (Section 3). The prohibitions do not apply to pottery works or to kilns being operated for personal use. Firewood is defined in Section 2(b) to include "any kind of wood used for burning a fire" but excludes "shrubs, lopping off trees not exceeding six inches in girth, or the stumps of trees".

The preamble to this law states that the restrictions are imposed "in the public interest", which may be interpreted to include conservation. Forest officers with a warrant may arrest anyone suspected of committing an offence under this Act or rules pursuant to it (Section 6). They may also seize firewood or charcoal involved in the offence. The provincial government may make rules to implement the provisions of this Act (Section 8). The maximum penalty for contravening the provisions of this law is imprisonment for a term of 30 days and or fine of 500 rupees (Section 4).

5.3.8 West Pakistan Registration of Boats for Extraction of Coastal Forest Produce Rules 1963

These Rules were framed under Section 41, read with Section 42, of the Forest Act, 1927. They require that all boats used to transport forest produce from the Coastal Afforestation Division be registered with the forest department (Section 3), and spell out procedures for registration (Sections 4 and 5).

5.3.9 Land Preservation Act, 1900

This Punjab law, extended to Sindh by means of the Sindh Adaptation of Laws Order 1975, allows the provincial government to provide for the prevention of soil erosion and the conservation of sub-soil water (Section 3).

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

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

5.4 Fisheries

There is no provincial legislation on the protection, preservation or development of fisheries to ensure environmental conservation. Provincial laws for the most part serve to regulate the commercial aspects of the fisheries sector. The Sindh Fisheries Ordinance, 1980, for example, does not require that exploitation be integrated with the conservation and sustainable use of fish resources, although some clauses restricting fishing



Palla Fish, a delicacy of Sindh

sizes of individual specimens may be interpreted as conservation measures. Fisheries laws make no mention of subsistence fishing. The Sindh Wildlife Ordinance, which gives the provincial government the power to designate wildlife sanctuaries, includes marine turtles in its schedule of protected species but no fish species are mentioned.

The sector is also governed by the federal Fisheries Act, 1897 which deals with freshwater fisheries. The law remains in force, operating as a provincial statute, even though its substantive provisions are overridden by the Fisheries Ordinance.

Activities related to fisheries are affected by laws enacted to regulate other sectors. The Sindh Industrial and Mineral Development Corporation Act, 1988 awards the Corporation wide powers to exploit fisheries resources but provides no detail on how those powers are to be exercised. Similarly, under the Karachi Fisheries Harbour Authority Ordinance, 1984, the Authority is responsible for logistical and administrative matters with respect to fisheries.

5.4.1 Coastal Development Authority Act, 1994

This Act establishes an Authority that is responsible for the development, improvement and beautification of the coastal areas of Thatta and Badin districts (Section 7(1)). The Authority may plan and execute schemes related to a number of sectors including fisheries (Section 7(2)(c)), and assists in the development of fish harbours (Section 7(11)). The Coastal Development Authority continues to operate under the provincial government hierarchy.

5.4.2 Sindh Industrial and Mineral Development Corporation Act, 1988

This law establishes an Industrial and Mineral Development Corporation to promote various industrial activities including the exploitation of "fisheries and other commercial water produce" (Section 4(a)(ii)). These operations are defined in Section 2(f) to include fish and shrimp farms, cold storage, packaging, and "specialised fisheries transportation". The Corporation is also authorised to acquire and dispose off property (Section 5).

5.4.3 Karachi Fisheries Harbour Authority Ordinance, 1984

This Ordinance establishes the Karachi Fisheries Harbour Authority as an autonomous body under the provincial government, responsible for planning and regulating harbour design, construction and operations, and for registering fishers, fish dealers and transporters (Section 12(2)). The Ordinance establishes the parameters within which the Authority is to operate but does not provide general principles to be followed in doing so. Nor does the law specifically provide for or enable any measures to monitor and mitigate the environmental impact of harbour operations. The provincial government is empowered to make rules to regulate fisheries resources (Section 31).

5.4.4 Korangi Fisheries Harbour Authority Ordinance, 1982

This federal law provides for the establishment and operation of the Korangi Fisheries Harbour Authority. For the purposes of this Ordinance, fish are defined broadly as "any species of fish or aquatic animal including whales, seals, porpoises, turtles, shell-fish, oyster, crustaceans, ascidians and spawn and eggs of such animals" (Section 2(f)).

The Authority determines charges to be levied for the registration of fishers, and for exporters of fish and fish products (Section 9(3)(a)). It has no specific responsibilities regarding the environmental protection of the area under its control and is under no obligation to undertake conservation work. The language of Section 9(2)(r), however, allows the Authority to "carry out other important work [...] if necessary and appropriate". This provision could be interpreted as enabling conservation measures, were the Authority to determine that conservation is appropriate or important.

5.4.5 Sindh Fisheries Ordinance, 1980

This Ordinance regulates fishing operations, and applies to inland fisheries in public waters as well as to territorial waters. Fishing is defined broadly in Section 2(d) as the "taking or catching of fish by any means" while public waters are defined in Section 2(r) to include "any waters other than the [sic] private waters and includes territorial waters". The law applies to "all kinds of fish" including "molluses, crustaces and kelpfish [sic]" (Section 2(c)).

The provincial government has the power to issue leases or fishing licences in any public waters (Section 3(1)). Lease-holders may in turn issue permits for fishing in leased waters (Section 3(2)).

The Ordinance lays down restrictions in the case of selected species of fish. Under Section 4, for example, the species listed in the First schedule may only be caught with a permit or licence, and only during a specified period. Section 5, which applies to the same species listed in the First schedule, prohibits the taking of specimens that are smaller than 12 inches in size. The government may add or remove species from this schedule, or alter the period during which fishing of these species is permitted (Section 25). A licence is also required to operate a "fishing craft", defined as a "vessel propelled or moved in any manner and used in fishing or for transport or processing of fish" (Section 2(e)). This provision does not apply to recreational fishing. In addition to these regulatory measures, the Ordinance allows the government to declare "any public waters" to be a sanctuary for the species mentioned in the First schedule, and to prohibit the killing, capturing or taking of fish from such waters for a specified period without a "special" permit (Section 6).

The government regulates various aspects of commercial fishing including the size of mesh that may be employed, the type of fishing equipment that may be used, and processing and marketing operations (Sections 9, 10, 11 and 27). The government may appoint fisheries inspectors (Section 13) who are empowered to arrest suspected offenders, seize equipment and fish involved in a suspected offence (Section 16), "compound" offences (Section 26), and call for police assistance (Section 18). Although intended primarily to protect commercial stocks, certain provision of the Ordinance nevertheless serve to protect fish species in general, along with aquatic environments. Under Section 7, for example, the use of explosives, poisons and "noxious" materials for the purpose of "catching or destroying fish and other aquatic life" is prohibited in "any waters". Similarly, Section 8 prohibits the discharge of untreated sewage, "effluence [sic]" and factory waste into "any waters"; all such waste must be treated so that it is "harmless for fish and other aquatic life".

The maximum penalty for carrying out fishing operations without a licence (an offence under Section 4) is a fine of 50,000 rupees and or imprisonment for a term of one year (Section 21(1)), along with the forfeiture of equipment and illegally taken fish (Section 21(4)). Maximum penalties for employing destructive methods such as killing fish with dynamite or poison, and for discharging untreated industrial or municipal waste (offences under Sections 7 and 8) are lower, at 10,000 rupees and or six months' imprisonment (Section 21(1-A)). The law holds companies and their senior staff (Section 21(5)) as well as owners or those in charge of fishing crafts, processing factories or "fishing yards" involved in an offence to be liable if they "knew or had reason to believe" that an offence was committed (Section 22).

The government may delegate its powers under this Ordinance (Section 24), and make rules to regulate a wide range of activities including "quality certificates for processed or unprocessed fish used for processing, domestic consumption or inter-provincial trade"; the determination of royalties and other government dues on vessels and fish catches; licence fees; conditions on which leases are issued; the utilisation of receipts recovered under this Ordinance; and rewards to individuals assisting in the "detection" of offences under this Ordinance (Section 27).

5.4.6 Sindh Fisheries Rules, 1983

These Rules, framed under Section 27 of the Sindh Fisheries Ordinance 1980, provide for the regulation of fishing operations. They contain procedures related to the issuing of fishing licences and permits, and the registration of fishing vessels (Sections 3–5). The Rules also provide for the leasing of fishing rights in "any public waters" (Sections 6–8). Such leases, issued annually through an open auction, apply in the months of May and June (Section 6(1)). During this period, no fishing in leased waters may be carried out except by the lease-holder (Section 7). Lease and licence-holders are required to provide information regarding the area fished, the gear used, and the type and quantity of fish caught (Section 10). If a "reasonable bid" is not received, public waters may be fished "departmentally" (Section 14(1)).

The Rules provide for the declaration of sanctuaries within public waters and such areas are to be clearly marked so that "the person who happens to visit or use those waters should at once know that it is a sanctuary" (Section 11).

Limited protections are in place for specified species. The Hilsa shad (*Tenualosa ilisha*), known locally as Palla, may not be caught by any method within a distance of one mile below the gates of the Kotri Barrage, except by fisheries department employees for research (Section 9(2)). Obstructing the upstream movement or migration of the Hilsa is not permitted (Section 9(1)). In the case of the Rohu (*Labeo rohita*), Mori (*Cirrhinus mrigala*) and Thaila (*Catla catla*), the Rules specify the number of specimens that may be caught and the gear that may be used (Section 12) while for these species as well as the calbasu (orange-fin labeo, Labeo calbasu), the Rules also specify the size of mesh that may be used (Section 13). Special permission from the authorities is required to collect, sell or culture oysters within the creeks of the Indus River delta (Section 9(3)).

The Rules provide for the establishment of a fund which is used to finance the development of fisheries (Section 26). The remaining provisions of the Rules deal with matters related to the landing, processing and sale of fish at markets and "collection centres", and the collection of royalties. Leases, licences and permits may be cancelled for violating the provisions of the 1980 Ordinance and the Rules (Sections 8 and 3(8)). Offences not covered by Section 21 of the 1980 Ordinance are punishable with a maximum fine of 1,000 rupees or imprisonment for up to 30 days (Section 27).

5.4.7 Sindh Wildlife Protection Ordinance, 1972

This Ordinance enables the provincial government to designate protected areas, and to impose restrictions on the hunting of various species of wild birds, reptiles and mammals. The term 'wildlife' is defined broadly in this Ordinance as "organic resources, animals, birds, fish, reptiles, vegetation, soil and water" (Section 2(n)). It is worth noting that, although fish are "organic resources" and thus included within the original definition, fish were not specifically mentioned in the law until some 20 years after the Ordinance was promulgated, when the definition of wildlife was amended by means of a 1993 amendment.

Provisions of the Ordinance that are related specifically to fisheries include Section 14, which allows the government to declare wildlife sanctuaries and may be interpreted to mean that an area can be so designated to protect fish species. In addition, fishing waters within a wildlife sanctuary cannot be leased, auctioned or "in any way used" for fishing or the collection of lotus or roots for commercial purposes (Section 14(4)). The 1993 amendment annulled all such leases, agreements or similar transactions in fishing waters in wildlife sanctuaries as of 1992. The Ordinance prohibits the hunting of "protected" animals (Section 7(i)), defined simply to mean all animals listed in the Second Schedule (Section 2(j)). Fish are not included in either of the two Schedules appended to the 1972 Ordinance.

The Indus dolphin and several species of marine turtle are protected under the Ordinance (Second schedule items 5 and 6, read with Section 7(1)). The maximum penalty for hunting these species is two years' imprisonment and or a fine of 1,000 rupees (Section 17(1)(ii)).

While the law forbids the hunting of protected animals, except under specified conditions, it allows them to be killed in self-defence or to protect human life and property (Section 19). The incidental or accidental killing of protected species is not mentioned.

This law repeals the West Pakistan Wildlife Protection Ordinance, 1959 and the Wild Birds and Animals Act, 1912 in their application to the Province of Sindh (Section 43).

5.4.8 West Pakistan Fisheries Rules, 1965

These Rules were framed under the West Pakistan Fisheries Ordinance 1961. While the Sindh Fisheries Ordinance, 1980 repeals the 1961 Ordinance, it does not specifically save or repeal rules framed under the repealed law. Nor are these Rules specifically repealed or saved by the Sindh Fisheries Rules, 1983.

The 1965 Rules provide for a number of matters related to fishing including various categories of fishing licences and leases, and the terms under which they are granted; licence fees; and types of fishing gear and nets that may be used. Restrictions are imposed on the size and number of fish of a particular species that may be caught. With respect to trout, fishing is prohibited during the closed season, from October 10 to March 9 each year. Trout waters are divided into "reaches" for licensing purposes.

5.4.9 Fisheries Act, 1897

This Federal Act, which operates as a provincial law, regulates certain aspects of fisheries within both public and private waters. Private waters are defined as waters that are the "exclusive property of any person" or in which "any person has an exclusive right of fishery whether as owner, lessee or in any other capacity" (Section 2(3)) while fish are defined to include shellfish (Section 2(1)). The law forbids the use of explosives for the purpose of fishing in "any water" (Section 4(1)). This prohibition extends to the sea for up to a distance of one marine league from the coast (Section 4(2)).

The law also prohibits the use of poison to catch or destroy fish in "any water" but gives the provincial government the discretion to modify that prohibition for a specific area (Section 5). The police or a provincial government officer may, under limited conditions, arrest without a warrant person suspected of committing an offence under this Act (Section 7).

Offences under this law are also covered by the Sindh Fisheries Ordinance, 1980, where the penalties stipulated are significantly higher.

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

5.5 Wildlife, Fauna and Non-Timber Flora

The law gives the provincial government wide powers to regulate the hunting and capture of wild birds and animals. There are no restrictions on the licensing powers of the provincial government, nor are there legislative guidelines for the coordinated management and sustainable use of wildlife. The Sindh Wildlife Ordinance, 1972 does not provide for the conservation of wildlife habitats, the protection of breeding populations of wild animals, or the promotion of research required to establish the Hog deer parameters for such activities. Nor does it accommodate the country's obligations under various international treaties and agreements concerning the conservation of biodiversity, the protection of migratory species and the trade in endangered species. The limited protections afforded to specified wildlife species are further weakened by the fact that broad exemptions may be granted by government officials in a variety of situations to allow prohibited activities.

The Sindh Wildlife Ordinance is outdated in many respects but other instruments governing the sector are archaic. The Glanders and Farcy Act, 1899, for example, deals with communicable diseases among domestic livestock while there are no laws to govern current issues, including diseases of wild animals that can infect domestic animals, such as avian influenza. Similarly, the Prevention of Cruelty to Animals Act,1890 focuses on working conditions for draught animals with only marginal provisions

concerning activities such as bear-baiting and no provisions to regulate or prohibit the keeping in captivity of exotic species, including endangered species. Meanwhile, the Elephants'Preservation Act, 1879 remains in force even though elephants are no longer found in the wild anywhere in Pakistan.





Grey Patridge



Two Floral Species found in Sindh

5.5.1 Sindh Wildlife Protection Ordinance, 1972

This Ordinance prohibits the hunting of certain species of wild birds, reptiles and mammals, and allows the provincial government to designate protected areas. The term 'wildlife' is defined broadly as "organic resources, animals, birds, fish, reptiles, vegetation, soil and water" (Section 2(n)) while protected animals are simply those "specified" in the Second Schedule (Section 2(j)).

Section 7(i) of this Ordinance states that no "protected animal" may be hunted. The species to which this provision applies are listed in the Second Schedule. This Schedule has been amended on a number of occasions, either to provide protection to additional species or to grant exemptions to hunting parties in certain locations for a specified period.

The substantive provisions of this law serve to regulate hunting, and to monitor the trade in animals and animal parts. Permits are required to hunt game animals (Section 7(ii)), defined as those species specified in the First Schedule (Section 2(d)). Species considered to be game animals are listed in the First Schedule, along with various conditions applicable to each species, such as the number of specimens that may be taken and the season in which hunting is permitted.

Possession of or trade in wild animals and animal parts is authorised under a certificate of lawful possession (Sections 10 and 11). The import and export of wild animals is also permitted with a licence (Section 12). Similarly, dealing in wild animals and trophies, and operating businesses that manufacture goods from wild animal parts is permitted with a licence (Section 13). It is worth noting that under the Ordinance, the term wild animal is defined to include not just game animals mentioned in the First Schedule but also protected species listed in the Second Schedule (Section 2(m)).

The protections offered to some species are limited by provisions that allow broad exceptions to be made in every case. Any animal, including one belonging to a species listed as protected, may be killed in defence of oneself or another, or to protect livestock and standing crops (Section 19). The government may also grant exemptions in the interest of any scientific or public purpose (Section 39).

Similarly, although killing a "protected animal" is prohibited (Section 7(i)), the government may nevertheless grant a "special permit" to hunt any species of wild animal whether or not it has been declared to be protected (Section 41(2)(e)). Meanwhile, the accidental or incidental killing of protected species is not mentioned. It is worth nothing that while hunting or killing "protected animals" is prohibited by law, except under specified conditions, the Ordinance does not impose an outright ban on their possession. The provisions related to possession, including trade and import or export (Sections 10–13), all specify that a licence is required but the general term "wild animal" is used and that term, as defined in Section 2(m), includes game animals as well as protected animals.

Under the Ordinance, capturing a "wild animal" is specifically prohibited only within the perimeters of a wildlife sanctuary or national park.

In 2001, the protection clauses of the 1972 Ordinance were further limited through the promulgation of two Amendment Ordinances. New provisos were added to Sections 14(3) and 15(4), allowing the government to permit the laying of a single underground pipeline in a wildlife sanctuary or national park "using construction techniques other than blasting", and exempting from the provisions of Sections 14 and 15 "any activity" in sanctuaries or national parks that is connected with the "exploration or production of oil or gas". Such operations must not "permanently disturb" wildlife or the environment, and must be undertaken in accordance with an EIA, as defined in PEPA, 1997. No mention is made of how the impact of such activities on wildlife is to be mitigated.

The law requires that the government establish a Wildlife Management Board (Section 4), which operates a fund (Section 5). Specific functions and responsibilities of the Board are not specified, nor does the law state where money in the fund come from or on what they are to be spent. These matters may be addressed by means of rules framed by the provincial government (Section 41).

Wildlife, forest and other officials are awarded powers to arrest suspected offenders without a warrant (Section 27), search without a warrant premises or persons (Section 21), seize wild animals as well as equipment involved in a suspected offence (Section 22), release suspects on bond (Section 28) and "compound" offences to the tune of PKR. 15,000 (Section 33). The government may delegate to wildlife officials additional powers to hold an inquiry, call witnesses, issue search warrants and prosecute a case (Section 34).

Originally, maximum penalties under the 1972 Ordinance amounted to two years' imprisonment and/or a fine of PKR. 1,000 (Sections 17(1), 17(2) and 17(3)). These penalties were increased significantly in 1998, by means of an Amendment Ordinance, but only with respect to the hunting of specified species. Penalties in the 1998 amendment, added by means of a new Section 17(1-A), are as follows: three months' imprisonment or a fine of PKR. 100,000 for hunting rabbit; six months in prison or a fine of PKR. 150,000 for hunting deer, "hooder" or "para"; and a nine-month sentence or a fine of PKR. 300,000 for hunting Sindh ibex (Section 17(1-A)). The maximum penalties for other offences under this law remained unchanged until 2001, when an Amendment Ordinance issued in that year brought about a tenfold increase in the fines that could be imposed under Sections 17(1), 17(2) and 17(3). This amount now stands at PKR. 10,000. In addition to amendment acts and ordinances, many notifications have been issued over the years to amend the 1972 Ordinance or its Schedules.

Some of these amendments are merely procedural, granting powers to officials or delegating authority. Other amendments grant specific exemptions, or add or remove species from the Schedules to facilitate hunting for individuals in specific areas. Such notifications are not always reproduced in law journals.

The 1972 Ordinance repeals the West Pakistan Wildlife Protection Ordinance, 1959 and the Wild Birds and Animals Act, 1912 in their application to the province of Sindh (Section 43). The Sindh Wild Birds and Wild Animals Protection Act, 1940, was repealed by the 1959 West Pakistan Ordinance.

5.5.2 Sindh Wildlife Protection Rules, 1972

These Rules, framed under the Sindh Wildlife Protection Ordinance, 1972 focus on procedures concerning licence fees and permits. They contain detailed provisions related to various types of hunting and shooting permits, and specify licence fees, renewal charges and other conditions applicable in each case (Sections 9–15 and 20). The restrictions and protections specified in the 1972 Ordinance are subject to broad exemptions which, along with the fees and conditions attached to them, are spelled out in the Rules. Section 13 contains a detailed table of the various permits, licences and "special" permits that may be issued activities such as using prohibited hunting methods (item 3) or carrying out other activities that are normally prohibited in a wildlife sanctuary or national park (items 10 and 11). Similarly, the Rules allow any person, local authority, statutory organisation or government department to capture wild birds and animals in a wildlife sanctuary or national park upon submission of a written application (Section 16(1)).

Animals and birds listed in the Schedules appended to the 1972 Wildlife Ordinance may not be cooked or served in a public place, hotel, café, restaurant, hostel, boarding house or any other catering establishment, except during the hunting season for each species, as specified in the Schedules, or if the bird or animal has been "lawfully obtained" (Section 17). Carrying firearms within a national park, wildlife sanctuary or game reserve, or taking a "sporting dog" into such areas, is prohibited, except with a permit or in cases where a right of way has been established (Section 18).

The Rules allow game wardens, other wildlife officials and forest officers to confiscate any wild animal suspected to have been taken illegally, along with equipment and vehicles used to commit the suspected offence (Section 19). The Rules also specify the powers of the Sindh Wildlife Management Board, which takes policy decisions regarding the "conservation and development of wildlife and game management" (Section 3(a)), and approves and monitors the progress of wildlife and game "development schemes" (Section 3(b) and (d)). The Board appoints inspectors and game "watchers" (Section 3(e)), oversees the work of district game wardens (Section 3(g)), and is empowered to act as an appellate authority in cases where wildlife officials have been punished (Section 3(f)).

Among the powers of the Board, Chairman is the authority to issue hunting or shooting licences and permits free of charge to heads of state, diplomats and other influential persons (Section 8).

These Rules do not specifically override, supersede or repeal earlier wildlife rules issued under the repealed 1959 Wildlife Ordinance and 1940 Wild Birds and Wild Animals Act.

5.5.3 West Pakistan Wildlife Protection Rules, 1960

These Rules were framed under Section 26 of the West Pakistan Wildlife Protection Ordinance, 1959. Although the 1959 Ordinance was repealed by the Sindh Wildlife Protection Ordinance, 1972, rules framed under the Ordinance are saved in Section 43(2) of the 1972 Ordinance. While the Rules continue in force, enforcement is problematic. Since the 1959 Ordinance itself is repealed, all provisions related to species mentioned in the First and Second Schedules to the 1959 Ordinance are void. As such, only two substantive provisions remain in force: special permits are required to capture hares for use in coursing competitions (Section 12) and persons carrying a firearm or accompanied by a hunting dog must obtain a permit from the authorities before entering a game reserve or wildlife sanctuary (Section 19).

These Rules do not specifically override or supersede rules issued under the repealed 1940 Wild Birds and Wild Animals Act.

5.5.4 Sindh Wild Birds and Wild Animals Protection Rules, 1953

These Rules, issued under Section 15 of the Sindh Wild Birds and Wild Animals Protection Act, 1940 provide exclusively for matters related to the hunting and capture of specified birds and animals, and the issuing of permits. For the purposes of the 1940 Act under which these Rules were framed, "protection" is restricted to the issuing of hunting licenses and permits. Although the 1940 Act was repealed by the West Pakistan Wildlife Protection Ordinance, 1959 rules framed under the repealed Act are saved (1959 Ordinance, Section 27(1)).

Conditions under which various species may be hunted, including methods that may be used and those that are prohibited, are specified (Sections 3 and 5). Permits that may be issued under the Rules include "professional" permits, which apply to "contractors" supplying wild animals to zoological gardens, aviaries and "research societies" (Section 6(4)), and "special" permits that allow the hunting of specified species, among them the Urial and Sindh ibex (Section 6(3)(ii)), both of which are protected under the 1972 Wildlife Ordinance. Restrictions applicable to special permits are in most cases relaxed for holders of professional permits (Section 6(5)). No permit holder is allowed to possess a wild bird or animal that has been "seriously maimed or injured", and no captive wild bird or animal may be subjected to cruelty (Section 17).

Permit holders must acquire "special permission" from the conservator to enter reserved or protected forests, as well as closed forests, for the purpose of hunting (Section 9(i)). Possession of a permit does not exempt permit holders from liability under the Forest Act, 1927 for any damage caused or offence committed under that law during hunting expeditions (Section 9(ii)).

Conditions related to trapping and capture are spelled out in Sections 15–18 while the powers and duties of wardens are specified in Sections 19–25.

As is the case with the 1960 Wildlife Rules, enforcement of the 1953 Rules is also problematic. Since the 1940 Act is repealed, all provisions related to species mentioned in the three Schedules to the Act, as well as all rules that refer to specific provisions of the Act, are void.

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

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

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

5.5.6 West Pakistan South African Horse Sickness Rules, 1959

Framed under the Glanders and Farcy Act, 1899 these Rules provide for measures to deal with animals infected by the African horse sickness. The Rules cover a wide range of matters including the isolation of diseased animals (Sections 4 and 5), the cleaning and disinfection of premises and equipment (Section 8), and disposal of the carcases of diseased animals (Section 7). The government is to pay compensation, at rates specified in the Rules, for all animals destroyed under the provisions of the 1899 Act (Section 13).

Police officers are required to provide assistance to animal health officials carrying out their functions under the law (Section 11). Violation of the Rules is punishable with a maximum term of one month in prison and or a fine of 50 rupees (Section 14).

5.5.7 Prevention of Cruelty to Animals Act, 1890 (No. XI)

This federal law, which operates as a provincial law and delegates all powers under it to provincial governments, applies to "domestic or captured" animals (Section 2(1)). The law does not define either of these terms, and deals primarily with livestock and draught animals. There is, however, nothing in the law to exclude captured wild animals from its ambit. In fact, Section (6c) which prohibits animal fights and baiting except under specified conditions suggests that the protection clauses of this law were intended to cover other animals besides livestock. Under the law, it is an offence to kill an animal in an "unnecessarily cruel" manner (Section 5). Maximum penalties under the Act are a fine of 500 rupees and or imprisonment for a term of two years. At the local level, enforcement of the 1890 Act is the responsibility of the grouped district agriculture office (Sindh District Governments (Conduct of Business) Rules, 2001, Section 3(2), read with schedule II, item 2(ii)(c)).

5.5.8 West Pakistan Prevention of Cruelty to Animals Rules, 1961

These Rules, issued under the Prevention of Cruelty to Animals Act, 1890, deal primarily in matters related to draught animals. The only provision that applies generally to all animals is Section 3, which allows the government to designate "recognized societies" for the prevention of cruelty to animals (Section 3).

5.5.9 Elephants' Preservation Act, 1879

This federal Act, which operates as a provincial law, has been repealed in the Punjab as well as the Islamabad Capital Territory. No legal instrument repealing this law in its application to Sindh could be identified. The Act governs the capture or killing of elephants and the taking of ivory, and requires hunters to obtain a license (Section 3(c)). Killing, injuring, capturing, or attempting to kill, injure or capture a wild elephant is permitted without a license, as long as it is done in defence of human life, or to protect homes, farms, public roads, railways or canals (Sections 3(a) and 3(b)).

Powers under the Act are delegated to provincial governments, which may extend the application of this law to any area within their jurisdiction (Section 1). This statute remains in force despite the fact that in Pakistan elephants are no longer found in the wild.

5.6 Protected Areas

No national system has been established to designate and manage protected areas. National parks, sanctuaries and other types of protected areas are established under provincial wildlife laws. In Sindh, protected areas are created under the provisions of the Sindh Wildlife Protection Ordinance, 1972 which allows for the designation of protected areas but does not provide any criteria for designation.



Kirthar National Park, Sindh

The law does not provide for inter-provincial coordination in designating and managing protected areas, or set out basic principles for the declaration and management of protected areas.

Pakistan is a party to the Convention concerning the Protection of World Cultural and Natural Heritage, Paris, 1972 but no natural heritage sites have been declared in this country. Despite the fact that there are 10 Ramsar sites in Sindh, there is no provincial legislation governing the conservation of wetlands.

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

At the local level, the district government law office is responsible for various aspects related to the implementation of PEPA 1997 (Sindh District Government (Conduct of Business) Rules 2001, section 3(2), read with schedule II, item 8(ii)).

These federal Regulations, issued under section 33 of PEPA 1997, empower the "Federal Agency" to designate "environmentally sensitive areas", and to issue guidelines related to projects planned for these areas (section 21). Such projects are required to undergo a prior EIA (Schedule II, part I). The relationship between "environmentally sensitive areas" that may be established by the federal government and protected areas established under provincial laws is not specified.

Under section 2(xvi) of PEPA 1997, the term 'Federal Agency' is defined as "the Pakistan Environmental Protection Agency" or any "local council or local authority exercising the powers and functions of the Federal Agency". The Sindh Environmental Protection Agency (EPA) exercises the powers and functions of the Federal Agency in this province.

5.6.2 Sindh Wildlife Protection Ordinance 1972

This Ordinance enables the provincial government to establish protected areas and specifies activities that are prohibited in such areas.

The provincial government may designate any area to be a wildlife sanctuary, to serve as an "undisturbed breeding ground for the protection of wildlife" (section 14(2)). National Parks may be established in order to protect and preserve "scenery, flora and fauna in the natural state" (section 15(1)).

In game reserves, meanwhile, hunting is allowed with a "special permit" (section 16). Hunting, killing or capturing wild animals "within three miles of the boundaries" of a sanctuary is prohibited (section 14(3)(iv)). In addition, taking up residence within the perimeters of a sanctuary; cultivating, damaging or destroying land or vegetation; using a firearm; causing a fire; and polluting water are not permitted (section 14). The same prohibitions apply to national parks, along with additional restrictions on discharging weapons or "doing any other act" which may disturb an animal or interfere with breeding places (section 15(4)(ii)), and clearing or breaking up land for cultivation, mining or any other purpose (section 15(4)(iv)). The construction of access roads, rest houses, hostels, and other buildings and amenities in a national park must be carried out in a manner that does not "impair the object of the establishment of the national park" (section 15(3)).

Introducing exotic species into a sanctuary or allowing domestic animals to stray inside its perimeters is prohibited (sections 14(3)(v) and (vi)) unless the provincial government grants an exception. Fishing waters within a wildlife sanctuary cannot be leased, auctioned or "in any way used" for fishing or the collection of lotus or roots for commercial purposes (section 14(4)). The protections afforded by this Ordinance are subject to broad exemptions since the provincial government reserves for itself the right to authorise any of these activities for scientific purposes, for "aesthetic enjoyment or betterment of scenery" in a sanctuary (section 14) or for "betterment" of a national park (section 15).

In 2001, the protection clauses of the 1972 Ordinance were further limited through the promulgation of two Amendment Ordinances. New provisos were added to sections 14(3) and 15(4), allowing the government to permit the laying of a single underground pipeline in a wildlife sanctuary or national park "using construction techniques other than blasting", and exempting from the provisions of sections 14 and 15 "any activity" in sanctuaries or national parks that is connected with the "exploration or production of oil or gas". Such operations must not "permanently disturb" wildlife or the environment, and must be undertaken in accordance with an EIA, as defined in PEPA 1997. No mention is made, however, of the manner in which the impact of such activities on protected areas is to be mitigated.

Public access to a wildlife sanctuary is prohibited, except under conditions that are to be specified by means of rules framed pursuant to this Ordinance (section 14(2)), while public access to a national park is permitted for recreation, education and research (section 15(2)).

The Kirthar National Park, spread over 308,733 hectares, was established in 1974 by means of a notification (No. WL&FT(SOI-DCF-993)/74 dated 31 January 1974) issued under this Ordinance. More than 30 wildlife sanctuaries have also been notified between 1972 and 1988 but all notifications issued for this purpose could not be identified. Similarly, approximately 20 game reserves have been notified (half of these prior to 1972) but every such notification could not be located.

5.6.3 Sindh Wildlife Protection Rules 1972

Under section 14(2) of the Sindh Wildlife Protection Ordinance 1972, the conditions under which public access to wildlife sanctuaries is permitted are to be specified in the Rules.

The Rules, however, do not address the issues of public access, stating only that a permit is required to carry a firearm in or take a sporting dog into a national park, wildlife sanctuary or game reserve, unless a "right of way" exists (section 18). The Rules also contain detailed provisions related to licences and procedures for hunting within game reserves.

5.7 Freshwater

Provincial law provides a framework for the management of freshwater resources, with detailed arrangements concerning the establishment of boards and agencies that carry out these functions at the local level. What is missing, however, is a coordinated mechanism to monitor, manage and control the contamination of freshwater sources, and penalize offenders. The Sindh Water Management Ordinance 2002, for example, provides for the control of toxic substances and pollution in water sources, and specifies stiff penalties for such offences. Similar provisions are also made in the SLGO 2001 and the Karachi Water and Sewerage Board Act 1996, where penalties are lower, as well as in PEPA 1997, where the penalties are far higher. Moreover, the Sindh Wildlife Protection Ordinance 1972, Forest Act 1927, Sindh Irrigation Act. 1879, Canal and



Keenjhar is the largest freshwater lake in Pakistan



Clean drinking water, a rare commodity in Sindh

Drainage Act 1873, and Pakistan Penal Code 1860 all contain provisions related to the pollution or contamination of specified water sources. Penalties in these older laws are lower still, and suggest that offences committed in certain areas, such as forests, may not be dealt with in the same manner as offences committed, for example, in urban areas.

The allocation of freshwater resources is governed by federal law, where no provisions exist for the conservation or sustainable use of these resources. Conservation and sustainable use are also not covered by provincial law, despite the fact that comprehensive legislation governing the sector has been enacted as recently as the year 2002.

5.7.1 Sindh Water Management Ordinance 2002

This Ordinance establishes a framework for executing and managing schemes for irrigation, drainage and flood management. Water is defined broadly in section 2(r) as "any water standing or flowing on surface [sic] or found in the soil at any place in the province". There is potential here for conflict with federal law, under which WAPDA controls all underground water resources (Water and Power Development Authority Act 1958, section 11(1)(i)(a)).

The law reconstitutes the Sindh Irrigation and Drainage Authority (section 3), and provides details regarding its composition and operational procedures (sections 5–9). The Authority was established under section 3 of the Sindh Irrigation and Drainage Authority Act 1997, which is repealed by the 2002 Ordinance.

Functions of the Authority include operating and maintaining irrigation and drainage systems, and carrying out flood protection (section 10). The Authority advises the provincial government on these matters, along with issues such as drought management and sea water intrusion.

The Ordinance also assigns specific "tasks" to the Authority, including the distribution of irrigation water from barrages within the province, and from "inter-provincial/link" canals (section 11(c)). The Authority is empowered to levy and collect service fees and surcharges (section 11(e)). It is required to carry out research in a number of areas, including the impact of its own operations and policies on "the ecology and on the environment including protection of wetlands with a view to appraising the various available options for minimizing the adverse impact" of such activities (section 11(l)). Another task assigned to the Authority is to issue flood warnings (section 11(r)). From the text of this provision it appears that this responsibility extends to all types of floods including those precipitated by natural or environmental events. The Authority also performs a coordinating role in the case of "calamities", explained in section 26(1) as "breaches, floods or extreme weather conditions such as cyclones".

Area water boards, which may be established or reconstituted by the provincial government (section 28), and farmers' organizations (section 40) established under section 26A (1) of the repealed 1997 Act, perform within their respective territorial jurisdiction many of the same functions. One notable additional responsibility of area water boards is to monitor the disposal of "toxic or noxious effluent safely and with minimum pollution of water resources" (section 38(1)). Area water boards are empowered to charge fees for monitoring services provided (section 28(2)), and to notify the Regulatory Authority of offences related to the discharge of toxic effluent within its jurisdiction (section 28(3)).

The government is required to establish a Regulatory Authority of Drainage and Flood Protection (section 67), the main purpose of which is to ensure compliance with the provisions of this Ordinance (section 74(1)). It performs mostly supervisory functions but is awarded specific powers to enforce compliance (section 81). It is also empowered to determine fees and charges (section 77), institute measures for drought control (section 78), and sanction measures to prevent the "waste, undue consumption and misuse" of water (section 29).

The Ordinance empowers both the Authority and the provincial government to establish various user level boards, committees and associations, and deals almost exclusively with the powers and functions of these bodies. Offences under the law are covered in a single section, and include obstructing a watercourse, allowing cattle or animals to bathe in or near a water source, and permitting the "steeping" of "dangerous material" near or in a water source (section 103).

Maximum penalties specified under the law extend to six months' imprisonment and or a fine of PKR. 100,000. It should be noted that these prohibitions apply only to water resources that "belong" to the Authority, area water boards or farmers' organizations. Rules are to be framed by the provincial government but regulations may be framed by the various bodies established under this Ordinance (section 104).

5.7.2 Sindh Irrigation and Drainage Authority Rules, 1999

These Rules were framed under the Sindh Irrigation and Drainage Authority Act 1997. Although the 1997 Act has been repealed by the Sindh Water Management Ordinance 2002, rules framed under the 1997 Act are not specifically repealed or saved by the 2002 Ordinance.

The Rules provide for the transfer of assets from the irrigation wing of the provincial irrigation and power department to the Sindh Irrigation and Drainage Authority, from the Authority to area water boards, and from area water boards to farmers' organizations, specifying the conditions on which such assets are to be retained (sections 3–5). The Authority grants "concessions" (operating licenses) to area water boards allowing them to operate, maintain, develop and improve the "water management infrastructure [and] associated land" (section 7). Area water boards in turn issue concessions to farmers' organizations for the same purpose (section 7(7)).

In carrying out their functions with respect to infrastructure as well as land, area water boards are required to exercise "all due prudence and care" (section 7(4)). Water boards may be required by the Authority to undertake "corrective actions" or pay compensation in cases where they have breached their obligations (section 7(5)).

The Rules specify terms and conditions related to the supply of water, including the individual share of each canal command area, and allow the Authority to determine charges for water supply as well as "non-water services" provided (sections 8–10). Criteria according to which the aggregate water entitlement of each canal command area is determined include an "increased requirement for industrial, domestic [,] environmental, or health-related water usage" (section 10(2)).

5.7.3 Sindh Irrigation and Drainage Authority (Pilot Farmer Organization) Regulations 1999

These Regulations, framed under the Sindh Irrigation and Drainage Authority Act 1997, provide for the functioning of farmers' organizations. The 1997 Act has been repealed by the Sindh Water Management Ordinance 2002 but regulations framed under the 1997 Act are not specifically repealed or saved by the 2002 Ordinance.

The substantive provisions of these Regulations cover matters related to the establishment, performance and jurisdiction of farmers' organizations (sections 3–6). All money received by farmers' organizations are paid into a fund which is used to finance operating costs, service debt, and pay for "capital replacements and improvement charges" (section 11). The Sindh Irrigation and Drainage Authority may suspend the operations of any farmers' organization found to be "working against the public interest" (section 7(1)).

5.7.4 Karachi Water and Sewerage Board Act 1996 (No. X)

This law reconstitutes the Karachi Water and Sewerage Board (KWSB), which is responsible for water supply, sewage disposal, and the construction and maintenance of the water and sewerage infrastructure (section 7). The KWSB must also ensure that the water supply is potable (sections 7(xiv) and 9(2)).

Under the provisions of the SLGO, water and sanitation boards and agencies are to operate under the control of the district government (section 182(3)). Such agencies are to continue performing their functions while the operation aspects of this transfer of management are finalized (section 182(1)).

The KWSB has the right to construct aqueducts, conduits, pipelines and drains over, under, along or across "any immovable property" without acquiring the property in question (section 9(9)). It may also enter such property to carry out maintenance and inspections.

Except in emergencies, the KWSB must obtain permission from federal, provincial, local or railway authorities before undertaking any construction or maintenance work on land under their jurisdiction (section 9(10)). In undertaking its activities, the KWSB is required to cause "as little damage and inconvenience as possible" (section 9(11)). In case of any such damage caused, it may pay a "reasonable amount" of compensation 9(11)). The law does not specifically provide for or enable any measures to monitor and mitigate the environmental impact of KWSB operations but section 9(11) does not rule out such an interpretation.

Penalties under the law cover a range of offences such as obstructing waterworks, taking water illegally and damaging transmission lines (section 14). It is also an offence to contaminate "any waterworks" by bathing in such an area, dumping "rubbish or other offensive matter", or causing the water to become "fouled" (section 14(f)), punishable with a maximum fine of PKR. 10,000 and or imprisonment for up to six months.

The KWSB may delegate its powers and functions (section 12(4)). The provincial government may make rules to carry out the purposes of this Act (section 15) while the KWSB may make regulations subject to the approval of the provincial government (section 16). The law provides the government, the KWSB and KWSB official's indemnity from prosecution (section 17). Although the management of water and sewerage boards falls under the jurisdiction of the city district government according to the provisions of the SLGO (SLGO, section 182(3)), operational aspects of this transfer of authority are still being worked out.

5.7.5 Coastal Development Authority Act, 1994

This Act establishes an Authority that is responsible for the development, improvement and beautification of the coastal areas of Thatta and Badin districts (section 7(1)). The Authority may plan and execute schemes related to a number of sectors including drinking water (section 7(2)(a)).

5.7.6 Port Qasim Authority Act 1973

This federal Act establishes an Authority to oversee the planning, development and management of Port Qasim. The Authority is charged with preparing a master plan for the port area (section 10), and may call upon government agencies and local bodies to prepare and execute schemes in the port area related to matters over which these agencies ordinarily hold authority (section 11(2)). Among other activities, such schemes may provide for the utilization of water and "other natural resources" (section 11(2) (f)), as well as environmental control and the prevention of pollution (section 11(2) (j)).

5.7.7 Sindh Wildlife Protection Ordinance 1972

The definition of wildlife in this Ordinance includes water (section 2(n)). Polluting water in a wildlife sanctuary is prohibited (section 14(3)(viii)) unless the government grants an exemption for scientific purposes or "aesthetic enjoyment or betterment of scenery". Similarly, polluting water "flowing in and through" a national park is a punishable offence (section 15(4)(v)) unless the government grants an exemption for scientific purposes or the "betterment" of the national park.

The maximum penalty for polluting the water in a sanctuary or national park is six months' imprisonment and or a fine of PKR 500 for a first offence (section 17(1)(iv)). For subsequent offences, a minimum penalty of one year in prison and or a fine of PKR. 1,000 may be imposed, in addition to the confiscation of materials and equipment involved in the offence.

5.7.8 Sindh Tenancy Act 1950

This law deals primarily with the relationship between landlords and agricultural tenants, and the rights and responsibilities of both parties. Under the provisions of this Act, tenants are responsible for the construction and maintenance of irrigation bunds and watercourses within the land allotted to them (section 23(c)) while the landlord is responsible for main watercourses and water supply (sections 24(a) and 24(b)).

5.7.9 Forest Act 1927

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

5.7.10 Sindh Irrigation Act 1879 (No. VII)

This Act provides for matters related to irrigation, a subject that is also governed by the Sindh Water Management Ordinance 2002. The 1879 law remains in force to the extent that its provisions do not come into conflict with the 2002 Ordinance. In cases of any inconsistency, the provisions of the 2002 Ordinance have overriding effect (Sindh Water Management Ordinance, 2002 section 105). The law allows the provincial government to "apply" and use water from any river, steam, lake or subsoil source for the purpose of canals (Sindh Irrigation Act 1879, section 5). Canal officers are empowered to enter the land on which such a water source is located, remove obstructions and proceed with canal works (section 6). The government and canal officers have similar powers with respect to drainage works (section 15). Canal officers authorize the construction of new watercourses (section 16), and settle disputes regarding mutual rights and liabilities of persons interested in watercourses (section 26). Those requiring the construction of a new watercourse, but unable to arrive at a private arrangement with the owners of the land on which such a watercourse is to be constructed, may apply to the canal officer (section 17). If the application is accepted, the land is acquired under the provisions of the Land Acquisition Act 1894 (section 19).

In cases where an "accident" has befallen a canal or is imminent, canal officers may enter land adjacent to the canal, take trees and "other materials" and undertake works to prevent or repair the damage (section 9). Similarly, where it appears necessary to undertake immediate repairs on a canal in order to prevent "extensive public injury" or "serious public loss", canal officers may request for labour from residents and landowners in the vicinity, who are "bound to assist" in repair work but are to be compensated at rates "that shall not be less than the highest rates for the time being paid in the neighbourhood for similar labour" (section 58).

Where "substantial damage" has occurred as a result of activities carried out under the provisions of this Act, compensation may be awarded (section 31). Compensation cannot, however, be claimed in cases where the damage has been caused by repair work, or by measures "considered necessary" to regulate water flow in a canal or maintain a watercourse.

The law provides for the supply of water from canals (sections 27 and 28) and for various rates that may be levied for water supply (section 44). Charges may also be levied for unauthorized use (section 45) and for wasting water either deliberately or through neglect (section 46).

Penalties under the 1879 Act are for the most part related to interference or damage to canals, although "corrupting" or "fouling" the water is also listed as an offence (section 61(3)), punishable with imprisonment for a term of up to two years and or a maximum fine of PKR 10,000. Public servants found to be conniving, either directly or indirectly, in the commission of an offence are considered to be abettors and liable to the same punishment (section 62-A).

Under section 105 of the Sindh Water Management Ordinance, 2002 the powers of canal officers under the 1879 Act are to be exercised by the Sindh Irrigation and Drainage Authority and area water boards in their respective areas of jurisdiction.

5.7.11 Canal and Drainage Act 1873

This federal Act regulates matters related to irrigation, water supply, navigation and drainage. This law was specifically extended to certain areas in Sindh; the Sindh Irrigation Act 1879 does not apply to these areas but remains in force throughout the rest of the province. The law allows the provincial government to use and control water from all rivers and streams flowing in natural channels, and from all lakes and other natural collections of still water (preamble). In addition, the provincial government may order any river, stream, lake or water body to be used for any public purpose at any time (section 5). The law contains no provisions for the sustainable use of freshwater resources or for their preservation.

Under the law, the term 'canal' is defined broadly to include all irrigation channels and associated works, and all watercourses as well as all parts of a river, stream, lake or "natural collection of water" that the provincial government has declared necessary for use under section 5 (section 3(1)).

Watercourses are, in turn, defined as channels supplied with canal water and all subsidiary works that are not maintained at government expense (section 3(2)), which suggests the law applies to privately owned or maintained irrigation channels as well.

The Act provides for the construction and maintenance of works related to canals (part III), and empowers canal officers to enter and survey land for this purpose (section 14). General provisions related to water supply and water rates are covered in parts IV and V, including charges to be levied and penalties incurred on account of waste or unauthorised use (sections 34 and 35).

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

Although this law deals primarily with the construction and maintenance of irrigation and drainage channels, it also prohibits the "corrupting or fouling" (section 70(5)) of canal water, imposing a fine of 500 rupees and or one months' imprisonment for offences.

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

5.7.12 Canal and Drainage (Extension to Rohri Canal Area) Act 1991

This Act extends the application of the Canal and Drainage Act 1873 to certain areas irrigated by the Rohri Canal in Tando Adam, district Sanghar (section 2). The law states that the Sindh Canal and Drainage Act 1879 does not apply to those areas where the 1873 Act has been extended (section 4).

5.7.13 Pakistan Penal Code, 1860

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

The PPC deals specifically with the pollution of water in chapter XIV on public health and safety.

Here, "fouling" or "corrupting" the water of a public spring or reservoir is listed as an offence, punishable with up to three months in prison and or a fine of PKR. 500 (section 277). This provision is limited in scope, since it applies only to reservoirs and public springs, and the terms 'fouling' and 'corrupting' are not defined. But provisions of PEPA, 1997 (sections 6 and 7) and the NEQS (appendix I) may be applied to facilitate enforcement of section 277. Other sections of this chapter may be interpreted to include the protection of water resources, including section 268 on public nuisance, section 269 on negligence likely to spread infectious disease, and section 284 on negligent conduct with respect to the possession and handling of poisonous substances.

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

5.8 Coastal and Marine

There are no provincial laws that control coastal areas in general. Nor has the province enacted legislation to implement Pakistan's international commitments under agreements specifically concerning marine pollution. Whatever little protection exists comes through federal laws such as PEPA, 1997, the Pakistan Merchant Shipping Ordinance 2001 and the Ports Act 1908.



A view of a coastal village in Keti Bunder

The Coastal Development Authority Act, 1994, the lone provincial law specifically concerning coastal areas, focuses on development rather than conservation, applies only to two districts, and contains no provisions regarding pollution caused by river bed construction, the dumping of toxic or other waste, increased shipping traffic and land-based pollution. Nor do any provisions obligate those involved in the exploitation of economic resources within territorial waters to protect the environment or follow sustainable development parameters.

Although marine turtles are listed as protected animals under the Sindh Wildlife Ordinance 1972, there are no provincial laws to protect marine ecosystems, smaller marine organisms and their habitats, sand dunes created by receding coastlines or river beds, micro organisms, or marine habitat. Provincial legislation does not provide for the protection of mangroves or coastal forests.



There are no provincial laws to protect the coastline

A fishing vessel in sea water near Keti Bunder from the effects of oil spills and other similar accidents, or to provide a framework for clean-up operations.



5.8.1 Karachi Building and Town Planning Regulations 2002 Notification No. SO (Land) HTP/KBCA-3-39/2000

These Regulations, issue d under the Sindh Buildings Control Ordinance 1979, provide exhaustive rules and procedures for construction and development activities in the city (section 1-2). They apply to all of Karachi except for cantonment areas (section 1-1.3). The government may also declare "special areas" that are exempt from the application of these Regulations (section 1-3).

The Regulations contain general standards for "coastline recreation development" (chapter 23). This development is to be carried out according to the 'Karachi Coastal Recreation Development Plan', under which the entire 40-mile strip of the city's coastline has been declared "interim control area for the purpose of recreation and tourism" (section 23-1). The Coastal Development Plan designates what are described as "environmental planning zones", which are to be considered in planning recreational schemes in the coastal areas (section 23-3).

The green turtle nesting areas, mangrove swamps, coral reef, oyster beds, rock pools, and bird roosting and nesting sites along the Hawks Bay, Manora and Sandspit beaches are classified as conservation areas", where controlled/limited infrastructural development and public access is permitted (section 23-3.1.2). An "area of concern" is one where "improvement [...] may be beneficial" (section 23-3.3) while the "restricted zone" covers a 2-kilometre radius around the Karachi Nuclear Power Plant (KANUPP), where no development is permitted (section 23-3.4).

A "utilization area", meanwhile, is suitable for development (section 23-3.2). A wide range of projects are permitted here, including hotels, restaurants, marinas and clubs, casinos, "dolphin parks", and other "modern types of amusements and water based recreation without damaging the natural environment of the coastline" (section 23-5.3.5).

This development is subject to certain regulatory provisions, not all of which are compulsory. Safety measures to check marine pollution as a result of "beach activities" (section 23-4.26), for example, is a subject that "may be given special consideration" (section 23-4.2). The design of marinas and piers in a manner that does not obstruct the free flow of tides (section 23-4.2.4) is another such optional consideration.

Separate building regulations are provided for "recreation and amusement projects" in such areas, including a "proper feasibility" (section 23-5). Specific areas to be covered by such feasibility studies are not mentioned and the building regulations for coastal development, in contrast to the regulations for other parts of the city, are by no means comprehensive. Provisions are to be made for the disposal of waste "without polluting the coastline" (section 23-5.1), 70 per cent of the project is to consist of an "open area with landscaping for recreation" (section 23-5.3.2), while a "large open space" is designated for car parking (section 23-5.3.6).

5.8.2 Coastal Development Authority Act 1994

This Act provides for the development, improvement and "beautification" of the coastal areas of Thatta and Badin districts, and establishes an Authority for this purpose. The Authority is responsible for the beautification of coastal areas and monitoring development schemes, as well as drinking water facilities, communication systems, electricity, drainage, development of fisheries, livestock, horticulture and forests (section 7(1) and 7(2)). It develops marketing facilities and constructs jetties and harbours (section 7(2)). It acts as a coordinating agency for the federal and provincial governments, local authorities or autonomous bodies (section 7(3)), and collaborates with them in development and environmental protection activities (section 7(4)). The Authority provides technical guidance including technical services for development activities (section 7(5)) and carries out research for development planning (section 7(7)). It assists in the establishment of coconut palm plantations (section 7(10)) and the development of fish harbours and oil refineries (section 7(11) and 7(12)).

5.9 How can you use these laws?

Different laws will apply depending on what area of the environment you may be investigating. So, for example, if you were looking for laws relating to the development of the steel mill, you would look under land, planning and development because the law relating to planning would be important. On the other hand, if you needed information about how to apply for a commercial fishing permit or commercial forestry permit, you would look under Natural and Cultural Resources because fish and forests are natural resources and there are specific laws that deal with the allocation of fishing and forestry quotas and licenses.

It is not possible to deal with the details of each of the laws that we have listed. You should use this section to help you find out which laws that will apply in a particular situation. Once it has been established which laws apply, you can then follow the steps set out in Chapter 8 and 9 of this handbook.

Chapter 6

Devolution Plan and Environment

The under mentioned analysis has been taken from the book "Environmental Law in Pakistan, governing natural resources and processes and institutions that affect them. Part 5 Sindh." ⁵¹

6.1 Sindh Local Government Ordinance, 2001

Although the word 'development' is used frequently throughout the SLGO 2001, the term itself is never defined. Matters relating to urban and rural development are, however, included in the definition of municipal services, which cover land use control, zoning, master planning, housing, urban and rural infrastructure, water supply, and construction (Section 2(xxii)).

Development planning is carried out by the zila council (Section 39(c)) as well as at the taluka level (Section 67(iv)). In a city district, the zila council is responsible for "urban design", "urban renewal", land use and zoning (Section 40(a)), and approves "beautification" schemes for riverbanks and coastline (Section 40(d)) as well as "macro municipal plans" (Section 41). Matters related to land use, "land development", "site development", zoning and water supply are handled by the taluka administration (Section 54(1)).

Under the provisions of the SLGO, the management of development authorities across the province has been handed over to district governments (Section 182). Until such time as the transition is complete, development authorities may acquire land for "development purposes" (Section 125).

Financial and administrative authority in a number of areas related to urban and rural development has been devolved to the district level. These include housing, urban and physical planning, and rural development (Section 14, read with the First Schedule, part A, items xxviii and xxix). In city districts, meanwhile, the provincial government may where necessary establish additional offices to handle land use, zoning and various forms of urban development including urban design and "renewal", urban and housing development, urban "improvement and upgrading", and urban "renewal and redevelopment" (Section 35, read with the First Schedule part D). In carrying out such activities, care must be taken to "preserve historical and cultural monuments" but there is no mention of the environment in general or natural resources in particular.

General powers of local governments cover building control (Section 195, read with the Sixth Schedule, items 24–36), the leasing of government property (Sixth Schedule, item 64) and master plans (items 69–71).

⁵¹IUCN, 2005. Environmental Laws in Pakistan Governing Natural Resources and Processes and Institutions That Affect Them. Part 5: Sindh. Published by IUCN - The World Conservation Union Pakistan.

Maximum penalties specified in the SLGO amount to three years' imprisonment and or a fine of PKR 15,000, in addition to a fine of PKR 1,000 for every day the offence continues to be committed, for activities such as violating prohibitions set out in the master plan, sanctioned development schemes or any other law in force, or carrying out "building operations" in a manner that is dangerous for those passing by or living in the vicinity (Sections 141–143 and 147, read with the Fourth Schedule, part I, items 12, 16 and 28). Similar penalties apply in the case of immovable encroachment on public land, and failure to demolish a building declared by the authorities to be dangerous (Section 141, read with the Fourth Schedule, part I, items 20 and 24). Lesser penalties apply for building or demolishing buildings, in whole or in part, in a manner that is declared to be dangerous or annoyance to the public (Sections 141–143 and 147, read with the Fourth Schedule, part II, item 40).

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

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

6.1.1 Coastal land and Sindh Local Government Ordinance, 2001

Under the SLGO, the zila council in a city district may approve development schemes for the "beautification" of beaches and the seaside (Section 40(d)). However, there is no mention of coastal land in rural areas. There are no guidelines as to how such projects should be carried out or, indeed, what constitutes beautification.

6.1.2 Water and Sindh Local Government Ordinance, 2001

The SLGO, which provides for the decentralization of governance, transfers to the district government financial and administrative authority for certain aspects of freshwater management.

Watershed management, however, continues to fall under the jurisdiction of the provincial government (Section 14, read with the First Schedule). Under the provisions of the Ordinance, water supply is included in the municipal services that are to be provided by various tiers of local government (Section 2(xxii)) but the provisions of the Ordinance also apply to land that is "covered with water" (Section 2(xiv)).

Among the powers of the Board, Chairman is the authority to issue hunting or shooting licences and permits free of charge to heads of state, diplomats and other influential persons (Section 8).

These Rules do not specifically override, supersede or repeal earlier wildlife rules issued under the repealed 1959 Wildlife Ordinance and 1940 Wild Birds and Wild Animals Act.

5.5.3 West Pakistan Wildlife Protection Rules, 1960

These Rules were framed under Section 26 of the West Pakistan Wildlife Protection Ordinance, 1959. Although the 1959 Ordinance was repealed by the Sindh Wildlife Protection Ordinance, 1972, rules framed under the Ordinance are saved in Section 43(2) of the 1972 Ordinance. While the Rules continue in force, enforcement is problematic. Since the 1959 Ordinance itself is repealed, all provisions related to species mentioned in the First and Second Schedules to the 1959 Ordinance are void. As such, only two substantive provisions remain in force: special permits are required to capture hares for use in coursing competitions (Section 12) and persons carrying a firearm or accompanied by a hunting dog must obtain a permit from the authorities before entering a game reserve or wildlife sanctuary (Section 19).

These Rules do not specifically override or supersede rules issued under the repealed 1940 Wild Birds and Wild Animals Act.

5.5.4 Sindh Wild Birds and Wild Animals Protection Rules, 1953

These Rules, issued under Section 15 of the Sindh Wild Birds and Wild Animals Protection Act, 1940 provide exclusively for matters related to the hunting and capture of specified birds and animals, and the issuing of permits. For the purposes of the 1940 Act under which these Rules were framed, "protection" is restricted to the issuing of hunting licenses and permits. Although the 1940 Act was repealed by the West Pakistan Wildlife Protection Ordinance, 1959 rules framed under the repealed Act are saved (1959 Ordinance, Section 27(1)).

Conditions under which various species may be hunted, including methods that may be used and those that are prohibited, are specified (Sections 3 and 5). Permits that may be issued under the Rules include "professional" permits, which apply to "contractors" supplying wild animals to zoological gardens, aviaries and "research societies" (Section 6(4)), and "special" permits that allow the hunting of specified species, among them the Urial and Sindh ibex (Section 6(3)(ii)), both of which are protected under the 1972 Wildlife Ordinance. Restrictions applicable to special permits are in most cases relaxed for holders of professional permits (Section 6(5)). No permit holder is allowed to possess a wild bird or animal that has been "seriously maimed or injured", and no captive wild bird or animal may be subjected to cruelty (Section 17).

Although marine turtles are listed as protected animals under the Sindh Wildlife Ordinance 1972, there are no provincial laws to protect marine ecosystems, smaller marine organisms and their habitats, sand dunes created by receding coastlines or river beds, micro organisms, or marine habitat. Provincial legislation does not provide for the protection of mangroves or coastal forests.



There are no provincial laws to protect the coastline

A fishing vessel in sea water near Keti Bunder from the effects of oil spills and other similar accidents, or to provide a framework for clean-up operations.

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The Regulations contain general standards for "coastline recreation development" (chapter 23). This development is to be carried out according to the 'Karachi Coastal Recreation Development Plan', under which the entire 40-mile strip of the city's coastline has been declared "interim control area for the purpose of recreation and tourism" (section 23-1). The Coastal Development Plan designates what are described as "environmental planning zones", which are to be considered in planning recreational schemes in the coastal areas (section 23-3).

The green turtle nesting areas, mangrove swamps, coral reef, oyster beds, rock pools, and bird roosting and nesting sites along the Hawks Bay, Manora and Sandspit beaches are classified as conservation areas", where controlled/limited infrastructural development and public access is permitted (section 23-3.1.2). An "area of concern" is one where "improvement [...] may be beneficial" (section 23-3.3) while the "restricted zone" covers a 2-kilometre radius around the Karachi Nuclear Power Plant (KANUPP), where no development is permitted (section 23-3.4).

A "utilization area", meanwhile, is suitable for development (section 23-3.2). A wide range of projects are permitted here, including hotels, restaurants, marinas and clubs, casinos, "dolphin parks", and other "modern types of amusements and water based recreation without damaging the natural environment of the coastline" (section 23-5.3.5).

Under the SLGO, keeping "ferocious dogs and other animals" in a residential area is an offence, punishable with an immediate fine of PKR. 200 (Section 141, read with the Eighth Schedule, item 7).

An offence repeated within a period of three months incurs a maximum penalty of up to six months' imprisonment and or a fine of PKR. 5,000, in addition to a daily penalty of PKR. 200 if the offence is repeated. Since "other animals" are not defined specifically, this clause may be interpreted to refer to exotic pets, including endangered species. It is also an offence to set free a diseased animal. Other offences, punishable with similar fines, concern animal trespass and the failure to remove "offensive" vegetation (Section 141, read with the Eighth Schedule, items 3, 16, 23 and 41).

6.1.4 Pakistan Environmental Protection Act, 1997 and Sindh Local Government Ordinance

At the local level, the district law office is responsible for various aspects related to the implementation of PEPA, 1997 (Sindh District Government (Conduct of Business) Rules 2001, Section 3(2), read with schedule II, item 8(ii)).

6.1.5 Sindh District Government (Conduct of Business) Rules, 2001

These Rules were framed under Section 31 of the SLGO and provide for the operation of "grouped" offices at the district level. The distribution of responsibilities amongst grouped offices is shown in schedule II (read with Section 3(2)).

Forests are to be managed as part of the grouped agriculture office (Section 3(1), read with schedule I, item 2). The agriculture office is responsible for the "scientific management of existing public forests to maximize the production of wood and minor forest produces" (schedule II, item 2(vii)). Its other functions include forest plantation, promoting farm forestry in private land, establishing "amenity forests", and carrying out activities related to publicity and education (schedule II, item 2(vii)). The office operates under the technical guidance of the provincial government and must submit its working plans to the provincial government for approval.

Fisheries are to be managed as part of the grouped agriculture office (Section 3(1), read with Schedule I, item 2). The agriculture office is responsible for enforcing fisheries law at the district level, and for the "lease of fishing rights, conservation, management and promotion of fisheries in water areas except rivers, canals, and barrages/pond areas which have no boundaries" (schedule II, item 2(vi)) within its jurisdiction. Its functions include issuing angling licenses, aquaculture development, fish stock replenishment in natural water bodies and supervising the operation of hatcheries.

The agriculture office also performs tasks related to extension services, education, training, awareness-raising activities and the collection of statistical data for the fisheries sector.

Chapter 7

Environmental Rights and Cultural Rights

Environmental rights and cultural rights have a complex interrelationship that surface in many concrete policy debates. Sometimes these rights are compatible, and there is only minimal controversy. In the 1970s, Pakistani laws were enforced without paying much heed to indigenous practices and customary laws of the people, especially in the Northern Areas who had little or no knowledge of these new laws.

Cultural rights, as guaranteed in Article 28 of the Constitution of Pakistan, state that "Citizens having a distinct language, script and culture shall have the right to preserve and promote the same and subject to law, establish institutions for that purpose."

Article 27 of the International Covenant on Civil and Political Rights (ICCPR) also guarantees cultural rights since they are crucial for the maintenance of social identities, and are invoked primarily when governments take steps that threaten to undermine the way of life of whole groups. Although some analysts have proposed that the right to culture involves nothing more than non-interference, the Human Rights Committee — the United Nations treaty body that enforces the ICCPR — has explicitly stated that cultural rights are "positive" and not "negative," meaning that governments must take affirmative steps to ensure the protection of cultural rights.

Often, cultural discourse helps reinforce the demand for environmental protection. For example, indigenous people have challenged the desecration of sacred sites, arguing that harm to the environment will also undermine the way of life of the people. In cases such as this, environmental rights and cultural rights coincide, revealing a confluence of rights claims.

Yet in many other contexts, environmental rights claims come in conflict with cultural rights claims as in the case of endangered species. At the crux of many of these cases are cultural differences regarding the use of particular endangered species by indigenous people or by other communities that revere these animals. Despite the existence of such international treaties as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), designed to prevent the killing of animals thought to be near extinction, in some countries these animals are revered to support cultural and religious practices. Animal parts may be used for medicinal purposes, as aphrodisiacs, or some believe that they have supernatural powers.

Animal rights activists and environmentalists contend that endangered species deserve protection for their own sake and to preserve biodiversity. On the other hand, some cultures maintain that they are entitled to use such animals for legitimate purposes despite international criticism. The affected groups, therefore, invoke the right to culture and the right to religious freedom to justify their position. Although religious liberty may be

construed as an aspect of culture, to prevail in court such claims must be framed as an issue of religious freedom rather than the right to culture, given that national constitutions usually protect the former but not the latter.

Natural resources in many parts of northern Pakistan are still being controlled under unwritten customary laws transmitted through oral traditions which have been adopted by local communities.



The tomb of Noori and Jam Tamachi, Keenjhar Lake

While statutory law now predominantly governs the use of forest resources in Northern Areas, customary law continues to apply to the use of pastures. This causes a conflict between environmental laws and customary laws. For example, under the Rajas (Kings), hunting was regulated and required permission from the Raja. Currently it is regulated by the statutory law but local people continue to hunt. Instead of taking it to court, the locals of the Northern Areas prefer to go the Jirgas. In Yasen, Hunza and Nagar (Northern Areas of Pakistan) Rajas granted hunting privileges within their states. Game reserves were established exclusively for the ruling princes and hunters who were specially appointed for the purpose. Restrictions on hunting included total bans on:

- ☐ Hunting in breeding seasons
- ☐ Hunting of young animals
- ☐ Hunting of female animals⁵²

In the customary laws of Northern Areas of Pakistan, there is no concept of ownership of wildlife and water resources. Under customary law, wild animals belong to the hunter but statutory restrictions on hunting ... have significantly altered customary practices.

Water is a shared resource under customary law; it is owned by no one.⁵³

The impact of statutory law on customary law and authority is strongest in the regulation of forest management and commercial use of forest products. Customary law regulating natural resources in Northern Areas has most of the fundamental features of a statutory regulatory regime. It provides for permits for using resources; there may or may not be a fine for the permit.

The primary difference between customary and statutory regimes is clear; most statutory regimes governing natural resource management and use in Northern Areas were designed to promote resource exploitation, rather than resource conservation.⁵⁴

^{§27} Bilal, A. et al. 2003. Customary Laws: Governing Natural Resources in Northern Areas. IUCN Law Program. IUCN-The World Conservation Union, Pakistan, P.7

⁵³ Ibid., p. 55

⁵⁴ Ibid., p. 57

Chapter 8

Environmental Issues and Ways to Resolve Environmental Disputes

When deciding which path to follow in resolving an environmental dispute, you must first identify which rights have been infringed. Once this has been done you will be in a position to assess which steps you should take to solve the problem. Here is a suggested four-step plan for solving an environmental dispute:

Step one: identify which rights are infringed;

Step two: outline what you want to do to address the infringement;

Step three: decide who to approach for help; and

Step four: decide what steps to take if you receive no response.⁵⁵

There are two kinds of environmental problems: local issues and public issues. Local issues tend to affect a particular locality, such as poor maintenance of water, electricity or sewage facilities or pollution from nearby factories etc. Public issues, on the other hand, may concern people all over the country such as the protection of Houbara Bustard or water scarcity.

8.1 What rights are Infringed?

In order to determine this you will need to look at the Constitution, the common law and legislation as has been discussed earlier.

8.2 Ways to resolve Environmental Disputes

It is important to note that there are substantive ways to solve an environmental problem and procedural ways to solve the problem. Substantive environmental justice does not require going to court. In fact, disputes are specifically resolved outside of court. Substantive environmental justice can involve a variety of different methods, some of which are listed below:

8.2.1 Public Participation

The Pakistan Environmental Protection Act, 1997 says that Section 12 provides that no person or proponent of a project can commence construction or operation of a project where such project falls within a prescribed category unless in respect of that project:

- a) An Initial Environmental Examination (IEE) has been undertaken; or
- b) Where the project is likely to cause an adverse environmental effect, an Environmental Impact Assessment (EIA), has been filed with the EPA and its approval has been obtained.

⁵⁵ http://www.paralegaladvice.org.za/docs/chap04/01.html: retrieved on 19.11.2008

The law goes on to say that, notwithstanding the prescribed categories, if any project is likely to cause an adverse environmental effect, it must conduct an EIA. Failure to file an IEE or EIA is an offence.

This section requires that an environmental impact assessment shall be reviewed publicly. Public participation in this instance includes sending in written submissions.

This is the golden thread line of the PEPA, 1997. The right to participate in decisions about the environment applies to all tiers of government (federal, provincial and local). Public participation in these processes may require a fairly high level of expertise in and awareness of planning and development procedures. A partnership with environmental groups and academia is necessary.

When examined from a democratic standpoint, public participation resulting from the provisions of PEPA are a strong form of democracy. Each project likely to cause an adverse environmental effect or listed in the Schedule of PEPA must be brought before the public or community it will affect. The law gives the community the right to comment on the EIA of the project and participate in the decision making process.

The Pakistan Environmental Protection Agency Review of Initial Environmental Examination and Environmental Impact Assessment Regulations, 2000 explains how to effectively participate in such apparently complex processes as environmental impact assessments. It lists the projects which require an IEE and those which require an EIA.

8.2.2 Environmental Awareness Raising and Advocacy

Drawing the project developers' attention to potential problems may often be enough for them to enters into negotiations or seek out steps to rectify problems. It is often best to tackle a problem by beginning with appealing to and negotiating with those responsible for the problem. Mediation can help to solve environmental disputes and is often useful.

Consider other actions such as protest, media campaigns and, finally, possible court action. You can approach local community organisations to try and put pressure on them to take action; network with other organisations that may want to get involved or provide advice. Local newspapers may help by publicising a violation of an environmental issue. Communities themselves can also take action, for example by leading clean-up campaigns.

8.2.3 Non-governmental Organisations (NGOs) working for the Conservation and Protection of Environment

Non-Governmental Organisations working for the conservation and protection of the environment may be involved in helping to develop government policy, empowering people to participate in law-making or policy processes or public participation processes, lobbying for environmental changes or actions. They may also be engaged in protesting for people's environmental rights, taking up environmental or conservation issues caused by ongoing projects. There are many conservation action groups, for example, the World Wide Fund for Nature - Pakistan (WWF-P), The World Conservation Union (IUCN), the Pakistan Environmental Law Association (PELA) and others concerned with people's rights to a safe and healthy environment and with creating awareness of environmental issues at grassroots level. Contact these organisations for help or advice. Interested people can join one of these societies, or establish a group in their own area which will be concerned with local issues and problems.

In many countries environmental issues are a big part of political debate. They are often called green issues. Pakistani political parties and community organisations are increasingly taking up environmental issues and including green issues in their policies.

8.2.4 Trade Unions

Members of trade unions can play an active role in environmental issues. Unions advocate issues relating to workplace health and safety. Trade unions can extend their activities beyond immediate workplace needs to the worker and workplace environment in general. For instance, trade unions could be aware of industries that have a negative impact on the environments where communities live. They can take action against them. For example, if a particular industry is dumping its poisonous waste into a river which runs through a town; this can be very bad for people who use the river, or children who play in the river. The trade union can take this up with the management and threaten to take action unless management takes effective actions to rectify the problem.⁵⁶

8.2.5 Local Councils and Government

Many decisions affecting your environment take place at a local level. Although laws about environmental issues are made at the national and provincial levels, implementation and monitoring of the laws is often a local issue. For example, it is at the local level that settlements are planned and decisions regarding industrial, commercial and residential growth are taken. The local council manages sewage and drainage, waste disposal and so on. Therefore, it is at local level that people need to contribute to environmental decisions and take up issues. If there is a particular environmental issue in your area which needs attention, you can go to the local council in your area.

Often the local council does not make sure that all the laws are complied with, or they don't have the people available to go and check on all these things. Things are often damaging your environment without the council being aware of them. You can point these things out to the council.

If a local council fails to take action then you can approach the relevant department in the national government. The Ministry of Environment is primarily responsible for environmental conservation. But other government departments will be involved if the issue is cross-cutting and involves a range of implementing departments. You could also lobby parliamentary portfolio committees.

http://www.paralegaladvice.org.za/docs/chap04/01.html: retrieved on 19.11.2008

8.3 How to deal with Environmental Problems caused at the Local or Municipal Level

Step 1 Information
 □ Collecting information – by defining the problem, what is causing the problem, who is responsible effects and possible solutions; □ Talking to the community; □ Talking to a person or organization responsible; and □ Analyzing information.
Step 2 Letting the community know
 □ Share the Information obtained with the community; □ Establish possible impact on the community and □ Explain the impact through house to house visits; discuss it in local meeting places, approach an influential member of the community and ask them for their support; and use communication mediums such as radio, press etc
Step 3 Get the community involved
 □ Community gathering; □ Linking up with other community groups; □ Organise a community organization; and □ Involve a local newspaper or other media
Step 4 What can the NGOs do?
 □ Plan activities; □ Raise funds; □ Follow up with concerned authorities; □ Use the courts; □ Participate in an EIA; □ Network with other NGOs or government agencies; and □ Ask the Environment Protection Agency for help
8.4 How to deal with broader Environmental Problems which affect a larger number of people
Step 1-Information
 Collecting information – by defining the problem, what is causing the problem, who is responsible, effects and possible solutions; Talking to community; Talking to person or organization responsible; and Analyzing information

Step 2 Planning steps to make a difference

Ask Environment Protection Agency fo	r help;
□ Use media;	
□ Link up with NGOs;	
☐ Organize a group; and	
☐ Adopt a collective action plan	
Step 3 Taking it further	
D. Falleruna	

□ Follow up

□ Use the Courts

8.5 Procedural Environmental Justice

This refers to those solutions (remedies) to environmental problems that are available to us through the legal system.

8.5.1 Approaching the Court for Relief

It is usually very expensive to approach a court to solve an environmental problem. This is because you will have to use a lawyer to go to court.

8.5.2 Legal standing to bring a matter before the Court

Pakistani law, like many other legal systems, says that a person must have some personal interest if that person wants to bring a matter before the court. This rule (called the requirement of locus standi) has sometimes counted against a person who has wanted to raise an environmental matter with the court because it has been found that they do not have sufficient personal interest in the matter.

The Supreme Court of Pakistan, under Article 184(4) deals with matters of public importance and includes the following groups in the list of people who can approach a court with regard to the issue of an infringement of constitutional right:

Anyone acting as a member of, or in the interest of, a group or class of persons;
Anyone acting in the public interest; or
An association acting in the interests of its members.

This section allows individuals and non-governmental Organisations (NGOs) to take action to protect the environment in the public interest. This is important because environmental problems often affect a group of people from the community. One person from this group can now represent the interests of the whole group. Alternatively, if the group does not have sufficient funds to pay the costs required to protect their rights via legal action, their interests could be taken up by an NGO.

The jurisdiction of the High Court under Article 199 (1) requires that the person bringing the case must be an aggrieved party that is the person must have a *locus standi* to bring the case. The Pakistan Environmental Protection Act (PEPA), 1997 states that the following can bring a case before the environmental tribunal and magistrate.

- 1. The Federal or Provincial Environmental Protection Agency
- 2. Any Government Agency
- 3. Local Council
- 4. Aggrieved person

However, PEPA, 1997 has broadened the definition of person. Section 2 (xxxii) has defined person to mean "any natural person or legal entity and includes an individual, firm, association, partnership, society, group, company, corporation, co-operative society, government agency, non-governmental organisation, community-based organisation, village organisation, local council or local authority and, in case of a vessel, the master or other person having for the time being the charge or control of the vessel."

8.5.3 Legislative Remedies

The various pieces of legislation that we have listed above each provide legal remedies that are particular to the individual act. In order to use these remedies you will need to determine which piece of legislation is relevant to your client's specific needs and, perhaps with the help of an attorney, decide how the legislation in question can be used to aid your client.

Ask the following questions when trying to establish which piece of legislation applies to your clients' query:

	What	does	PEPA	has	to say	n
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- Which legislative area does the query relate to?
- Does it relate to pollution and waste management, land planning and development, natural and cultural resource use and allocation, or workers environmental rights?

Once you have identified the applicable legislation you must decide what legal remedy you wish to pursue. The remedies that follow are useful in the protection of environmental rights.

EXAMPLE

Members of your community live near a saw mill which prepares wood for sale to the building trade. Once timber has been made into commercially usable planks there is a large quantity of sawdust and wood chips that cannot be used by the mill or sold into the market. This waste is disposed off by burning. As a result the mill gives off huge clouds of smoke. This is causing serious air pollution in the area. People living near the sawmill approach you for advice because a number of children have started developing serious asthma which the doctor says is caused by the poor quality air in which the children live.

By causing air pollution the saw mill is infringing people's environmental rights. It is also likely that the saw mill is going against the requirements of a specific piece of legislation. This factor will add weight to the argument that must be put before the court when the application for an interdict is brought.

Your advice could be that an application should be written to court under PEPA and any other law applicable for ordering the owners of the saw mill to stop the burning process. This application would have to be brought before the court by a lawyer.

Chapter 9

Examples of Different Environmental Problems and Solutions

PROBLEM 1: Making complaints about environmental problems

A. Industrial fumes

A small factory in your neighbourhood is burning something that gives off fumes and clouds of smoke that make you feel ill.

What can you do?

Write a letter to the local councillor of the municipality that deals with environmental issues, reporting the matter and asking them to investigate.

B. Raw sewage

A sewage treatment plant regularly overflows and raw sewage is pumped into a river where children play.

What can you do?

Write a letter of complaint to the Water and Sewerage Board, Environment Protection Agency and to the local councillor in the municipality that deals with water affairs.

C. Local Development

Your municipality is making a decision about a development that will change the environment in the area. You feel certain principles of PEPA have not been followed in the planning process and you are afraid that the development will go ahead.

What can you do?

- Approach the local councillor and explain your concern. Ask for information about the development;
- Approach the District Officer (Environment) of the district in which the municipality is located; or
- ☐ Go to the Environment Protection Agency
- If the municipality does not respond to your satisfaction, or the EPA does not take satisfactory action on your complaint, you may approach the Environmental Tribunal.

PROBLEM 2: Appealing against government environment decisions

The government plans to use land in a certain way and you think is going to have a negative effect on the environment.

What can you do?

Write a letter addressed to the government, appealing against the decision. In your letter:

- ☐ Explain your complaint in detail;
- ☐ Say which PEPA environmental principle/s have been infringed;
- □ Say which law has been broken, say why you think the decision is unreasonable. If you are not satisfied with the result of your appeal you can take the complaint to the environ mental protection agency, environmental magistrate or the environmental tribunal to try to solve the dispute.

PROBLEM 3: Complaining to the Director General

A group of people have been burning large numbers of tyres in an open field in order to sell the steel that is found inside the tires. Your municipality has been unable to catch them or stop them from burning the tyres. The land owner cannot control the tyre burners either.

What can you do?

First complain to the municipality and then if you are not satisfied with the steps taken by the municipality, you should write to the Director General of the Environment Protection Agency.

If you make a complaint to the Director General, they must investigate the case and tell the polluter to take reasonable steps to stop the problem by a certain date.

PROBLEM 4: Work that harms the environment

You work for a factory and your supervisor orders you one day to dispose off hazardous waste in a nearby field. You refuse to do this. The owner threatens to dismiss you.

What can you do?

You can tell the owner that PEPA states that hazardous waste must be disposed off properly and, therefore, you cannot side with him in an illegal action since non compliance of this law results in legal action.

Or

You work for a company that grows vegetables. One of your bosses is secretly using a banned pesticide on one of the farms in order to grow more vegetables.

You should report this to someone senior in the company.

If the activity continues, you can report it to the EPA, the environmental tribunal or a civil society organisation involved in environmental matters; involve the local community and media. PEPA helps protect you against being victimized for blowing the whistle on your boss.

CONCLUSION

This guide is an attempt to explain the various laws, procedures and remedies available to the citizens for the protection, preservation and conservation of the environment not only for present but also for the future generations.

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Our Mission

- Preserving genetic, species and ecosystem diversity
 Ensuring that the use of renewable natural resources is sustainable, both now and in the longer term
- Promoting actions to reduce pollution and the wasteful exploitation and consumption of resources and energy

Vision of the Indus Ecoregion Programme

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