

Q.2:

I. INTRODUCTION

Pakistan's evolution of environmental governance has undergone several changes throughout its history. It started with the early 1970's as the world was gaining awareness about climate change and changed substantially with the 18th Amendment. Presently, the governance model is somewhat aligned with International models, with lessons to be learned.

II. EVOLUTION ACROSS THE DECADES

Pre-1970's -

Colonial legacy
and neglect

1990's

Institutions
for climate

1970's - 1980's

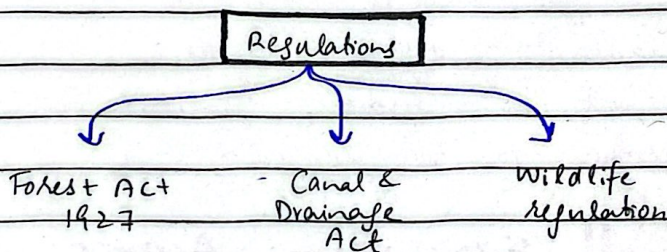
Awareness and
International
movement

Post 2000's

18th Amendment
as a major
change in
governance

(i) Post independence upto 1970's

The initial years of independence climate governance was not very active. The country possessed the colonial governance frameworks and the relevant laws. Environmental regulations were non-existent with very few laws.



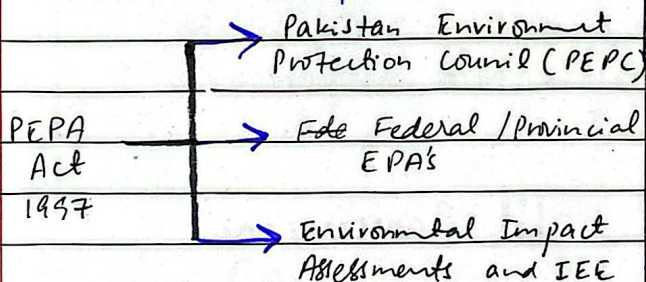
(ii) Beginning of International climate movement

Around the 1970s, the initial climate movements started. In response to Rachel Carson's "A Silent Spring", environmental discourse started. 1972 Stockholm Conference started global awareness. Pakistan also

adapted. Environment and Urban Affairs Division (1974) but limited enforcement and activeness.

(iii) Formal institutionalisation and frameworks

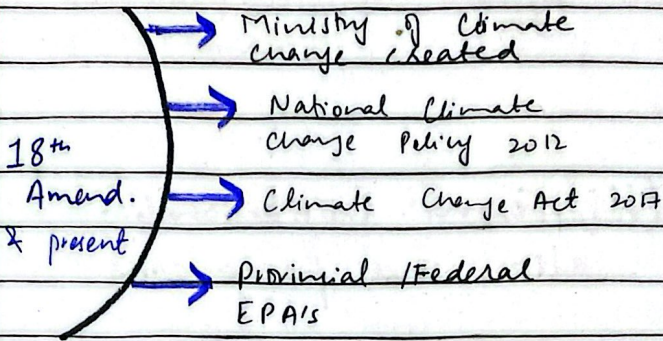
Within 1990's, Pakistan made several developments. This came in form of Pakistan Environmental Protection Act (1997) which established Pakistan's environmental protection council.



(iv) Post 2000's changes and present model

In 2010, the 18th amendment was passed. That brought structural changes within governance model.

It carried several developments.



The Concurrent list was abolished and Council of common interests was created. Environment and climate change was devolved to provinces. They have their own protection and disaster management agencies.

III. CONCLUSION

The evolution of governance has been substantial since inception. Pakistan has followed International shifts in governance. While shortcomings persist, it continues to adapt and transform.

B. Climate Change

I. INTRODUCTION

Climate change refers to the concept of changing environmental conditions of the globe. The climate, which is a long term weather, is undergoing accelerating shifts and transforming priorities on land. It is caused by both natural and anthropogenic factors and faces several hindrances in form of governance, political, financial and regulatory problems.

II. CAUSES OF CLIMATE CHANGE

A. Natural factors

- Volcanic eruptions
- Revolution speed of Earth
- Movement of tectonic plates within earth and sea bed
- Exposure duration of Sun

B. Anthropogenic factors

- Deforestation and land clearing
- Massive urbanization
- Extreme pollution
- Large scale industrialization
- Greenhouse gas emissions
- Increasing population and non-renewable energy production

III. KEY HINDRANCES IN SOLVING CLIMATE CHANGE

- Hindrances
- Legal / Regulatory
 - Financial constraints
 - International cooperation lacking
 - Rising Population pressure
 - Energy use changes

(i) Regulatory constraints

Many countries do not have strong regulatory mechanisms to tackle climate change.

The world is a significant threat with requires strong legal action.

(ii) Financial constraints amid mitigation pressures

Less developed nations face financial constraints in dealing with climate change. The Loss and Damage Fund as part of COP 27 remains non-existent and under funded.

(iii) Lacking International Cooperation amid "Treaty overload"

The international cooperation has recently gone down. The new agreements are being signed without existing commitments being fulfilled leading to treaty saturation. The US also pulled out of Paris Agreement, calling climate change a "hoax".

(iv) Rising global population speeding up change

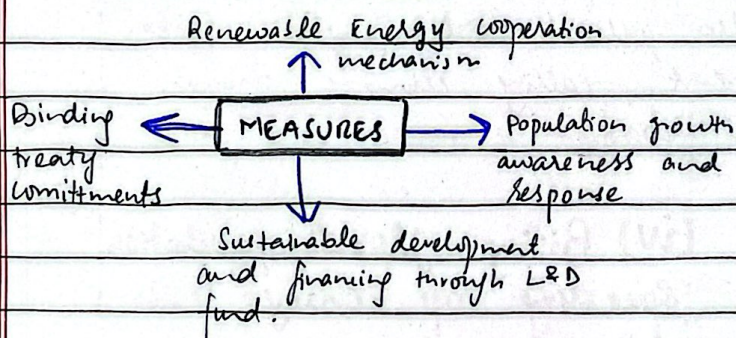
The global population is on the rise. This puts

greater pressure on existing resources, overexploitation and overuse. This further increases pollution. Carbon dioxide emissions have doubled in the last few decades, signalling worsening crisis.

(V) Energy use challenges in fuel based economies

Majority economies are running on fuel based raw materials. Global renewable adoption remains low, as many are still utilizing petroleum and fuel to drive economies, serving as a challenge.

IV. MEASURES AND CONCLUSION



By adopting certain measures the world can move towards resolving climate change issues.

Q.06: A

I. INTRODUCTION

Solid waste management refers to the process of collecting, handling, treatment and disposal of waste. It is an important job in any society as the mishandling of waste presents several consequences.

Pakistan has a National Waste Management policy to oversee the process of handling waste efficiently. Waste ranges from natural, biological, chemical and nuclear waste. Accumulation or inefficient disposal creates health and environmental issues.

II. KEY COMPONENTS AND PROCESS OF S.W.M

Waste Generation
and segregation



Storage and
collection



Transportation to sites



Processing and treatment

- Recycling
- Composting
- Anaerobic digestion



Disposal

- sanitary landfills

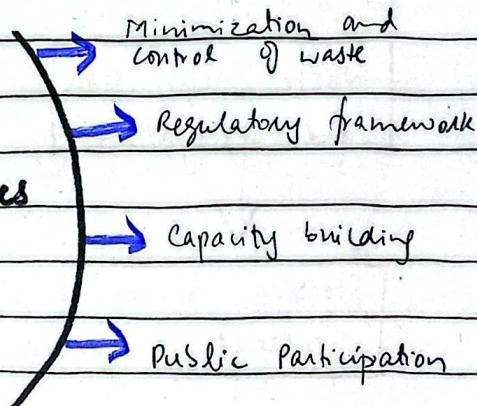
The overall goal of the process is to reduce pollution and promote sustainable consumption of resources.

III. NATIONAL WASTE POLICY 2022

The National waste management policy outlines an efficient framework for handling waste in Pakistan.

KEY

Objectives



(i) Principles of policy

The essential principles include source reduction of waste, polluter pay principle. Similarly, it also carries the precautionary principle to prevent over generation of waste.

(ii) Institutional capacity building

The Policy establishes a national Implementation Committee to be led by ministry of climate change. The institution will develop plans and provincial strategies to counter mismanagement.

IV. CONCLUSION

The Solid waste management includes various processes dealing with handling and disposal of waste. Pakistan has the institutional framework to deal with issues of waste management efficiently.