

Q Evaluate the effectiveness of Pakistan Environmental Protection Act of 1997 (PEPA) and Pak EPA Regulations 2000 in addressing environmental governance and pollution control.

CSS-2025

Pakistan Environmental Protection Act (PEPA) 1997

PEPA 1997 is a major ^{foundational} environmental law in Pakistan that provides guidelines about preventing deterioration of environment, management of natural resources, and achieving sustainable development. It led toward establishment of Pakistan Environmental Protection Council and Pakistan Environmental Protection Agency Pak-EPA in the same year.

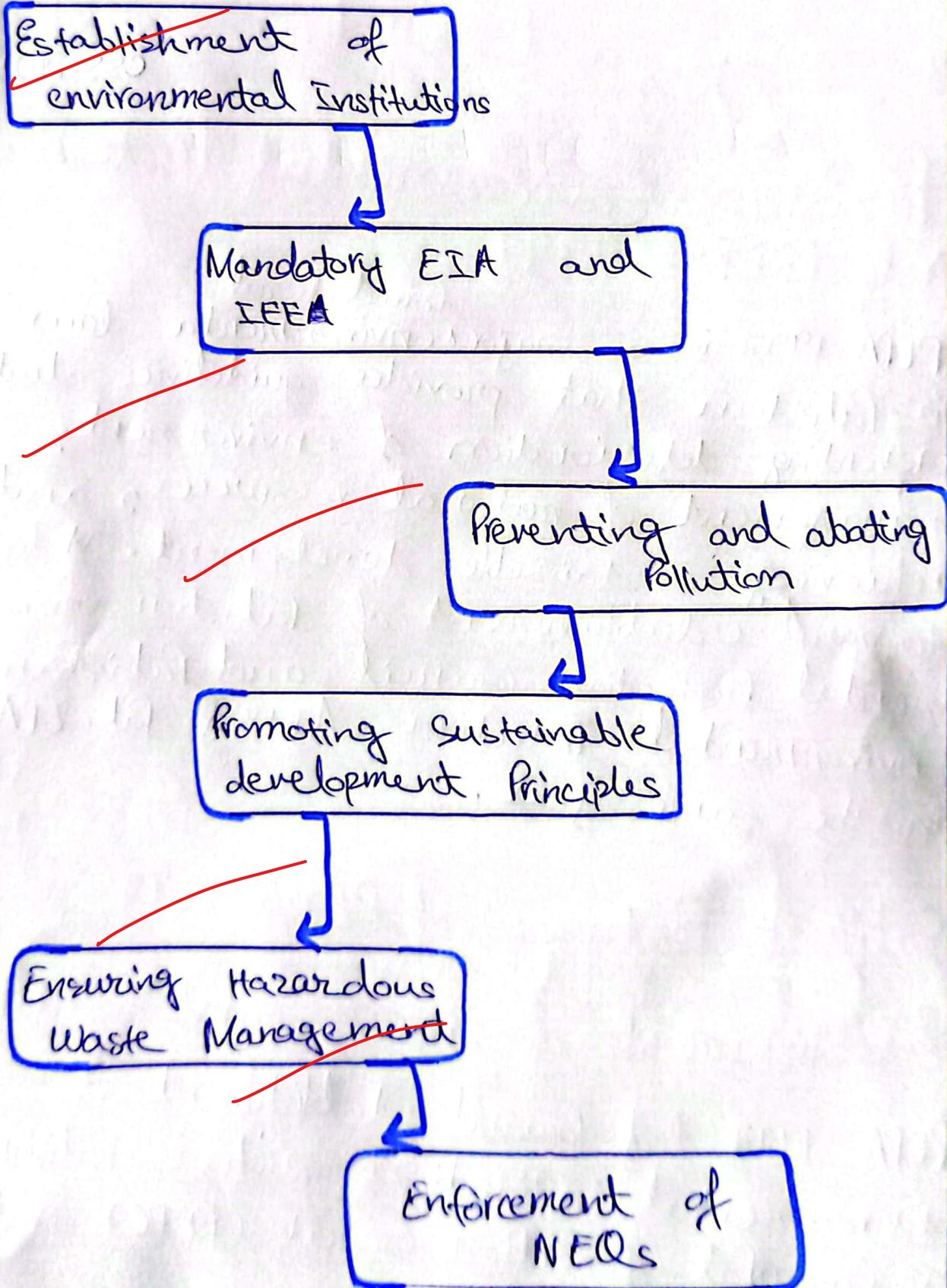
1. Salient Features of PEPA 1997

i- Establishment of environmental institutions

PEPA 1997 led toward establishment of environmental institutions such as Pakistan Environmental Protection Council (PEPC) and

and Pakistan Environmental Protection Agency Pak-EPA in 1997.

Fig: Salient Features of PEPA 1997



ii- Mandatory EIA and IEE

Pakistan Environmental Protection Act

(Review) of IEE and EIA regulations

2000 were issued under PEPA 1997, which made EIA and IEE mandatory.

iii- Preventing and Abating Pollution

For achieving this objective, government is taking steps. For instance, in 2025

KUHN, a worldily renowned manufacturing company provided eco-friendly technologies to private sectors at 7% markup (The News, Use of Eco-Friendly Technology in Pakistan, Dec 2025).

iv- Promoting Sustainable Development Principles

a- Environmental Sustainability: For example, Pakistan made world record in mangrove plantation which is incredible example of protecting ecosystem.

b- Economic sustainability:

For instance, Under CPEC Pakistan launched

Suki Kinari hydropower project which generates 3.2 kWh of clean electricity annually (The Guardian, Economic sustainability, June 2025).

c. Social Sustainability: PEPA addresses social sustainability by mandating public participation in EIA of development projects.

v. Managing Hazardous Wastes

Example: In 2022, Pakistan launched National Hazardous Waste Management Policy which aims at managing chemical residues, agricultural, biomedical and radio-active wastes.

vi. Enforcement of NEQs (National Environmental Quality Standards)

Example: in July 2025, KP's EPA ordered the shut down of iron ore mine in Suraj Gali, Haripur as it was causing air pollution exceeding NEQs limits.

vii. Promoting Environmental Awareness in Public

Example: in 2024 Sindh Government launched 'Zero Plastic Waste in Indus' River under which local residents were educated how to prevent pollution.

2. Expounding Pak-EPA Regulations

Pakistan Environmental Protection Act (Review of IEE and EIA) regulations 2000 were issued under PEPA 1997. These regulations made it mandatory for all public and private sectors to conduct IEE and EIA before approving that project.

3. Elucidating EIA and IEE

i- Environmental Impact Assessment (EIA)

^{ee}EIA refers to a systematic process that an organization uses to evaluate

potential environmental and socio-economic impacts of project before it is undertaken.”
It is used for large-scale projects.

ii- Initial Environmental Examination (IEE)

“IEE is carried out before approving small scale projects that do not have significant environmental impacts.”

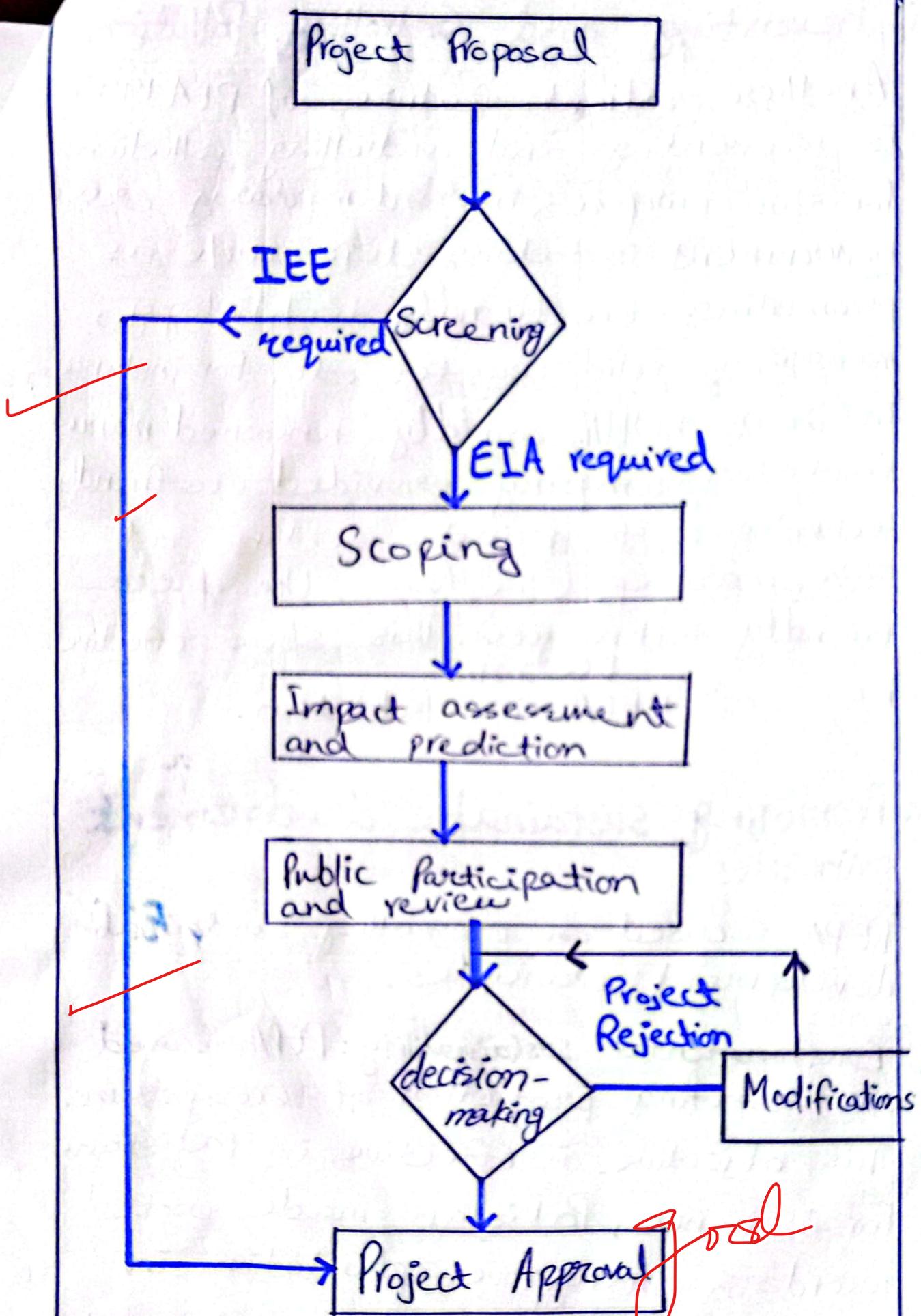


Fig:- Process of EIA

4. Examples Showing the Effectiveness of Pak-EPA 2000 regulations

i. ~~Evaluation of Projects using IEE~~

Solar mini grid power projects installed in Punjab between 2024 to 2025 under Punjab Agriculture Policy were evaluated using IEE (Climate Ministry of Pakistan, Evaluation of Solar Mini Grid Power Projects using IEE, Oct 2025)

ii. Evaluation of Projects using EIA

Various hydropower projects installed in

Pakistan under CPEC are evaluated using ~~EIA~~ such as ~~Hydropower~~ Hydro Kot Power Project (Tribune, Evaluation of CPEC projects using EIA, Jan 2026)

~~Concluding Thoughts~~

act that gives PEPA 1997 is a foundational guidelines about preventing and abating pollution, managing hazardous wastes, promoting sustainable development principles, enforcement of NEQs and promoting environmental awareness in public. Pak-EPA regulations ~~2000~~ make it mandatory for public and private sectors to evaluate a project before approval using EIA or IEE.

12/20

well done
answer is well composed