Stages of Environmental Impact Assessment | Environment

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The following points highlight the ten main stages of environmenta assessment. The stages are: 1. Identification 2. Screening 3. Scoping Consideration of Alternatives 4. Impact Prediction 5. Mitigation 6. Repo Decision-Making Body 7. Public Hearing 8. Review (EIA Report) 9. De Making 10. Post Project Monitoring & Environment Clearance Cor

Stage # 1. Identification.

The first step is to define a project and study all the likely activities involv process so as to understand the range and reach of the project. This he deciding the possible zones of environmental imp

Stage # 2. Screening:

Screening is done to see whether a project requires environmental cleara per the statutory notificati

Screening criteria are based upon:

(i) Scales of investme

(ii) Types of developme

(iii) Location of developm

A project will have several ramifications biophysical or environmental, e and social. Hence, it requires some degree of public participation. The law varies from country to country. If screening shows that a project necessitat moves to the next stag

Some projects may not require EIA. It is generally determined by the size project and is sometimes based on the site-specific infor

The output of the screening process is a document known as "**Initial Envir** Examination or Evaluation (IEE)", based on which the decision is taken wh EIA is needed and if so, to what exte

Stage # 3. Scoping and Consideration of Alternatives:

Scoping is the procedure of identifying the key environmental issues possibly the most important step in an EIA. Scoping means the scope or ra the EIA repor

It undertakes the project's effect on the air, water, soil, noise level, air qu physical impac

It identifies issues and concerns, decides the assessment methods, ident fected parties and invites public participation for agreement on debatable i which public participation involves interactions of all stakeholders includi beneficiaries, local people, private sectors, NGOs, scientists and

It is on-going process and is likely to continue in the planning and design p

the project

Scoping is important because it is possible to bring changes in the projec early stages of the cycle of the project and it ensures the study of all pc important issue

In this stage there is an option for cancelling or revising the project. After this stage, there is little opportunity for major changes to the

Stage # 4. Impact Prediction:

Impact Prediction is a way of 'mapping' the environmental consequence significant aspects of the project and its alterna

There are two steps in impact analysis

(i)Identification

Identification of the impacts would have been initiated in the scoping sta These initial identifications may be confirmed and new ones are added when the investigations reve

(ii)Prediction of Impacts

Predication of impacts is both qualitative and quantitative. The scale and of an impact is determined by whether it is reversible or irreversible. If the reversible, then it may be taken as low impact. If the adverse impact can reversed then the impact is said to be h

Duration of the impact is equally important to understand. The chron aspects of impacts, arising at different stages must be taken into a

Thus, it may be categorized into

(i) Short-term (3-9 ye

(ii) Medium-term (10-20 ye

(iii) Long-term (beyond 20 ye

Stage # 5. Mitigation:

This stage includes recommended actions that can offset the adverse imp the project. This is done with the idea of lessening the negative effec improving the scope for project bene

Mitigating measures may be

(i) Preventive: public awareness program

(ii) Compensatory: to reduce potential reac

(iii) Corrective: putting into place devices and instal

Stage # 6. Reporting To Decision-Making Body:

The project authorities have to furnish the following documents for envir appraisal of a development proj

(i) Detailed project report (D

(ii) Filled in questionna

(iii) Environmental impact statement (EIS): EIS should provide the possibl (positive and negative) of the proj

Some of the issues to be included are:

1. Impact on soil, water (hydrologic regime, ground water and surface wat
air qualit

2. Impact on land use, forests, agriculture, fisheries, tourism, recrea

3. Socio-economic impact including short and long-term impact on p

4. Impact on healt

5. Impact on flora, fauna and wildlife, particularly endemic and end
species, anc

6. Cost benefits analysis including the measures for environmental pr

(iv) Environmental Management Plan (EM

It covers the following aspects

1. Safeguards and control measures proposed to prevent or mitigate the ac
environmental imp

2. Plans for habitation of project ou

3. Contingency plans for dealing with accidents and dis

4. Monitoring add feedback mechanisms on implementation of necessa
guards

(v) Human Exposure Assessment Location (HEAL

The concept of Human Exposure Assessment Location (HEAL) was develop
a part of the health-related monitoring programme by WHO in coopera
UNEP, and the project has three components, viz., air quality monitorin

quality monitoring and food contamination monitoring on a glol

In our country, Chembur and central Bombay city have been identified f study of human exposure with reference to pollutants such as chlo pesticides (DDT and BHC), heavy metals (lead, cadmium) and air poll (nitrogen oxide

Stage # 7. Public Hearing:

After the completion of EIA report the law requires that the public must be and consulted on a proposed development after the completion of EIA

Any one likely to be affected by the proposed project is entitled to have ac the executive summary of the E

The affected person may include

(i) Bonafide local residen

(ii) Local associatio

(iii) Environmental groups active in the

(iv) Any other person located at the project site/ sites of displac

They are to be given an opportunity to make oral/written suggestions to t Pollution Control Board as per Schedule IV of the

Stage # 8. Review (EIA Report):

Once the final report is prepared, it may be reviewed based on the commen inputs of stakeholde

Stage # 9. Decision-Making:

The final decision is based on the EIA to approve or reject the project. This i to administrative or judicial review based on procedural as

Stage # 10. Post Project Monitoring & Environment Clearance Condition:

Once a project is approved, then it should function as per the conditions sti based on environmental clearance. These conditions have to be strictly mo and implemente

Monitoring should be done during both construction and operation pha project. This is not only to ensure that the commitments made are compli but also to observe whether the predictions made in the EIA reports were or not

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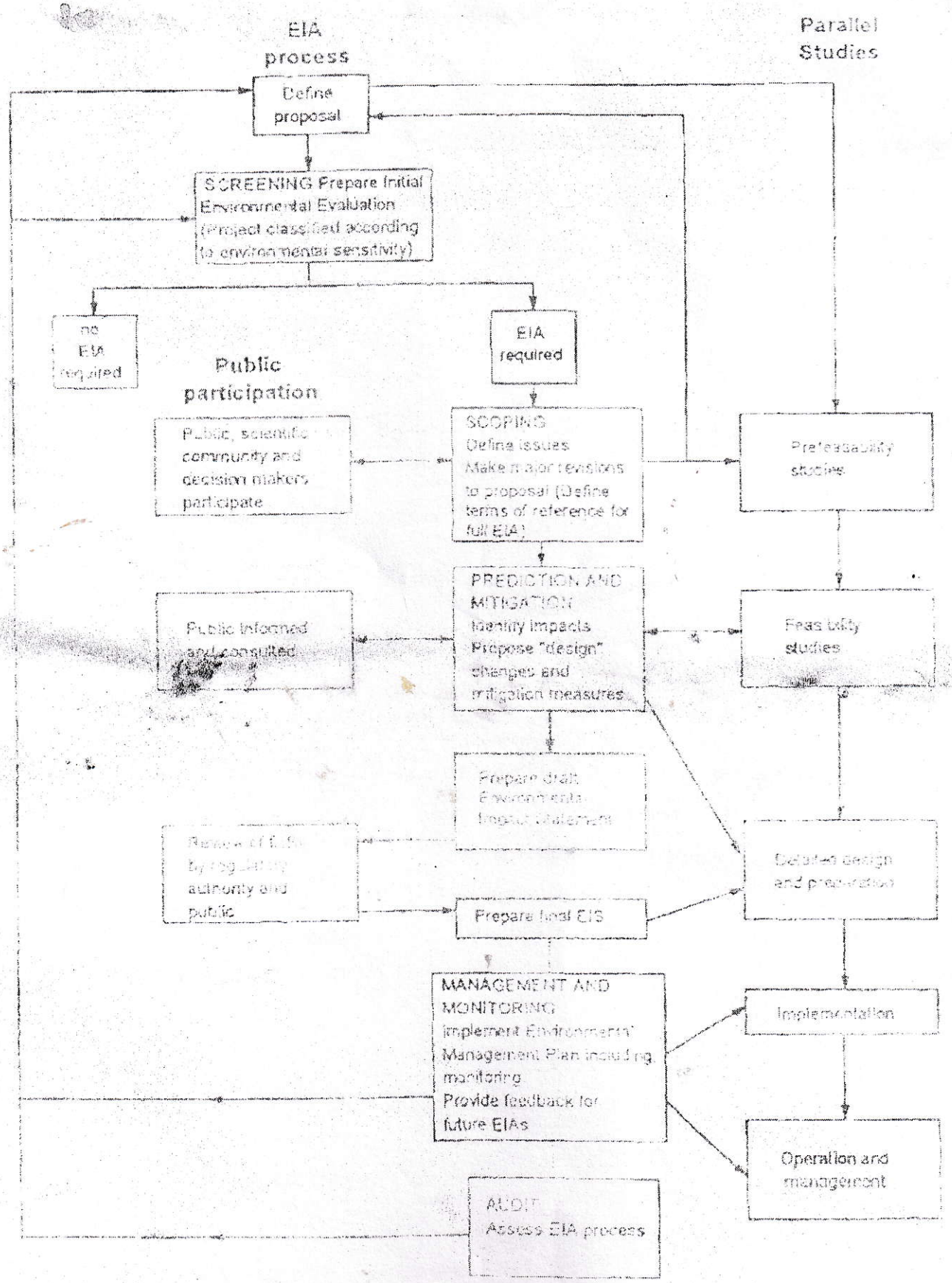
EIA process
Parallel Studies
Define proposal
SCREENING Prepare Initial Environmental Evaluation (Project classified according to environmental sensitivity)
no EIA required
EIA required
Public participation
Public, scientific community and decision makers participate
SCOPING Define issues Make major revisions to proposal (Define terms of reference for full EIA)
Prefeasability studies
PREDICTION AND MITIGATION Identify impacts Propose "design" changes and mitigation measures
Public informed and consulted
Feasibility studies
Prepare draft Environmental Impact Statement
Review of EIS by regulating authority and public
Detailed design and preparation
Prepare final EIS
MANAGEMENT AND MONITORING Implement Environmental Management Plan including monitoring Provide feedback for future EIAs
Implementation
Operation and management
AUDIT Assess EIA process

Resources