

# EIA ⇒ ENVIRONMENTAL IMPACT ASSESSMENT

background of EIA

- Purpose & Objective

process of EIA

Case Study of transport infrastructure

UNEP defines

subject

→ Environmental Impact Assessment is a tool used to assess the significant effects of a project or development proposal on the environment

EIAs make sure that project decision makers think about the likely effects on the environment at the earliest possible time and aim to avoid, reduce or offset those effects

UNEP, 1990



~~EIA is a process of evaluating the~~  
EIA can be defined as the systematic identification and evaluation of the potential impacts (effects) of proposed projects, plans, program or legislative action.  
Stages of the EIA process

5 main stages, If an EIA is required, An Environmental Assessment Impact Report will be written and submitted with the application for development consent. The Public will have the chance to comment. This makes sure you are given a chance to be involved in decision making.

Stage	what's involved
Screening	Deciding if an EIA is required.
Scoping	Deciding what needs to be covered in the assessment and reported in the EIA Report
Preparing the EIA Report	The EIA report has to include the likely significant environmental effects of development.
Making an Application & Consultation	The EIA Report and development Application must be publicised including electronic advertisement interested parties and the public must be given an opportunity to give their views on it
Decision Making	



## Decision Making

The EIA Report and any comments made on it must be taken into account by competent authority before they decide whether to give consent for the development. The decision notice has to be published.

## Post decision

The developer starts any monitoring required by the competent authority.

## Who makes the decision

competent authorities decide whether to grant consent for a project. Information from the EIA process must be looked at when making a decision. Comments from the statutory consultees and the public are also taken into account.

## Background of EIA

~~The EIA process~~ It started in 1976-77 when the Planning Commission asked the Department of Science & Technology to examine the river-valley projects from an environmental angle.



onus - not

legislation - ~~As per~~

- Till 1991, environment clearance from the Central Government was an administrative decision and lacked legislative support.
- The Ministry of Environment, Forests and Climate Change (MoEFCC) notified new EIA legislation in Sep 2006.
- The notification makes it mandatory for various projects such as mining, thermal power plants, river valley, infrastructure & industries including very small electroplating or foundry units to get environment clearance.

However, unlike the EIA notification of 1997, the new legislation has put the onus of clearing projects on the state government depending upon the size/capacity of project.



Objectives of EIA

Primary purpose of the EIA process, also called NEPA Process

- (i) ensure that Environmental considerations are addressed properly and incorporated into decision making process
- (ii) To avoid, minimize or balance the adverse (Bad) significant bio-physical social and other relevant effects of development projects.
- (iii) To protect the productivity and capacity of natural system and ecological processes with maintain their function.
- (iv) to promote development that is sustainable and optimize the resource use and management opportunities.

Characteristics of EIA

- Apply all activities that have Significant Environmental Impact & address all the impact that are expected to be significant.
- Compare alternatives to a proposed project management, techniques and mitigation measures
- Public Participation and stringent administrative review procedure
- Including monitoring & feed back procedures
- Ideal EIA System
- ~~System~~ Result in a clear EIS (Environmental Impact Statement) which conveys the importance of likely & their specific characteristics to non experts in the field.



undergo - ~~start~~

Date:

Page:

## When & Why

EIA is designed to identify the potential risk of a project (infrastructure development such as a dam) to environmental & human well-being and identify measures to eliminate and/or mitigate these risks. This can be done by replacing and modifying planned activities to reduce impacts.

## Case Study of transport project

⇒ Where is EIA Required :-

→ For schedule 1 projects, carrying out EIA is **MUST**

→ For schedule 2 projects, EIA must be carried out, if development is likely to leave a significant impact.

## Methodology of EIA

- (i) Organizing the Job
- (ii) Performing the assessment
- (iii) Writing the Environment Impact Statement.
- (iv) Review of the EIS - Review by public

→ Site visit  
→ Identification & Evaluation  
→ Discussion of Alternatives  
→ Preparation of checklist

① EIS is a conclusion of EIA. It is a written statement. Serves as a device to ensure that the policies & goals defined by NEPA are infused into the ongoing programme.

② Description of site  
③ Description of project  
④ Description of activities

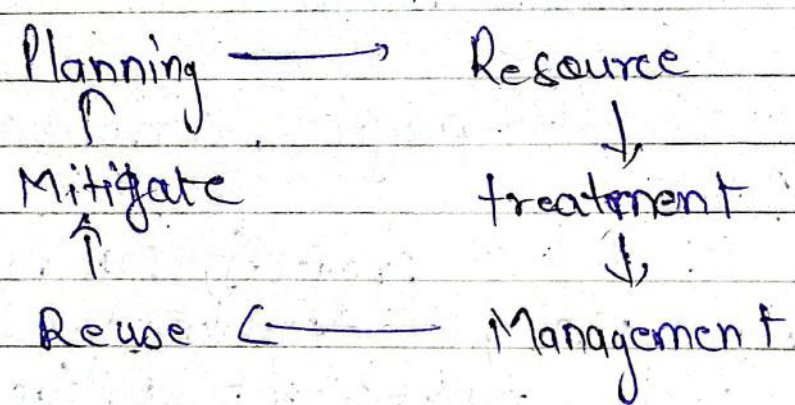


- ④ The environmental impact of the proposed project
- ⑤ The unavoidable adverse effects resulting from the activity
- ⑥ Alternatives of Activity

## Role of EIA in Sustainable Development

Social  
Economic  
Environmental

## Environmental Audit



Def

Acc<sup>n</sup> to United States Environmental Protection Act (USEPA), EIA is a systematic documented, periodic and objective review by a regulated entity of facility operations and practices related to meeting environmental requirements.

Aim → is to promote improvements in the environmental performance of industry, by requiring companies to establish and implement environmental policies, programmes & Management



## Compliance - अभिलेख

- The Concept of auditing in Industrial units in India in March 1992 with an overall objective of minimizing consumption of resources & promoting use of clean technologies in industrial production to minimize generation of waste.

### Provide Answer

what ~~is~~ ~~the~~ ~~name~~

### Components of E.A

Assessment → provides expert judgment/opinion on hazards, associated risks & Management & Control measures.

Verification <sup>Hazards</sup> <sup>Effect</sup> → determines & documents performance by evaluating the application of, and adherence to, policies & procedures.

अभिलेख

### Auditing Process

Pre Audit activities → team selection, logistic Arrangement, gathering background information.

→ environmental auditors have knowledge of EIA

② Environmental & Climate change issues.

→ Understand Management System and on the strength & weakness.



## Past Audit Activities +

to ensure that the audit results are clearly communicated to the appropriate level of management and to evaluate effectiveness of audit and provide suggestions for improving future audit.

## Types of E.A

- (i) Compliance A ✓
- (ii) E. Management Audit ✓
- (iii) Liability Definition ✓
- (iv) Supplier Audits
- ~~(v) Programme Audits~~
- ~~(vi) Single Issue Audit~~

## Benefits of E.A

- (i) Reducing E. impacts.
- (ii) Reducing waste, water & energy cost.
- (iii) Improve rel<sup>n</sup> with stakeholder.

→ Provide a foundation for an environmental Management System (EMS) such as ISO 14001 at a later date.