ENVIRONMENT IMPACT ASSESSMENT

INTRODUCTION

- An environmental impact assessment (EIA) is an assessment of the possible positive or negative impact that a proposed project may have on the environment, considering natural, Social and Economic aspects.

According to **The International Association of Impact Assessment (IAIA)-**

The process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made.

- EIAs began to be used in the 1960s as part of a rational decision making process.
- It involved a technical evaluation that would lead to objective decision making.
- EIA was made legislation in the US in the National Environmental Policy Act (NEPA) 1969.

➢**The main steps in EIAs process:-**

- Screening
- Scoping
- Prediction and Mitigation
- Management and Monitoring
- Audit

- **Screening** often results in a categorization of the project and from this a decision is made on whether or not a full EIA is to be carried out.

- **Scoping** is the process of determining which are the most critical issues to study and will involve community participation to some degree. It is at this early stage that EIA can most strongly influence the outline proposal.

- Detailed **prediction and mitigation** studies follow scoping and are carried out in parallel with feasibility studies.

- The main output report is called an *Environmental Impact Statement*, and contains a detailed plan for **managing and monitoring** environmental impacts both during and after implementation.
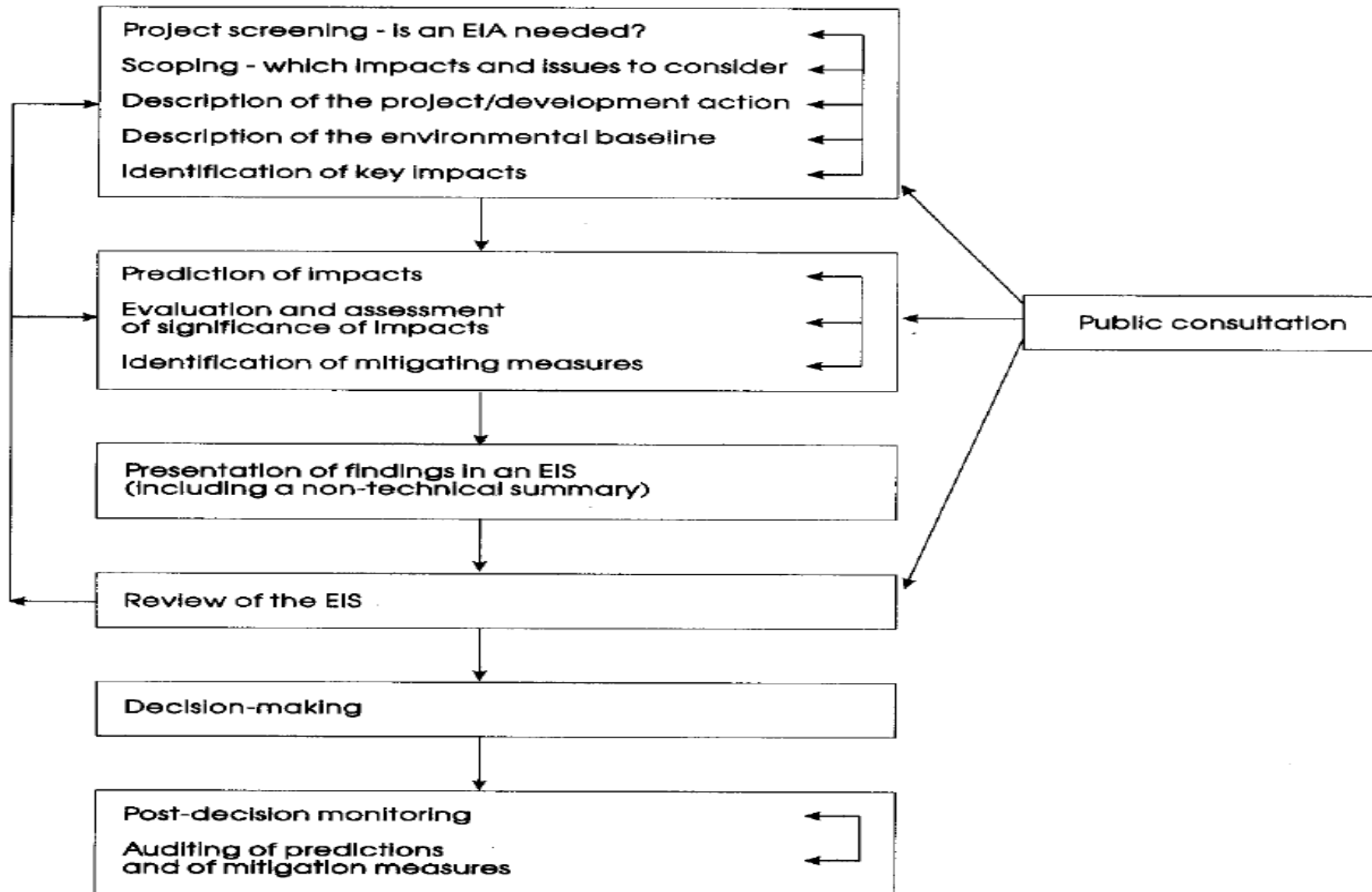
- Finally, an **audit** of the EIA process is carried out some time after implementation. The audit serves a useful feedback and learning function.
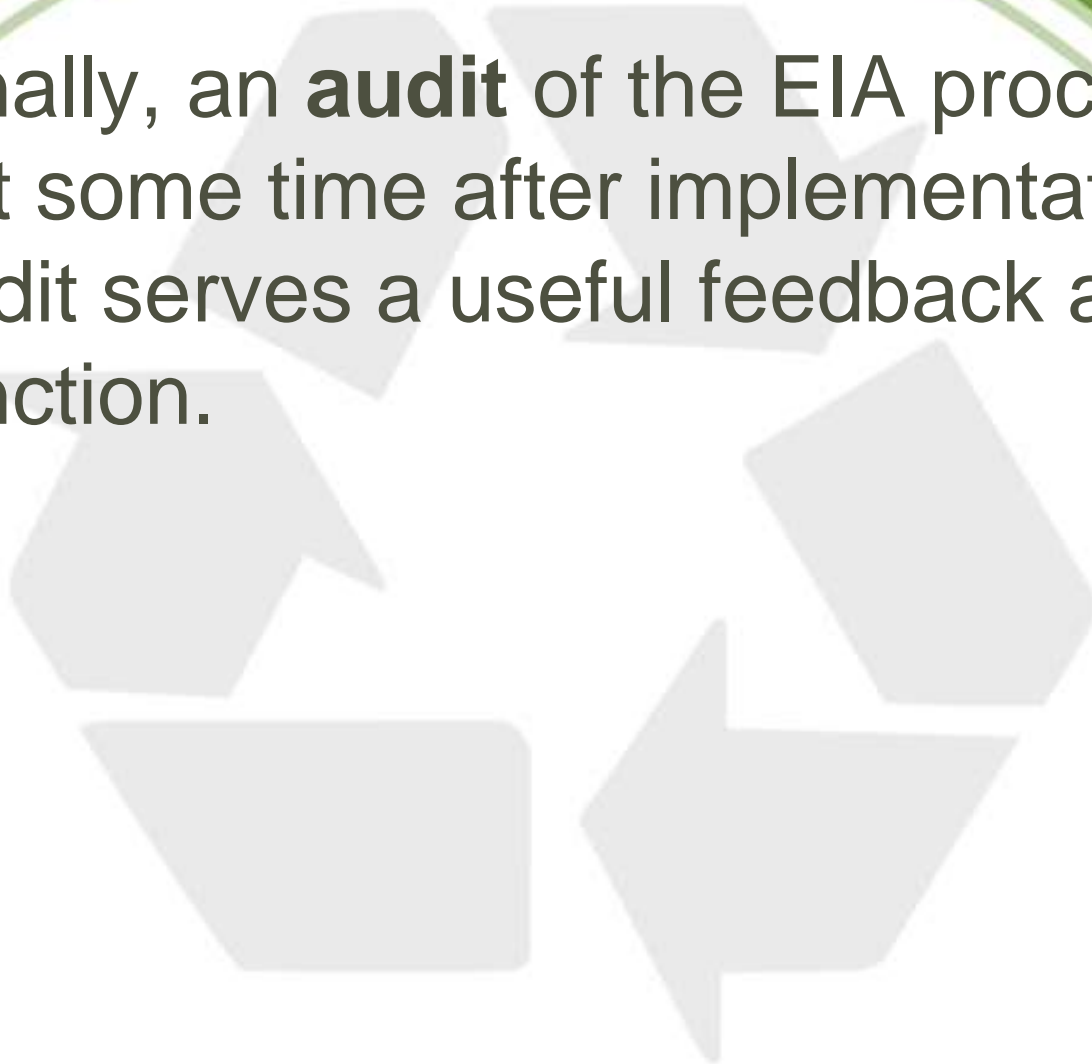
Data Requirements

- Project
  - » Type
  - » Size
  - » Location

- Area of potential impact
  - » Physical resources
  - » Biological resources
  - » Economic development resources
  - » Quality of life
  - » Other existing and planned projects

Externalities of EIA

➢**Positive Externalities:**

    1. New jobs generated, economic growth stimulated.

    2. Growth of local business enterprises supported.

    3. Development of supporting and complementary industries.

    4. Influx of capital and disposable income.

Cont'd…

➢ **Negative Externalities:**

- Social impacts:

  1. Impacts on health of local population.

  2. Increase in crime and deviant behaviour.

  3. Additional pressure on the existing physical infrastructure (sewage, water supply etc.).

  4. Decline in community cohesion.

  5. Changed cultural values.

Cont'd…

- Environmental impacts:

    1. Depletion of natural resources.

    2. Destruction of habitats.

    3. Change in ph, oxygen level, toxicity of water.

    4. Increase in toxicity of air.

    5. Global warming.

    6. Ozone depletion.

Benefits of conducting EIA

- Facilitates informed decision making by providing clear, well structured dispassionate analysis of the effect and consequences of proposed projects.

- Pre-emption or early withdrawal of unsound proposals.

- Assists in the selection of alternatives, including the selection of the best practicable and most environmentally friendly option.

- Results in best practice prediction and mitigation of adverse effects of projects.

Cont'd…

- Influences both project selection and design by screening out environmentally unsound projects, as well as modifying feasible projects - Mitigation of negative environmental and social impacts.

- Guides formal approval, including the establishment of terms and conditions of project implementation and follow-up.

- Mitigation of negative environmental and social impacts.

- Serves as an adaptive, organizational learning process, in which the lessons of experience are feedback into policy, institutional and project design - Enhancement of positive aspects

Conclusion

- Environment Impact Assessment is a very beneficial step to check, whether the project is environment friendly or not.

- Since economic development is result of interaction between natural resources and technology supported by designed for people, so all human activity should be economic, social and environment friendly.