EIA (Environmental Impact Assessment)

- Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.

- UNEP defines Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers.

Objectives of Environmental Impact Assessment

- Identifying, predicting, and evaluating economic, environmental, and social impacts of development activities.
- Providing information on the environmental consequences for decision making.
- Promoting environmentally sound and suitable development by identifying appropriate alternatives and mitigation measures.

EIA Process

1. **Screening:** to determine which projects or developments require a full or partial impact assessment study;
2. **Scoping:**
   - The project's potential impacts, zone of impacts, mitigation possibilities and need for monitoring.
   - Alternative solutions that avoid or at least reduce the adverse impacts of the project are also studied in this stage.
   - Investigation of alternate designs or sites that avoid or mitigate impact takes place.
3. **Impact Assessment & Mitigation:**
   Evaluate the socioeconomic and environmental impacts of the planned project and its alternatives, and then identify the mitigation measures to reduce those impacts.
4. **Reporting the Environmental Impact Statement (EIS) or EIA report**:
   An environmental management plan (EMP) and also a non-technical summary of the project's impact is prepared for the general public in this stage.
5. **Review of the Environmental Impact Statement (EIS)**:
   Based on the terms of reference (scoping) and public (including authority) participation designated authorities review the EIA report to determine if the planned project will get a license or if it requires amendments.
6. **Decision making:**
   Impact Assessment Authority along with the experts consult the project-in-charge along with consultant to take the final decision, keeping in mind EIA and EMP (Environment Management Plan).
7. **Monitoring, compliance, enforcement and environmental auditing**:
   Monitor whether the predicted impacts and proposed mitigation measures occur as defined in the EMP.

Importance of EIA

- EIA links environment with development for environmentally safe and sustainable development.

- EIA provides a cost-effective method to eliminate or minimize the adverse impact of developmental projects.

- EIA enables the decision makers to analyse the effect of developmental activities on the environment well before the developmental project is implemented.

- EIA encourages the adaptation of mitigation strategies in the developmental plan.

- EIA makes sure that the developmental plan is environmentally sound and within the limits of the capacity of assimilation and regeneration of the ecosystem.