

Question

What is EIA? Describe its process and shed light on its advantages?

(Marks: 10)

Environmental Impact Assessment (EIA)

"EIA is a tool used to analyze the environmental, economic, and social impacts of a development project."

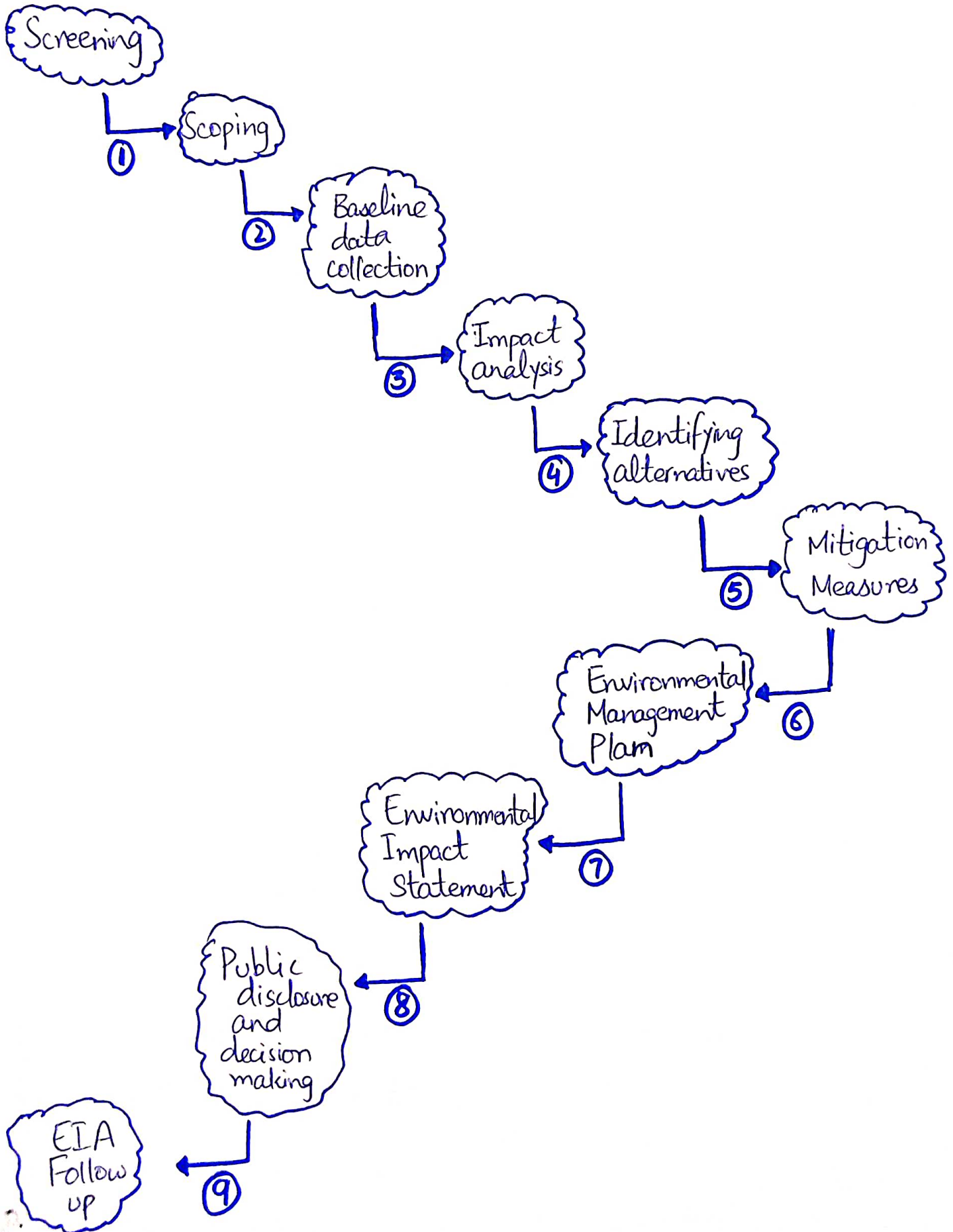
EIA accepts or rejects a project by seeing its potential environmental impacts.

(i) Origin of EIA

People ~~begin~~ began to realize in 1960s that the projects implemented have negative repercussions for the environment. So, they started to raise voice for such a tool which would be helpful to study the potential impacts of a project before its implementation.

In 1970, US became the first country to enact National Environmental Policy Act, which made EIA a compulsory requirement before making a decision about a project.

(ii) Process of EIA



(a) Screening

The first step of EIA is screening. In this step, the eligibility of a project to undergo EIA is tested. Any project which falls under Schedule II is eligible for EIA process.

For instance, an industrial project is eligible for EIA.

(b) Scoping

Scoping involves identifying issues of concerns underlying the project. Scoping set out terms of references and boundaries of a particular project. Once, the goals of project are determined, the EIA revolves around those issues.

(c) Baseline Data Collection

Baseline data is the preliminary data about environment in which a project is to be implemented. It tells the status of environmental factors prior to project implementation. Data may be collected through primary or secondary sources.

For instance, baseline information may include, air and water quality, forest cover, biodiversity, water cycle etc.

(d) Impact analysis

In this stage, possible impacts of a project are identified. These impacts might be severe or low, direct or indirect and temporary or permanent.

For instance, the possible impacts of a highway project would be deforestation, biodiversity loss, air pollution, land pollution, impact on local community.

(e) Identifying alternatives

Different alternatives of implementing the project are analyzed. The pros and cons are matched, and the most suitable alternative is selected. The alternatives should include NO PROJECT alternative.

(f) Mitigation Measures:

Once the impacts of the project are identified, mitigation measures can be found to address those impacts. Mitigation is addressing the causes or impacts of a project on environment.

The possible mitigation measures of a highway project may include, reforestation in some other vicinity, re-locating various species etc.

(g) Environmental Management Plan (EMP)

EMP is a schedule of all the impacts and their mitigation measures about a project. It provides a wholesome picture of whole project. EMP of a highway project might look like,

	Environment Component	Environmental impact	Mitigation Measures
1)	Biodiversity	Biodiversity loss	Relocating species to other places
2)	Deforestation	Global warming Ozone depletion	Afforestation in some other area

(h) Environmental Impact Statement (EIS)

EIS is considered as a final EIA report. It depicts the conclusion of the process of EIA. It is a document which aids in decision making about a particular project. The components of EIS include:-

- Executive Summary
- Impacts of a project
- Environmental Management Plan
- Information on stakeholders
- Details of the project
- Analysis of alternatives
- Mitigation strategies
- Project implementation

(i) Public Disclosure and Decision Making

The final EIA report (EIS) is disclosed before general public. The suggestions and comments are invited from the public. For this purpose, a hardcopy of EIA report is placed at concerned office of EPA and public libraries.

Finally, ~~an~~ after considering suggestions, the final decision is made about the approval or rejection of the project.

(j) EIA follow up

This step is linked with feedback on EIA project. The performance of the project is analyzed and then compared with the set standards. It has been studied whether the project is aiding sustainable development or not.

(iii) Advantages of EIA

EIA has various advantages. It helps to achieve **Sustainable Development Goals**. EIA filters out any project which is harmful for environment, economy, and society. The participation of local

community minimize the resistance to the project.
Moreover, EIA helps to reduce environmental
pollution.