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EIA AND MITIGATION APPROACHES FOR ENVIRONMENTAL IMPACTS

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Teacher's sign.....

Impact Assessment:

This step is the core part of an EIA impact assessment refers to the detailed evaluation of the environmental and social impacts of the planned project and identified alternatives, compared to the baseline conditions. Mitigation refers to minimizing or avoiding the described impacts.

This step is the core of EIA.

Impact Assessment:

Refers to the detailed evaluation of the environmental and social impacts of the planned project and identified alternatives, compared to the baseline conditions. This includes qualitative descriptions such as measuring high, medium and low impacts, and quantitative descriptions, such as indicating the cubic metres of water withdrawn, sewage produced, and pollutants released. This is done for the planned project as well as the identified alternatives, allowing for comparisons. Once the detailed assessment is complete, mitigation measures to reduce or avoid impacts are identified.

Mitigation:-

Refers to minimizing or avoiding the described impacts. Overall, mitigation measures are a response to the findings of impact assessment; they need to cover all the areas identified. The key focus of mitigation actions should be on:

- Preventive measures that avoid the occurrence of impact and thus avoid harm or even produce positive outcomes.
- Measures that focus on limiting the severity and the duration of the impacts.
- Compensation mechanisms for those impacts that are unavoidable and cannot be reduced further.

Key impacts and potential mitigation actions often relate to land. Almost all development proposals involve disturbance of the land surface. This is usually extensive for major linear projects (roads, pipelines) dams and reservoirs, and large-scale mining, agriculture, forestry and housing schemes. Environmental impacts of particular concern can include drainage of wetlands, conversion of natural areas, or expansion

into areas that are vulnerable to natural hazards.

Why conduct impact assessment and mitigation.

The purpose of conducting an EIA is to clearly identify and understand (assess) and then prevent or minimize (mitigate) the adverse impacts of the planned project on the environment and people.

The purpose of conducting an EIA is to clearly identify and the impact need to be assessed and measured over the lifetime of the project - from its construction through to operations and after closing.

Impact assessment is indispensable in order to provide systematic and detailed descriptions of the probable impacts in comparison to the identified project alternatives. Mitigation measures are a critical part of the EIA process, as these actions aim to prevent adverse impacts from the planned project on the environment and people, ensuring that unavoidable impacts are maintained within acceptable levels.

The key contributions of impact assessment and mitigation to a good EIA include:

- It provides a clear and itemized list of relevant impacts on the environment and people, include cumulative effects, social impacts, and health risks.
- Based on the results of the impact assessment, a detailed list of mitigation actions is identified.

What approaches exist?

- Development Banks.
- Central America
- Examples

Impacts and related mitigation actions are evaluated and identified according to the key environmental, social and cultural characteristics of the area where the project will be implemented.

How to conduct impact assessment and mitigation?

Impact assessment and mitigation is done by a multidisciplinary team of experts who have the skills and qualifications to assess

diverse environmental and social impact. Impact assessment and mitigation is done by a multidisciplinary and mitigation is done by a multidisciplinary team of experts who have the skills and qualifications to assess diverse environmental and social impacts.

The team begins by systematically assessing the impact of the planned project and its alternatives, using one or more assessment methods, such as those described in the downloaded resource Impact Assessment Methods. Ideally, it would also carry out a social impact assessment (SIA). The outcomes of these assessment are then summarized in the form of a matrix.

These are the key steps for conducting impact assessment and related mitigation:

1. Perform a detailed assessment of impacts of all project phases on the environment, socioeconomic systems and other areas as requested by the designed agency's guidelines and legislation, taking into consideration regional and international best practices.

2. Based on the Completed Analyses, Conduct an assessment of Cumulative impact.
3. Compile similar impact into groups in order to make the impact analyses easier to understand.
4. Identify mitigation actions to eliminate and/or reduce the identified impacts.
5. Identify specific mitigation measures to reduce Cumulative impact.

In Honduras, impact assessment for the reference areas must consider the total and net project area.

Identification of environmental impacts is conducted using a Leopold Matrix - a method based on the completion of table fields, which assists in conducting an inventory of the identified environmental impact.

Once of the significant environmental impacts have been identified and placed in order (according to either the construction or operational phase) and according to relevant

Environmental factors, the impacts are then evaluated according to Matrix of Impact of importance environment impact. This methodology scores each of the identified environmental impacts from 1 to 5, to produce a total score of environmental impact generated by the activity or work.

The outcomes of the impact assessment and mitigation include:

1. A list of impacts and description of the severity of the impact over the lifetime of the project in the context of the environmental, social, cultural and aesthetic resources and issues using the Leopold Matrix.
2. A grouping of similar types of impacts using MIA methodology.
3. A list of mitigation actions linked to the groups of impacts.
4. The presentation of the groups of impacts and related mitigation measures in a table.

Scoping:

Scoping is a critical step in the preparation of an EIA, as it identifies the issues that are likely to be of most importance during the EIA and eliminates those that are of little concern.

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Scoping is a systematic exercise that established the boundaries of your EIA and sets the basis of the analyses you will conduct at each stage. A quality scoping study reduces the risk of including inappropriate components or excluding components that should be addressed.

It involves:

- Identifying all relevant issues and factors, including cumulative effects, social impacts, and health risks.
- Facilitating meaningful public engagement and review.
- Determining the appropriate time and space boundaries of the EIA.

- Identifying the important issues to be considered in the EIA. Such as setting the baseline and identifying alternatives.

Why Conduct a Scoping?

Scoping is critical as it sets up the boundaries of the EIA, including the project area; it establishes what the EIA will include and how to put the EIA together in accordance with the terms of reference (TOR).

What approaches exist?

Examples

Central America.

National legislation usually specifies scoping procedures, listing the key sectors that need to be considered, providing guidance on public consultation and outlining the terms of reference (TOR)

How is a scoping process conducted?

A project scoping activity can be carried out in nine main steps.

A Project Scoping activity can be carried out in nine main steps. These are:

1. Set up the team of experts that will conduct the EIA.
2. Describe the project area and the area of project influence.
3. Outline project alternatives for preparation, implementation and closure.
4. Conduct public meetings and stakeholder consultations; integrate comments and collected feedback into project planning and the alternatives.
5. Outline a set of environmental, biological and socioeconomic resources and issues that will be addressed in the assessment.
6. Define a set of criteria to assess the planned project/development.
7. Identify the project impacts, during its all stages, list the significant and non-significant impacts and explain why.

8. Identify a set of data for baseline descriptions and potential additional data collection needs.
9. Start inserting this information in the appropriate section of the TOR.