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## A review on good practices of environment impact assessment (EIA)

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### Abstract

Environmental impact assessment is a dynamic tool in assessing the environment related, social and financial aspects of a project before commencing. EIA helps in choosing those projects which are based on the fundamentals of sustained development such that any adverse impact from the new projects can be resolved through well developed and logical decisions. Earlier, EIA has been not practiced with stringent regulations especially in developing countries of south Asia. Environment and economic growth both were working in opposite directions i.e where there was financial prospect there environment degradation was remarkable. And this scenario of ecological degradation has generated some serious ecological issues like air pollution, global warming, and natural resource depletion etc. Although, currently there is tremendous economic growth yet environment sustainability has become a challenging concern to the world. Thereby to overcome this disastrous situation many countries have adopted certain strict legislative rules and regulations for EIA by the environmentalists, scholars, general public, communities and government organizations. Therefore, the present article focuses on these issues and illustrates on some of the good practices of EIA.

**Keywords:** Good practices, environment impact assessment

### Introduction

Every nation endeavors to advance ahead in all aspects of its progress, and one part of progress is financial improvement through manufacture and business. Each nation constitutes businesses which give work, serve the customer's needs and help to create income.

Developments extended in the past were embraced with no thought to their environmental outcomes. Subsequently rivers and lakes got contaminated; air contamination came to at compromising level and pilling of industrial effluents brought about land debasement. Industrialization and monetary development gave material solaces and extravagances of life and yet disintegrated the personal satisfaction.

In perspective of the collusive harm to the environment by development projects individuals are presently worried about the environmental effect of industrial undertakings. EIA empowers the leaders to make decisions to examine the impact of development projects on the environment, well before the development projects have been executed <sup>[1]</sup>.

### Objectives of EIA

Environmental Impact Assessment (EIA) is a dynamic tool which targets on distinguishing, foreseeing, assessing, and alleviating the biophysics, societal, and new pertinent environment related impacts of developing plans preceding significant actions that are considered and duties that are prepared. It expects to:

- Make sure that while taking any decisions pertaining to developmental projects the safety of environment must be considered on priority.
- Identify, avoid, limit or counterbalance the unfavorable huge biophysical, social, and other significant impacts of developmental projects.
- Protect the efficiency and limit of natural frameworks and the environmental procedures which keep up their functions and
- Promote developmental activities that are practical, optimizes the use of natural assets and any administrative purposes.

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- Environmental Impact Assessment is a judicial necessity in more than 90 nations. Besides, in many nations wherever it isn't officially required, usually it is either rehearsed intentionally or presented through other necessities, for example by banks for developmental aspects, implying that there are encounters with EIA in the vast majority of almost 200 nations around the world.

Environmental Impact Assessment is normally considered as a procedure that includes discussion with legal and non-legal authorities and overall population interest. An Environmental Impact Assessment document is normally observed as the centre point in the evaluation procedure. It is the principle record created during Environmental Impact Assessment which depicts the imaginable critical effects and probable improvement in detailed manner.

On the other hand, to be a powerful dynamic instrument, EIA should be viewed not just as basic evaluation process, to be specific an integrative piece of planning frameworks more extensive environmental assurance strategy. By setting up thorough standard information and by applying appropriate evaluation techniques to survey environmental effects, EIA targets adding logical proof to developmental plans [2].

**Significance of EIA with regard to environmental protection**

Tragically development of industries is having an unfriendly effect on the environment. The vast majority of the development works, for example, construction of dams,

streets, air terminals, ventures, railway tracks, urban areas, and so forth utilize maximum natural resources as crude material and they create waste, which stay back within our environment. This gradually develops air pollutants, damages soil, and water, and ultimately leads to scarcity of natural resources.

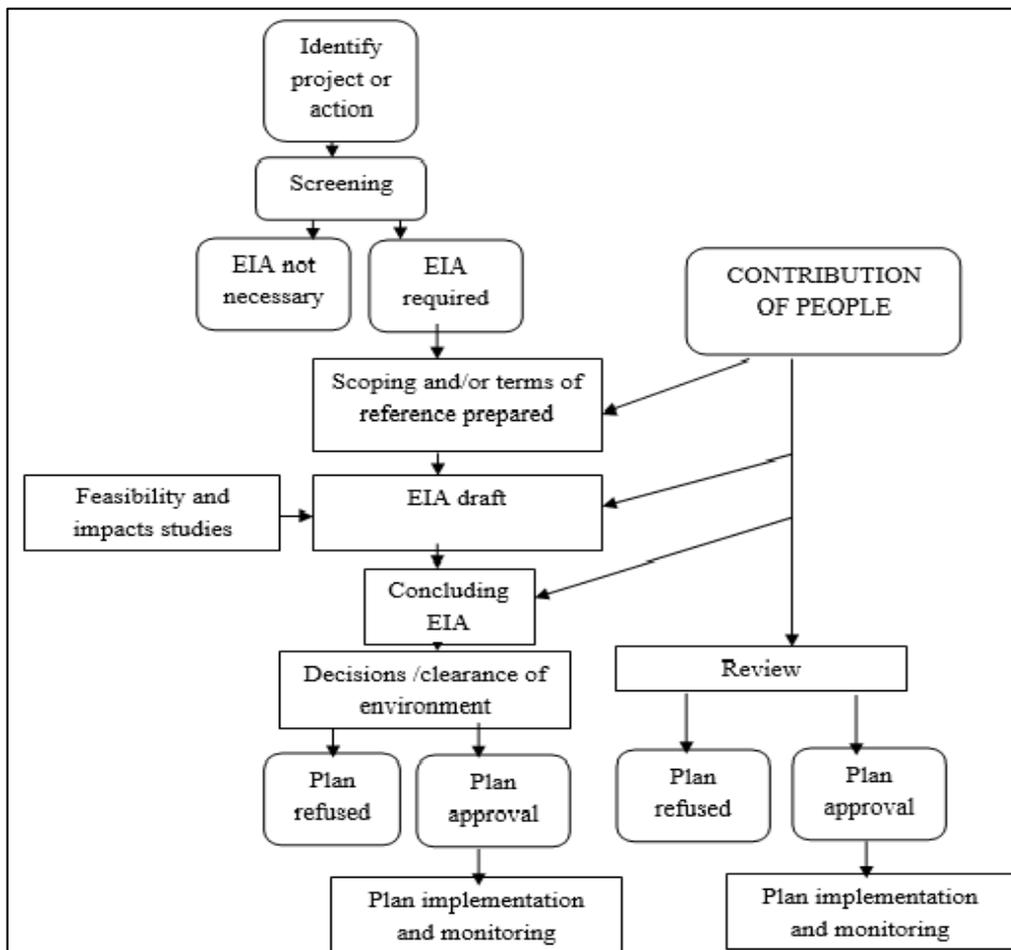
The security of the worldwide environment is in light of a legitimate concern for all living on this planet. Different measures have been taken at national and universal levels to address various environmental issues.

EIA is an instrument that improves dynamic and makes sure that the projects viable is a worthy alternative.

Advantages of the Environmental Impact Assessment procedure

- Potentially screen out environmentally unsafe development projects
- Recommends changes in the structure formats to lessen environmental impact
- Proposes alternate achievable preferences
- Envisages critical adverse impacts on the surrounding areas
- To dispose of the significant impacts on environment it identifies certain imitative measures to counter balance the effect
- Employs and intimate possibly effected community and natives
- It empowers the decision-making and the development of certain norms and conditions

**Phases of the EIA procedure**



Flowchart portraying basic components of good EIA practice.

The EIA procedure, while not uniform from nation to nation, for the most part consists of a lot of procedural steps built in a composed impact evaluation report that will illuminate the decision-makers whether to endorse or dismiss a proposed task.

### **Recognizing and Characterizing the Activity or developmental Project**

Although this progression might seem to be a basic step in characterizing a "venture/project" since an Environmental Impact Assessment can become complex and even uncertain if a mining venture is enormous, has a few stages, or includes numerous destinations. The significant aspect of this step is to identify the project with sufficient clarity and locate the area of potential effect so as to include activities that are strongly linked to the plan so the whole extent of ecological effects can be evaluated and limited.

### **Screening**

This step remains the core since screening decides on whether a particular project/venture demands for the preparation of an Environmental Impact Assessment. The activities that are to be considered for an EIA preparation differs in many countries— generally the laws of countries gives a list of works that shall need an assessment of environment, but usually they are submitted only if the project demands an EIA, for any plan that shall have an effect on environment or for the plans that are explicitly involving huge finance. In certain instances, where the impact of the project/plan is not known, a preliminary environmental evaluation shall be needed to understand whether if the venture/project demands an assessment.

### **Scoping**

This scoping phase is the one where the common people or groups or activist are involved to identify the areas affected by the venture and address them by preparing an EIA. Usually this is the stage which makes the public and NGOs to know about the project or venture in detail and can raise their voice to show their opinions. It also presents an opportunity to know whether any other projects are commencing within the vicinity of that area. If it so then they get an opportunity to identify the problems raised from the project, mitigate them or altogether cancel the project.

### **Planning Terms of conditions and Reference**

This step acts as a guideline for environment assessment planning and must be in a perfect shape to address the impacts and concerns that have been acknowledged during the checking procedure. For the peoples comments and validation a draft of Terms of Reference shall be made available for them. This stage is very helpful in an EIA preparation since people's comments and review shall be helpful in addressing any key issues of community and that particular ecology.

### **Planning draft EIA**

From the above step of terms of reference drafts EIA is prepared and further the extent of concerns and issues recognized during the scoping procedure are noted. The draft must necessarily meet up the substance necessities of the all-encompassing for environment assessment laws or guidelines. Planning connects with a wide scope of specialized authority to evaluate the trend and forecast

reasonable effect of the project/venture, and strategies' relief steps.

### **Public Cooperation**

A good environment assessment includes and draws the society at diverse steps throughout the process with mutual exchange of data and perspectives. People's support consists of informational gatherings, formal reviews, and they take opportunity to provide with valuable comments about a proposed venture. On the other hand, there are no reliable guidelines for public cooperation in the existing system of EIA. In fact, in other countries there exist a variety of guidelines or standards about the inclusion of people's remarks or choice in environment assessment process. This again depends on the type of venture considered, like they are that shall get affected or the type of authority regulating the venture.

### **Making Final EIA**

This is the last step of EIA preparation since this comprise of inclusion of the comments and thoughts of the individuals or groups involved during draft EIA. This shall create some modifications or increments to the information provided in the draft section. Sometimes, the last assessment copy shall incorporate a reference section briefing the entirety of the comments and modifications received from the general population and other invested individuals and response to those comments.

### **Decision**

A choice to affirm or dismiss a venture is commonly dependent on the last EIA, yet in certain situations, a EIA permission will remain at only one step far in the project permitting procedure. The decision to continue with the project shall be allowed on condition basis like submission of specific documents, or showing mitigation procedures if any required or producing a recovery bond or illustrating the management plan of venture etc. <sup>[3]</sup>.

### **Regulatory or legal audit**

Depending upon the regulatory, there might be chances for involved group verify administrative as well as lawful audit of an official conclusion and the environment assessment procedure. A plea may point out certain blemishes of process in the EIA procedure, for example, an inability to continue with any necessary formal proceedings, or can highlight major issues that were neglected to judge during EIA. A nation's legal survey or authoritative technique rule, or sometimes EIA law itself, shall as a act recognize the issue types which can be brought up in pale and the kind of resolution that might be allowed.

### **Execution of the project or venture**

Once all the permissions and administrative necessities are fulfilled, project shall commence based on the plan proposed and all legal opportunities to disturb the venture are nullified <sup>[4]</sup>.

### **Monitoring**

Monitoring is a significant piece of project/venture execution. Monitoring aids three needs: (1) it make sure that necessary mitigating steps are implemented properly; (2) evaluates whatsoever mitigating step taken are running

adequately; and (3) evaluating the precision of design or elevations that were utilized during the EIA process.

### Assessments related with EIAs

Besides EIAs, there are also other types of environmental evaluations that are used to recognize and dispose unsafe environmental effects from projects/ventures, speculations and different actions. These incorporate Integrated Environmental Assessments (IEAs) and Strategic Environmental Assessments (SEAs).

- Integrated Environmental Assessments (IEAs): An IEA is a procedure of creating and imparting future-oriented, strategy applicable data on key collaborations between the indigenous habitat and explicit human activity.
- Strategic Environmental Assessment (SEA) (also called Environmental Assessment [EAs]): It is a methodical dynamic procedure done to assess the environmental and human wellbeing impacts of proposed developmental activities. This procedure is directed before the environmental effect evaluation and decides the EIA's degree, profundity of investigation and peoples support and discussion to be incorporated into the process. People's support and counsel are basic parts of this procedure and must be incorporated at each progression of the EA procedure where conceivable <sup>[5, 6]</sup>.

In comparison with IEA and SEAs, EIAs are the most regularly utilized environmental evaluations. However, it is significant that all EIAs are established by aiming at continuous improvement, particularly they all focus on the protection of natural assets and the environment for people in future by advising on how human activities will expand and what steps can be taken to diminish their effect on environment <sup>[7, 13]</sup>.

### The essentials in an EIA

An EIA must permit the decision makers to comprehend venture/projects effects in the all of its stages. It must permit people and different partners to show their perspectives and contributions on the developmental plan. Besides, to be really viable, an EIA must add to and improve the undertaking structure, with the goal that environmental and financial aspects both are equally important side by side. Data utilized in the EIA should be built only on quality information, utilize acknowledged methodological techniques and be outlined in plain language that is reasonable for decision makers.

At long last, the EIA doesn't end with the conceding of a permit to work. It is important that that the endorsed practices and configuration are followed during the task activities and development and that progressing checking is set up during the lifetime of the undertaking <sup>[8]</sup>.

### Generic examples of essentials of EIA

- Improvements to the environmental plan and social contemplations applicable to a plan.
- Possible options must be created along with the existing meditative measures to reduce the seriousness of the effects.
- Clear data for chiefs to incorporate terms and conditions for environmental manageability of the undertaking.

- Clear sign of protecting natural resources, biological systems, social legacy destinations and places offering environmental support.
- Clear distinguishing proof of all the potential effects on human wellbeing and the environment, both constructive and destructive.
- Details on how irreversible changes or harm to the environment will be maintained in a strategic way to avoid them <sup>[9]</sup>.

### Sensitive places of environment with more attention

The more environmentally sensitive the area, it is certain that the impacts will be noteworthy and will require an evaluation. Certain assigned locales are characterized as sensitive zones

All projects which are in, or incompletely in, such zones must be screened. These are: Locales of Scientific Interest, Areas of Natural Beauty, National Parks, scheduled monuments and World Heritage Sites.

An evaluation is bound to be required if the venture influences the texture for which the sensitive region was assigned. It is important to decide whether the reasonable impacts on the environment of that specific project will be huge in that specific area. Local experts are encouraged to counsel the discussion bodies in situations where there is an uncertainty about the essentialness of an projects consequences for a sensitive zone <sup>[10]</sup>.

Individual contemplations apply to Locales of Scientific Interest. Practically, the imaginable environmental impacts of development will frequently be, for example, require an EIA in the event that it is to be situated in or near delicate locales. It might likewise be important to attempt a suitable evaluation under the Conservation of Habitats and Species Regulations 2010 if the proposed improvement is probably going to significantly affect a sensitive site. If the local administration authority or candidate is dubious about the importance of proposed plans consequences for a Site of it must take grants from the concerned authority before commencement <sup>[11, 12]</sup>.

In specific cases, local designations which are excluded from the "sensitive zones", yet which are regardless environmentally sensitive, may likewise be important in deciding if an evaluation is required.

In thinking about the affectability of a specific area, it must also consider that whether any national or globally concurred environmental measures (for example air quality) are being exceeded or approached.

### Conclusion

An EIA is a significant piece of environmental approach and endeavors to limit the negative effects of activities, and speculations on environmental assets, for example, water, biodiversity, soil, forest and others. From the start, EIAs were incorporated as a feature of environmental approach. Later, they turned out to be a piece of more extensive endeavors to advance economical improvement. These endeavors adopt a more extensive strategy to EIAs not exclusively to survey impacts on forest, soil, water, and biodiversity, yet in addition to concentrate on the interaction between land, water, and biodiversity and habitats discontinuity, while adopting a progressively prudent strategy. After some time, EIAs have moved from just effects on nature but more towards coordinating social and human wellbeing impacts also.

EIA is a significant device in ensuring that ventures and developmental activities shall not create any unfriendly effect on ecology. The point isn't to create the documents which depict the effects but instead start a procedure that offers the chance to minimize the maximum impact and choose the "best" by considering as many possibilities. Societal angles need to come up with logical and specialized perspectives. The present article finishes up with some consideration on the potential advances considered important to improve the adequacy and procedure of the EIA procedure.

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