

# A LITERATURE SURVEY ON ENVIRONMENT IMPACT ASSESSMENT: CRITICAL REFLECTIONS ON THE CURRENT AND FUTURE PROSPECTS

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## ABSTRACT

*Environment plays a vital role in the life of mankind. Big corporate houses and industrialists giants are using natural resources exhaustively. It is the Iron law of nature if you are getting something from the environment then you should also give something in return. The primary problem is that if you continue using these resources like this, our future generations will not be able to see them. Pollution is the main cause of worry, the surroundings filled with dirt, wastage, chemicals, and poisonous gases. EIA came as a tool by which the projects can be inspected, by statutory assessment as per guiding manuals provided by the government of India. In this study, our main focus area remains the reflections of EIA in the environment.*

*For that purpose, an extensive literature survey has been analyzed and various articles, magazines, case studies, newspapers have been reviewed. EIA can influence the decision of the top-level managers whether to accept or reject the project moreover it gives potential insights into the projects and their remedial measures. In the period of covid 19 pandemics, the new draft of amendment EIA 2020, which makes significant changes highlighted in the study.*

**Keywords:** EIA, Statutory Compliance, Pollution, New Amendments, Covid 19.

## INTRODUCTION

Since the beginning of the First World War, there is a quick pace for the growth of Industrial development which destroys natural resources further; the second world war adds more attention to policymakers and financial experts to understand the importance of the environment. The most significant federal legislation incorporated the national environmental policy act (NEPA) effective on 1 January 1970 dealing with air pollution water pollution, solid and hazardous waste management, and soil management, also known as “Magna Carta for the environment “ (kreith,1973). Engineering, economics and the environment become the 3 important aspects in the planning and decision-making process.

These paved the way for various other multilateral agreements such as the Rio summit (1992), the Ramsar convention (1971), the Stockholm convention (2001), the convention of biological diversity (1992), the Kyoto protocol (1997), and many more. Environment impact assessment is a decision-making tool that predicts future possibilities by identifying, evaluating the proposed projects related to ecological, cultural, and socio-economic dimensions of the environment. With the help of environment impact assessment, the management will be able to calculate the future flows of the project and choose accordingly. environment impact assessment is a comprehensive statement that is to be prepared on the guideline’s manuals provided by the competent authority.it entails all the elaborated detailed analysis of the future implications which helps to govern the project not only in the decision-making process but also in the planning, preliminary assessment, and operation. The primary objective of EIA is to identify and analyze the environmental impacts of projects and to suggest mitigation measures for reducing future impacts. The experts and professionals personnel are required for the preparation and execution of the environmental impact assessment report. The EIA includes an

assessment of the substantial impacts of the project on the ecosystem and the socio environment. For the preparation of the EIA report, secondary data from various sources have been gathered and analyzed for the predictions in pollution levels and to their remedial measures. Therefore the decision “whether the project is sustainable environmentally or not?” depends upon the EIA.

The world has seen its worse when the environmental tragedy hits hard as the gulf war spill, the filin chemical explosion, the deepwater horizon oil spill, the death of the Aral Sea, the catastrophe at Chernobyl, ecocide in Vietnam, the oil crisis, rape of the amazon, Bhopal gas tragedy, the dust bowl and many more but these disasters can be treated and prevented by the EIA as it is a strategic planning tool, which predicts the early stages consequences and their mitigation measures. The project life cycle goes in the three phases such as

1. Pre-Construction
2. Construction
3. Operation
4. Post-Operation.

### **Inception and Implications of Eia**

The UNITED NATION ENVIRONMENTAL PROGRAM defines Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social, and economic impacts of a project that leads to decision-making. The need for the environment impact assessment grows when the planning commission of India asked the departmental of science to do an assessment and prepare a report on the river valley projects from the point of view of the environment. In 1994, the notification released by the Ministry Of Environment, Forests, And Climate Change (Then Ministry Of Environment And Forests) which makes significant changes in the Indian industries making environment clearance for certain industries mandatory. The environment protection act 1986 backed the EIA statutorily explaining various provisions, methodology, and processes.

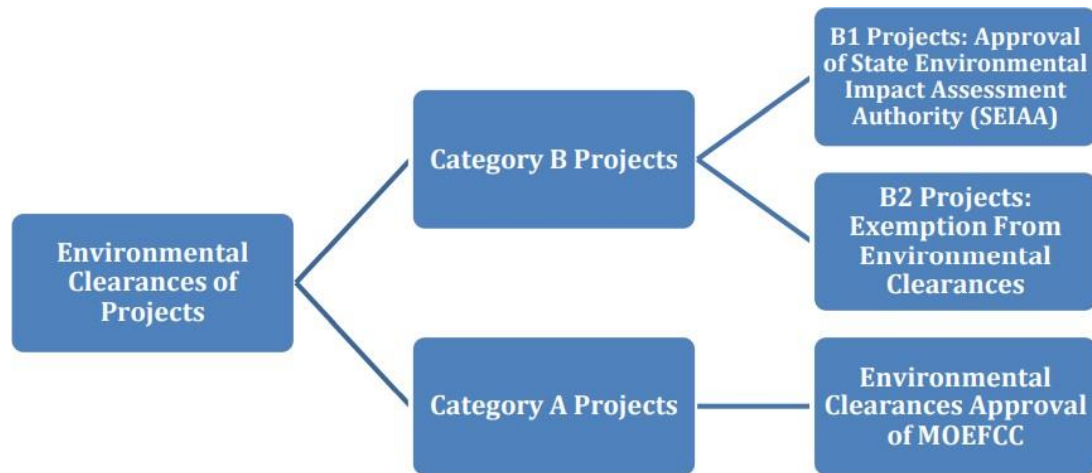
The new benchmark set up in the new amendment which came in 2006 stating significant changes:

Classification of developmental projects: category A (national level) and category B( state level) while category B is subdivided into B1 and B2.

There are four stages involved in the cycle of EIA:

1. Screening
2. Scoping
3. Public hearing
4. Appraisal

It has been made clear that the category A project requires mandatory environmental clearance so they do not have to go under the entire screening process while category B projects are further divided into two subsets stating B1 which requires mandatory compliance with EIA and other B2 which does not require EIA in Figure 1.



**Figure 1**  
**CATEGORY PROJECTS**

According to the amendment of 2006, certain companies require mandatory compliance with EIA:

1. Mining
2. Thermal power projects
3. River valley
4. Infrastructure (road, highway, ports, harbors, and airports)

The very new development in this area was brought up by the ministry of environment, forest, and climate change in this period of emergency, the whole world when affected by the covid pandemic. The amendment has its roots in The LG Polymers Plant In Visakhapatnam And Fire At Oil India Limited's Baghjan Oil Well In Assam.

The new draft provides to reduce the time of public hearing from 30 to 20 days leads to reduced awareness. Public participation plays a major role in the process of EIA. further MoEFCC exempted several projects from mandatory environmental clearance. In the modern world, environmental disasters are increasing posing a great setback to the humanity and natural environment. The new big significant changes will benefit the big industrial corporates.

### **The Whole Process of EIA Includes**

1. Project proposal
2. The screening process for which expert force of skilled professionals is required.
3. After the screening, preliminary assessment where comprehensive assessment performed
4. Scoping is based on the guidelines provided and shows various effects on the environment
5. Impact and predictions are made based on secondary data collected and analyzed. An interim progress report is prepared for the purpose.
6. Evaluation is not only based on the facts published in the reports but also on the consultation of the top-level managers.
7. Mitigation measures are established to reduce the possible risk and also propose various cures for the coming known potential impacts.

### **The basic problem with the process of EIA**

1. There is a non-availability of professional and skillful personnel to analyze the EIA. The middle-level employees are not able to understand what EIA is all about?
2. To make EIA reports baseline data is required which is necessary but there is a lack of cooperation and coordination between the parties. The desired data may not be achieved for the purpose.
3. Employees working in the area EIA are mostly underqualified for the job. The purpose of their work is

unknown to them. They are hired because of their connections. Thus, the quality of EIA has been slowed down.

4. Various panels consist of experts in their respective fields. The suggestions and reviews given by them are valuable. One should incorporate these suggestions into the assessment. But in most cases, these are ignored.
5. The major loophole in the system is clearance to the projects. The projects having a poor history of the complicated and complex statement of facts raise a high concern in the administration system.

### Current Developments In the Field of Environmental Impact Assessment

Sustainability in the modern era of industrialization we are utilizing natural resources to the fullest without thinking about the future needs of the generation. It is a challenging time for humans because our lifestyle is not at all sustainable so for the betterment we need to mend certain changes in our life so that future generations will not be affected. New modern concepts, ideas, approaches imply vast implications for providing meaningful direction to the optimum utilization of resources. Waste management and optimum utilization of resources to the best possible are how environmental sustainability can be achieved.

The introductory phase between 1960 to 1970, the word sustainability highlighted which pressurize the government to incorporate policies regarding sustainability reporting and regulation. In 1980 sustainability becomes a highly publicized gained reputation which shifts its focus from globalization to antiglobalization in Figure 2.

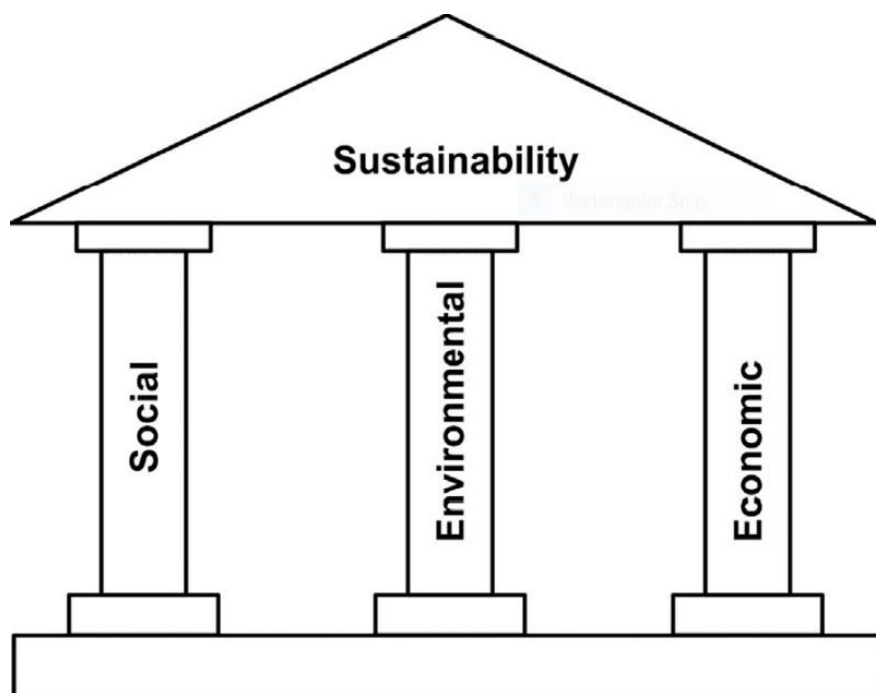


Figure 2  
THREE PILLARS OF SUSTAINABILITY

### Present Scenario

India is a developing country, the resources should be utilized at the optimum level so that minimum waste can be produced and properly disposed of. EIA provides details of the projects since their inception. EIA in India is growing rapidly as a general assessment report which provides solutions for the possible consequences in the future. There is a huge impact of EIA report as it is a decision-making tool whether to accept the project or not. Deficiencies in the screening process, scoping, unbalanced coordination, ineffective public participation, unskilled staff, poor monitoring of the process lead to negative impacts on the environment.

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