

# Environmental Impact Assessment: A Tool for Sustainable Development

**ABSTRACT-** The planet is divided between people who are alive and those who are deceased. However, a sizable portion belongs to people who have not yet been born. Anticipatory and participative development techniques are necessary for informed decision-making on the best use of natural resources and sustainable development to ensure that development and environmental health go hand in hand. One of these tools is the environmental impact assessment (EIA). This essay aims to define the idea of environmental impact assessment (EIA) and analyse its numerous components, including its basic ideals, guiding principles, shortcomings, and recommendations for improvement.

**KEYWORDS-** Development, Sustainable Development, Environmental Impact Assessment.

## I. INTRODUCTION

The renowned Indian Guru Swami Vivekananda, who once observed, "To safeguard is the voice of the present, to prevent is the holy whisper of the future," may have unintentionally set the agenda for all environmentalists. When it comes to certainty, prevention is always preferable to treatment. EIA serves as a kind of look before you leap message. EIA might be thought as a playful approach to worry before an event happens. EIA is the process of analysing the environmental impacts of a given project or activity. EIA is a tool for making decisions that examines several project alternatives in order to find the one that best balances the costs and benefits on the economic and environmental fronts. When he declared,

**Manuscript received January 23, 2020**

**Chandramouly Y J**, Associate Professor, Department of Civil Engineering, PACE Institute of Technology & Sciences, Ongole, India (email: [chandramouly\\_j@pace.ac.in](mailto:chandramouly_j@pace.ac.in))

**Sivasubramanian R**, Associate Professor, Department of Civil Engineering, PACE Institute of Technology & Sciences, Ongole, India

**Gandhavalla Madhavarao**, Professor, Department of Civil Engineering, PACE Institute of Technology & Sciences, Ongole, India

**K Harish**, Associate Professor, Department of Civil Engineering, PACE Institute of Technology & Sciences, Ongole, India

**Thirumalairaja. R**, Associate Professor, Department of Civil Engineering, PACE Institute of Technology & Sciences, Ongole, India

"To defend is the voice of the present, to prevent is the divine whisper of the future," the great Indian Guru Swami Vivekananda may have unintentionally established the agenda for all environmentalists. Since you can never be too sure, prevention is always preferable to treatment. EIA is kind of like a look before you leap sign. EIA might be characterised as a playful method of worrying ahead of time. The research to foretell how a proposed activity or project will affect the environment is known as an EIA. EIA examines multiple project alternatives as a decision-making tool in order to determine which one best balances the costs and benefits of economic and environmental factors. When he declared, "To defend is the voice of the present, to prevent is the divine whisper of the future," the great Indian Guru Swami Vivekananda may have unintentionally established the agenda for all environmentalists. Since you can never be too sure, prevention is always preferable to treatment. EIA is kind of like a look before you leap sign. EIA might be characterised as a playful method of worrying ahead of time. The research to foretell how a proposed activity or project will affect the environment is known as an EIA. EIA examines multiple project alternatives as a decision-making tool in order to determine which one best balances the costs and benefits of economic and environmental factors.

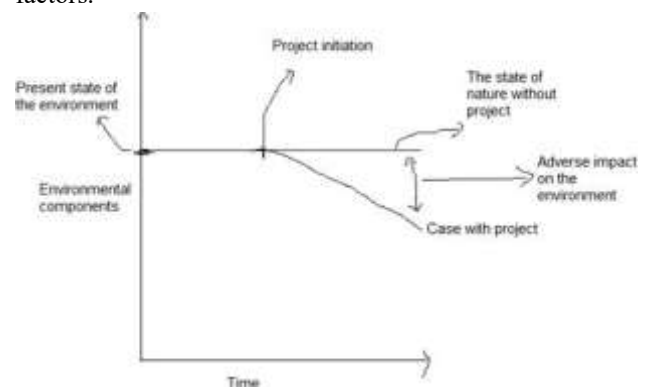


Fig. 1: Diagrammatic representation of EIA

## II. PURPOSE AND BENEFITS OF EIA

It has been realised that all developing activities must be coordinated with the preservation of the environment and ecology in order to adhere to the principles of sustainable development. The goal of an EIA is to make decision-making better and to guarantee that the project options being considered are sustainable and environmentally

sound. Environmental assessment, which considers environmental effects of a project and their mitigation early in the project planning cycle, has many advantages, including environmental protection, optimal resource use, time and cost savings, lessening conflicts by promoting community participation (if conducted properly), and informing decision-makers.

The foundation for ecologically friendly projects is an EIA. The EIA can be integrated to benefit a project at any stage, from exploration and planning to building, operations, decommissioning, and beyond site closure.

### III. CORE VALUES OF EIA(USI)

Integrity, utility, and sustainability are the three guiding principles that provide EIA action and approach meaning and direction. Integrity indicates that the procedure will adhere to recognised standards and good practise norms. Utility indicates that the procedure will deliver fair-minded and reliable facts for making decisions. Sustainability means that the method will support environmentally sound development, i.e., within the natural systems' assimilation and regeneration capabilities.

### IV. GUIDING PRINCIPLES FOR AN EFFECTIVE EIA PROCESS

These principles define the fundamental, legal, and policy requirements as well as elaborate the underlying values. These guidelines act as standards for the efficient operation of EIA systems. The major environmental tool should be the EIA, which should have clear guidelines and requirements. It should be applied uniformly and consistently to all ideas and deeds that could have negative repercussions on the environment. It should be done utilising cutting-edge science and a mitigation strategy throughout the project cycle. All elements, including cumulative, long-term, and widespread consequences, should be covered. It should incorporate sustainable factors such as biological variety, carrying capacity, and assimilative ability. It ought to offer chances for public participation and a flexible approach to problem-solving. In order to minimise delays and the burden on the proponents, it should be efficiently implementable. It ought to have built-in procedures for feedback and follow-up. It should offer economically viable solutions to encourage behaviours that will ensure environmental protection at the lowest possible cost to society

### V. DEFICIENCIES IN EIA

There have been instances where clearances were given on on data that was insufficient, inaccurate, lacking, or false. The quality of EIAs generated in India is one of the main issues with the environmental clearance process. The way public hearings are handled is likewise appalling. The manner in which a notice of public hearing is published, the accessibility of required documents before to the hearing, and the restriction on free speech during the hearing all raise serious questions. The problems that

develop after a project receives approval from the government are not covered by the EIA procedure. In India, the clearance requirements are frequently broken. Lack of baseline data and long-term data basis. Environmental reviews take too long, are laborious, and slow down the rapid pace of development. Less people are taking part in society. Growth will be hampered if the environmental clearance process is not rigorous. Environmental protests result from environmental harm, which further delays things

### VI. CONCLUSION

The EIA needs to change its emphasis from project proponents to those who will be impacted (both beneficiary and adversary). The quality and amount of baseline data for EIA may significantly vary as a result of the information from environmental auditing. The public at large as well as administrative and professional participants in the EIA may benefit greatly from education, training, and informational accessibility. In order to develop qualified human resources, technical labs, libraries, data centres, and computer facilities, there is a huge demand for capacity building. Because some nations are attempting to attain environmental sustainability at the expense of other nations, the globalisation of the economy is bringing new challenges to the environment. Sustainability for the environment is sort of imported. Perhaps the EIA's purview has to be widened to include implications like this. EIA can assist in achieving desired goals if it is successfully integrated with other planning and policy tools.

Economic and social growth are prerequisites for environmental life support systems. As a result, the life support systems need to be completely protected.

Our nation is undergoing a rapid industrialization process, which frequently comes with significant environmental and social costs that are primarily borne by the local communities closest to project locations. In order to ensure good economic development without compromising on environmental and social costs, monitoring instruments like EIA take enormous significance.

In the end, the EIA process is all about ensuring that the country's economic and developmental expansion is sustainable through involving the populace. EIA has many flaws and drawbacks, many of which are exploited by the industry, but it may be a useful tool for making decisions. This has rendered the EIA process useless and ineffectual. Furthermore, we firmly believe that a defective decision-making process will not be beneficial to democracy or progress.

### REFERENCES

- [1] "Principles of Environmental Impact Assessment Best Practice". International Association for Impact Assessment. 1999.

- [2] Clark, Ray; Canter, Larry, eds. (1997). Environmental Policy and NEPA: Past, Present and Future. Boca Raton, Florida: St. Lucie Press
- [3] Kershner, Jim (27 August 2011). "NEPA, the National Environmental Policy Act".
- [4] Carroll, B. and Turpin T. (2009). Environmental impact assessment handbook, 2nd ed. Thomas Telford Ltd, ISBN 978-0- 7277-3509-6
- [5] Fischer, T. B. (ed., 2016). Environmental Assessment. Critical Concepts of the Built Environment, Routledge, New York. ISBN 978-1-138-77776-7