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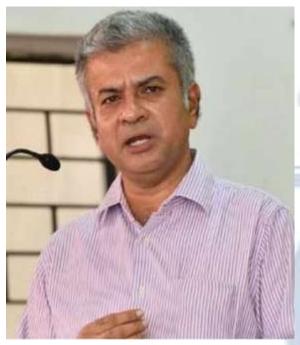
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WHITE BLACK LEGAL is an open access, peer-reviewed and refereed journal providededicated to express views on topical legal issues, thereby generating a cross current of ideas on emerging matters. This platform shall also ignite the initiative and desire of young law students to contribute in the field of law. The erudite response of legal luminaries shall be solicited to enable readers to explore challenges that lie before law makers, lawyers and the society at large, in the event of the ever changing social, economic and technological scenario.

With this thought, we hereby present to you

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## <u>CRITICAL ANALYSIS OF THE ENVIRONMENTAL</u> <u>IMPACT ASSESSMENT (EIA) PROCESS AND ITS</u> <u>POTENCY IN INDIA</u>

#### AUTHORED BY - NIHAD SHARIEF

#### ABSTRACT

Historical data shows how environment laws for its protection and preservation have developed from, giving it a very narrow approach to a very broad and holistic approach. One such mechanism or rather process which will aid in finding out and evaluating the condition of the environment is the 'Environment Impact Assessment Process', which evaluates the likely environmental impacts of a proposed project or development, which takes into account inter-related socio-economic, cultural and human health impacts, both beneficial and adverse. Therefore, this paper will critically analyze the Environment Impact Assessment evaluation mechanism on its potency so far in India, as Indian cities have proven to be the most polluted in the World, thus what are the drawbacks, the mechanism or the administration?

Keywords: Environment, Law, Pollution, Disaster, Control, Health, Constitutional Rights.

# I. INTRODUCTION

#### **1.1. INTRODUCTORY NOTE**

The Environmental Impact Assessment (EIA) process is a vital tool in modern environmental management, allowing governments, industries, and communities to understand the potential consequences of development projects on the environment. In India, a country characterized by diverse ecosystems and rapid economic growth, the EIA process has gained significant importance. This article delves into the concept of EIA, its application in India, and the significance of this process in balancing development with environmental preservation.

The Environmental Impact Assessment (EIA) is a procedural framework employed for the purpose of identifying and evaluating the potential environmental consequences of proposed developmental measures. The US National Environmental Policy Act (NEPA) inaugurated the inaugural official EIA system on January 1, 1970. This legislation primarily materialized as a political reaction to factors including the evolving scale and character of industrial development following World War II, the burgeoning public apprehension regarding the environmental repercussions of economic growth, and the shortcomings of existing decision-making tools, particularly Cost Benefit Analysis, in adequately addressing these concerns. NEPA, despite its brevity and outward simplicity, displayed originality, ingenuity, and a radical approach, all the while encountering significant obstacles in the pursuit of its objectives and ideals. It not only introduced a fundamentally new paradigm of environmental management within the EIA but also articulated concerns that later found embodiment in the principles of sustainable development, some 15 years down the road (Sadler, 1996).

#### **1.2. RESEARCH PROBLEM AND OBJECTIVES**

The following paper intends to address and add to the theoretical foundation of EIA and the role of science in EIA. The 'kind' and 'style' of decision-making when it comes to Environmental matters. However, debate on the theoretical and philosophical bases of rival ideologies has been limited. Thus, this paper intends to address on inculcating this process in law and how it will resolve the Environmental control mechanism by bringing in pre-fact measures and not post-fact actions.

#### **1.3. RESEARCH QUESTIONS**

What is the process of EIA? What is the penumbrae of EIA in India? What are the criticisms and challenges to EIA in India and worldwide?

#### **1.4. LIMITATIONS**

The scope of the present paper extends to understanding the penumbrae in international societies and the applicability of EIA as a concept in India and thereby, will not address the economic and moral implications of the subject-matter, except to the extent necessary for rendering context to understand the legal position.

#### **1.5. MODE OF CITATION**

The format of citation as prescribed in the 20th edition Harvard Bluebook will be followed for the present paper.

#### **II. LITERATURE REVIEW**

The academic discussion on various components of the present subject-matter has been extensive. This literature review assays the viewpoints on the acceptability of Environmental Impact Assessment process and the potency in India.

#### 2.1. Environmental Impact Assessment: The State of the Art<sup>1</sup>

This study examines developments in environmental impact assessment (EIA) during the previous 40 years, with a focus on the last 15-20 years, and asks if EIA is prepared to face future problems. The first section of the article covers the global expansion of EIA, current trends in EIA adoption, and the ongoing appearance of impact assessment variations. The second section of the study focuses on contemporary concerns in EIA, divided into three major categories: theory and EIA, practice difficulties, and EIA effectiveness. A significant thread running through the second section of the study is how recent discussions regarding EIA theory have influenced many aspects of EIA practice and evaluation.

#### 2.2. A Practical Guide to EIA<sup>2</sup>

Environmental impact assessment concepts (overview of environmental impact assessment; environmental compartments and dynamics; impact assessment approaches; environmental standards; resource interconnections; and the assessment procedure); (2) the physical environment (aquatic resources; terrestrial processes; wetland resources; and special issues); (3) the social environment (overview of components and dynamics; personal and interpersonal impacts; impacts on public health and safety; economic impacts; cultural impacts; and special issues); and (4) the economic environment (overview of components and dynamics; personal and interpersonal impacts; impacts; impacts on public health and safety; economic impacts; cultural impacts; personal and interpersonal impacts; impacts; impacts on public health and safety; economic impacts; cultural impacts; personal and interpersonal impacts; impacts; impacts on public health and safety; economic impacts; cultural impacts; and special

<sup>&</sup>lt;sup>1</sup>. Richard K. Morgan, Taylor & Francis Online, Vol. 30 Issue 1, available at: <u>https://www.tandfonline.com/doi/full/10.1080/14615517.2012.661557</u>.

<sup>&</sup>lt;sup>2</sup>. Ericson, CABI Journal, available at: <u>https://www.cabdirect.org/cabdirect/abstract/19951904392</u>.

## III. THE EIA PROCESS IN INDIA

The EIA process takes place in the following procedure which involves various sociological and environmental factors into consideration, they are as follows;

- Screening: Firstly the EIA process will determine whether there is requirement in the project for a detailed EIA or not. Projects are screened based on their size, location, and potential environmental impacts. In India, the Ministry of Environment, Forest and Climate Change (MoEF&CC) has issued guidelines for determining projects that fall under the EIA ambit.
- **Scoping**: Scoping involves the identification of key issues, potential impacts, and stakeholders. This step helps define the scope of the EIA study, setting the stage for data collection and analysis.
- **Baseline Data Collection**: In this phase, data is collected on the existing environmental conditions of the project area, including air quality, water quality, biodiversity, and socio-economic factors. This baseline information is used for comparison during the later stages of the EIA process.
- **Impact Prediction**: Environmental specialists analyze the project's potential impacts on the environment. This includes identifying both positive and negative consequences, such as habitat destruction, air and water pollution, and social disruptions.
- Mitigation and Impact Management: Based on impact predictions, strategies for mitigating negative impacts are developed. Developers are required to incorporate these strategies into their project plans.
- **Drafting the EIA Report**: The EIA report compiles all the information and findings from the previous steps. This report is then reviewed by experts and the public.
- **Public Consultation**: One of the hallmark features of the EIA process is public participation. The public is invited to provide feedback on the EIA report, enabling a more comprehensive understanding of local concerns.
- Appraisal by Regulatory Authorities: Regulatory authorities review the EIA report and public feedback. They may grant approval, suggest modifications, or reject the project.
- Monitoring and Compliance: If approved, the project is monitored during construction and operation phases to ensure compliance with environmental safeguards.

#### **3.1. APPLICABILITY IN INDIA**

In India, the EIA process has gained prominence due to the country's rapid industrialization and the associated environmental concerns. The applicability of EIA in India is governed by the Environmental Impact Assessment Notification of 1994, which was later revised in 2006 and further amended in 2020. This notification lays down the criteria for projects requiring EIA, including those related to infrastructure, industries, and mining.

#### 3.2. KEY ASPECTS OF EIA WITH REGARDS TO INDIA

- Categorization of Projects: The EIA notification classifies projects into Category A and Category B based on their potential environmental impact. Category A projects require a mandatory EIA, whereas Category B projects are assessed by the State Environmental Impact Assessment Authority (SEIAA).
- **Public Participation**: Public participation is an integral part of the EIA process in India. Developers are required to hold public hearings to obtain feedback and address concerns of the local communities.
- Environmental Clearance: Environmental clearance is mandatory for projects falling under Category A and B. This clearance is granted by the Ministry of Environment, Forest and Climate Change (MoEF&CC) or the respective SEIAA, depending on the category.
- **Post-Project Monitoring**: The EIA process in India doesn't end with clearance. Projects are monitored during and after their implementation to ensure compliance with environmental conditions.

#### **3.3. SIGNIFICANCE OF EIS IN INDIA**

The EIA process plays a crucial role in India's sustainable development by:

- Environmental Preservation: It safeguards the environment by assessing potential impacts and enforcing mitigation measures.
- **Public Participation**: EIA fosters transparency and empowers local communities to voice their concerns, ensuring that development projects align with societal expectations.
- Legal Framework: It provides a legal framework for developers, helping them understand their environmental responsibilities.
- Sustainable Development: EIA promotes sustainable development by ensuring that projects

do not harm the environment irreparably.

• **Investment Attraction**: It enhances India's attractiveness to foreign investors, as they can be assured that their projects are subject to a rigorous environmental assessment.

## **IV. SCHOLARLY OPINIONS**

The systematic evaluation "Environmental Impact Assessment, commonly referred to as EIA, is an evaluation mechanism for the environmental consequences of a development or a proposed project. It aims to ensure that the decision-makers, developers, and the public are informed about the potential environmental impacts of a project before it commences. EIA serves as a crucial tool to strike a balance between development, conservation, and sustainability."<sup>3</sup>

"One explanation presented to explain the apparent limits of EIA is that the subject's theoretical foundation is poorly defined and underdeveloped. Lawrence (1997) and Lawrence (1994). The administrative structure for EIA sprang from a political exigency rather than a scientific foundation, and practice began before enough scientific competence was developed Lee et al., 1995; Rosenberg et al., 1981. Theory arose mostly from evaluative research and the adoption of theoretical frameworks drawn from the several disciplines covered by EIA. Three decades later, the resulting state-of-the-art' EIA has been described as an uneven mixture of planning theory, traditional scientific theory, and discipline-specific social, economic, and biological theories, with the conceptual whole being significantly less than the sum of all parts (Lawrence, 1997)."<sup>4</sup>

Nonetheless, "individuals engaged in the development of NEPA could not have predicted the worldwide influence it would have. More than 100 countries, as well as various bilateral and multilateral assistance and financial agencies, have implemented EIA processes (Petts, 1999a). Because of the fast internationalization and institutionalization of EIA, NEPA has been referred to as one of the twentieth century's main policy advances (Bartlett, 1988). It is also thought to have had the most worldwide influence of any US law (Caldwell, 1998). However, the rapid international adoption of EIA has resulted in predicted limits in the procedural requirements for, and efficacy of, EIA

<sup>&</sup>lt;sup>3</sup>. Kumar, D., Environmental Impact Assessment in India: An Appraisal, Journal of Environmental Law, Volume 10, Issue 1.

<sup>&</sup>lt;sup>4</sup>. Ibid 4.

systems in many jurisdictions. While there is universal agreement that EIA has resulted in increased consideration of environmental considerations in decision-making, its accomplishments tend to be most favorable when compared to historical neglect and failures, rather than when judged against sustainable development goals (Caldwell, 1993)."<sup>5</sup>

"The apparent disregard for EIA theory does not indicate a scarcity of EIA research. There is a substantial body of literature on EIA, a significant amount of which focuses on the topic of efficacy (Sadler, 1996). However, research has tended to focus on the practical and procedural components of EIA rather than the substantive aims, substantive outcomes, and theoretical advances. Frost's (1997, p. 141) observation that "[i]t is almost as if those involved with EIA would rather concentrate on the procedures than dare to look at the end results" seems especially applicable. While the research scope has extended significantly over time (Wood, 2003), most notably to incorporate all parts of the social sciences more holistically, the process of EIA continues to overshadow its substantive aims. Caldwell (1993), Ensminger and McLean (1993), and Lawrence (2003) are three examples. Furthermore, the EIA literature has been criticized for lacking scientific rigor in clarifying and analyzing the values and judgments that underlay contentious topics (Lawrence, 2003)."<sup>6</sup>

## V. SCIENTIFIC BACKGROUND TO ENVIRONMENTAL IMPACT ASSESSMENT

In the applied science perspective, EIA is considered as a process in which scientific information and skills are put to practical use. The EIA scientific paradigm is founded on traditional philosophical traditions that regard science as a fundamentally rational process of objective inquiry. The only essential commonality between the two models defined under this paradigm (the analytical science model and the environmental design model) is this.

Furthermore, the second major paradigm discussing the link between science and EIA is a broad and fluid school of thinking that includes differing perspectives on the particular function of science. The concept that EIA is a tool for influencing decisions via the use of a pragmatic, inclusive, and

<sup>&</sup>lt;sup>5</sup>. Parikh, J., and Parikh, K., Environmental Impact Assessment in India: A Critical Review, Economic and Political Weekly, Volume 27, No. 28, July 11, 1992.

<sup>&</sup>lt;sup>6</sup>. Ibid 5.

deliberative kind of science, sometimes termed as trans-science or civic science, is a distinctive feature of this paradigm. O'Riordan, 2001; Weinberg, 1972.

### VI. LEGAL ASPECT TO EIA REGARDING INDIA

The Environmental Impact Assessment (EIA) process is a crucial component of environmental governance, helping nations make informed decisions about developmental projects and their potential impact on the environment. In India, a country experiencing rapid industrialization and urbanization, the EIA process plays a pivotal role in striking a balance between development and environmental conservation. This article explores the EIA process and examines its legal standing in India through the lens of case laws.

#### a. Vellore Citizens Welfare Forum vs. Union of India (1996)<sup>7</sup>

This landmark case marked a significant turning point in Indian environmental jurisprudence. The Supreme Court held that the "precautionary principle" and the "polluter pays" principle are part of Indian law, emphasizing the importance of EIA in environmental decision-making. The case underscored the need for EIA studies and public participation in environmental clearance processes.

#### b. Rural Litigation and Entitlement Kendra vs. State of U.P. (1985)<sup>8</sup>

In this case, the Supreme Court issued an interim order to halt mining activities in the Mussoorie hills due to the environmental damage caused. It laid the foundation for the principle that environmental protection is paramount and developmental projects should not compromise it. This case emphasized the significance of EIA in evaluating the ecological consequences of developmental projects.

#### c. T.N. Godavarman Thirumulkpad vs. Union of India (1997)<sup>9</sup>

Commonly known as the "Forest Case," this litigation led to a series of orders emphasizing the importance of environmental clearance for projects in forested areas. It reinforced the need for EIA, particularly in ecologically sensitive regions, and ensured that projects adhered to environmental safeguards.

<sup>&</sup>lt;sup>7</sup>. Vellore Citizens Welfare Forum vs. Union of India, 1996 AIR 2715.

<sup>&</sup>lt;sup>8</sup>. Rural Litigation and Entitlement Kendra vs. State of U.P., 1989 AIR 594.

<sup>&</sup>lt;sup>9</sup>. T.N. Godavarman Thirumulkpad vs. Union of India, (1997) 2 SCC 267.

#### d. National Green Tribunal (NGT) and Various Cases

The NGT, established in 2010, has been instrumental in addressing environmental disputes and upholding the EIA process in India. It has heard numerous cases related to violations of environmental clearance conditions and non-compliance with EIA regulations. The NGT's verdicts have played a pivotal role in reinforcing the legal standing of the EIA process.

#### e. Sterlite Industries (India) Limited vs. Union of India (2013)<sup>10</sup>

The Sterlite Industries case brought to light the importance of public participation in the EIA process. It stressed that public consultation was not just a procedural requirement but an essential aspect of democracy, enhancing the transparency and credibility of the EIA process.

#### f. Lafarge Umiam Mining Pvt. Ltd. vs. Union of India (2011)<sup>11</sup>

In this case, the Supreme Court reinforced the requirement of strict adherence to the EIA process for mining projects, particularly in ecologically sensitive areas. It highlighted that environmental concerns should be central in granting approvals.

#### g. Subhash Datta vs. State of West Bengal (2004)<sup>12</sup>

This case underscored the need for independent and expert scrutiny of EIA reports. The court held that the expertise and credibility of EIA consultants were critical in ensuring the integrity of the process.

## VII. CONCLUSION

Adopting EIA is nothing but adopting a scientific way to a sustainable future. The Environmental Impact Assessment process is an indispensable instrument for balancing development with environmental preservation in India. It ensures that the environmental consequences of development projects are thoroughly evaluated, mitigated, and monitored, thus contributing to the country's sustainable growth. Despite criticisms and challenges, the continued evolution of the EIA process in India reflects its importance in safeguarding the nation's diverse and precious ecosystems. It remains

<sup>&</sup>lt;sup>10</sup>. Sterlite Industries (India) Limited vs. Union of India, CIVIL APPEAL Nos. 2776-2783 OF 2013.

<sup>&</sup>lt;sup>11</sup>. Lafarge Umiam Mining Pvt. Ltd. vs. Union of India, (judgment reserved).

<sup>&</sup>lt;sup>12</sup>. Subhash Datta vs. State of West Bengal, Original Application No. 171/2016/EZ.

a powerful means of addressing environmental concerns in the face of rapid economic expansion.

Since NEPA was adopted in 1970, the role of science in EIA has received substantial attention, particularly as part of a wider discussion on enhancing the impacts and efficacy of EIA. Nonetheless, it has been stated that the EIA community is still split on the aims of EIA and the significance of 'good science' (or, more objectively, the type and form of science). Scientists began to express worry about the EIA process's effectiveness immediately after NEPA was implemented (Morgan, 1998). Schindler (1976), for example, outlined a number of important flaws in the practice of EIA in an editorial in the prestigious magazine Science. Much of the early studies concentrated on the link between science and EIA, and this topic continues to get a lot of interest in the present literature.

## VIII. SUGGESTIONS

While EIA is a valuable tool, it is not without challenges in India. Some common criticisms include:

- Lack of Rigorous Monitoring: Monitoring and enforcement of environmental safeguards are often weak, allowing some projects to violate regulations.
- **Delayed Clearances**: The EIA process can be time-consuming, leading to delays in project approvals and implementation.
- Weak Implementation of Mitigation Measures: In some cases, mitigation measures are not adequately enforced, leading to negative environmental impacts.
- Lack of Stringent Penalties: The legal framework may not provide for stringent penalties for non-compliance, which can undermine the effectiveness of the EIA process.
- **Inadequate Expertise**: In some cases, there have been concerns about the quality and independence of EIA consultants, indicating a need for stricter regulations.

However, these challenges must be brought in and addressed and adopted with hesitance, so as to not contradict the ultimate aim of EIA which is the maintenance and regulation of a harmonious environment which is safe for the people and at the same time sustainability.

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