



Octa Journal of Environmental Research

(Oct. Jour. Env. Res.) ISSN: 2321-3655

Journal Homepage: <http://www.sciencebeingjournal.com>



ENVIRONMENT IMPACT ASSESSMENT (EIA) STUDIES FOR DEVELOPMENTAL ACTIVITIES IN INDIA IN CONTEXT WITH EIA 2020

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Received: 14th Jan. 2021 Revised: 19th Feb. 2021 Accepted: 30th Mar. 2021

Abstract: The Ministry of Environment and Forests vide number S.O. 1533 (E) dated the 14th September, 2006 (hereafter EIA Notification, 2006), the Central Government imposed certain conditions and thresholds on the undertaking of some projects or expansion or modernization of such existing projects entailing capacity addition, in any part of India listed in Schedule to the EIA Notification, 2006 unless Prior Environment Clearance has been accorded by the Ministry or the State Level Environment Impact Assessment Authority or District Level Environment Impact Assessment Authority, as the case may be, in accordance with the procedure specified in the EIA Notification, 2006 and subsequent amendments. There have been several amendments issued to the EIA Notification, 2006, from time to time, for streamlining the process, decentralization and implementation of the directions of Courts and National Green Tribunal. The new draft EIA Notification, 2020 (hereafter EIA 2020) has been published by Ministry of Environment, Forest and Climate Change, New Delhi on 23rd March 2020 in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 and section 23 of the Environment (Protection) Act, 1986, read with clause (d) of sub-rule (3) or rule 5 of the Environment (Protection) Rules, 1986 and in supersession of the notification number S.O. 1533 (E) dated the 14th September, 2006 read with subsequent amendments, notification numbers S.O. 190(E) dated the 20th January, 2016, S.O. 4307(E) dated the 29th November, 2019, S.O. 750(E) dated the 17th February, 2020, except in respect of things done or omitted to be done before such supersession. This draft notification is not finalized yet after one year due to weakening.

Keywords: Conservation; Draft EIA 2020; Environment; Forest.

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INTRODUCTION

The rapid growth of population, improvements in standards of living and concomitant growth of infrastructure has altered the environment, sometimes beyond its power of resilience. These changes have resulted in ecological crisis and have become a matter of grave concern to managers and decision makers throughout the world. The issues both at national and global levels are focusing concern of nodal agencies (Regulatory Departments, Ministries and Boards) to support sustainable development and curb and

restrain such acts which tend to produce adverse impacts on living conditions of human, animals, plants and geographical environment. In India, Ministry of Environment and Forests (MOEF) has been recognized by Govt. of India as the nodal agency to regulate through its functionaries the provision of water Act, 1974, Air Act, 1981 and Environmental Protection Act of 1986 and provide guidelines for its implementation. As per the procedures outlined, EIA is required to provide a comprehensive account of the state of existing environment, the stresses produced by

diverse activities and the impacts these will have on various components of environment. The proponents of the development projects also need to suggest and provide the measures to mitigate the adverse effects. Environment is everybody concern, however, a person's perception as well as concern, is subject to change as a result of an effect, or proposed change on personal environment or neighbourhood environment, or economic circumstance. There have been global efforts in focusing on problems facing humanity. They relate to sustainable development, conservation of resources, maintaining biodiversity, protection of regional, seas, and global problems related to Global Warming and Ozone depletion. One of the most important conference of United Nations, held in Stockholm (1972) focused on Human Environment in which India's PM Ms. Indira Gandhi delivered the keynote address. This was followed by UNEP (United Nations Environment Protection), Agency and Earth's Summit in 1982. The concern in these global efforts was on:

- Human health and settlements
- Territorial ecosystems
- Environment and development (Sustainable Development),
- Protection of natural resources,
- Prevention of environmental disturbance,
- Promotion of chemical safety,
- Global climatic changes
- Risk to Ozone layer
- Depletion of genetic resources

In India, we are also concerned about them but our problems are different in magnitude. Population growth and poverty pose the most serious challenge. Poverty itself pollute the environment. India, is the first country, which has made provisions for the protection and improvement of environment, in its constitution (through 42nd amendment, in 1972, made effective from Jan. 03, 1977). The EIA notification was first issued in 1994 by the Central Government (Ministry of Environment, Forests and Climate Change (MoEFCC)) in exercise of its power to take any measure to protect and

improve the environment as provided under Section 3 of the Environment Protection Act, 1986. It introduced a process for prior environmental approval of certain kind of projects (specified in schedule 1). These included inter alia projects in river valleys, nuclear power, exploration of oil and gas, ports, petroleum refineries, mining (major minerals), thermal power, highway roads etc.). The project proponents were required to submit an environmental assessment report, environmental management plan and the details of the public hearing conducted in the vicinity of the project (exceptions to these requirements were permitted for certain projects). The MoEFCC would function as Impact Assessment Agency which could consult a Committee of Experts set up for this purpose.

NATIONAL ENVIRONMENT POLICY

The National Environment Policy, 2006 is the outcome of extensive consultations with experts in different disciplines, Central Ministries, Members of Parliament, State Governments, Industry Associations, Academic and Research Institutions, Civil Society, NGOs and the Public. A diverse developing society such as ours provides numerous challenges in the economic, social, political, cultural, and environmental arenas. All of these coalesce in the dominant imperative of alleviation of mass poverty, reckoned in the multiple dimensions of livelihood security, health care, education, empowerment of the disadvantaged, and elimination of gender disparities. The National Environment Policy is intended to be a guide to action: in regulatory reform, program and projects for environmental conservation; and review and enactment of legislation, by agencies of the Central, State, and Local Governments. The dominant theme of this policy is that while conservation of environmental resources is necessary to secure livelihoods and well-being of all, the most secure basis for conservation is to ensure that people dependent on particular resources obtain better livelihoods from the fact of conservation, then from degradation of the resource. The policy also

seeks to stimulate partnerships of different stakeholders, *i.e.* public agencies, local communities, academic and scientific institutions, the investment community, and international development partners, in harnessing their respective resources and strengths for environmental management (MoEFCC, 2006).

Objectives of national environment policy

The principal Objectives of this policy are enumerated below. These Objectives relate to current perceptions of key environmental challenges. They may, accordingly, evolve over time:

- Conservation of Critical Environmental Resources.
- Intra-generational Equity: Livelihood Security for the Poor.
- Inter-generational Equity Integration of Environmental Concerns in Economic and Social Development.
- Efficiency in Environmental Resource Use.
- Environmental Governance.
- Enhancement of Resources for Environmental Conservation.

This policy has evolved from the recognition that only such development is sustainable, which respects ecological constraints, and the imperatives of justice. The Objectives stated above are to be realized through various strategic interventions by different public authorities at Central, State, and Local Government levels. They would also be the basis of diverse partnerships. These strategic interventions, besides legislation and the evolution of legal doctrines for realization of the Objectives, may be premised on a set of unambiguously stated principles depending upon their relevance, feasibility in relation to costs, and technical and administrative aspects of their application (MoEFCC, 2006).

FOREST POLICY

In the constitution of India, forestry appears on the concurrent list meaning that both federal as well as state governments have control over forestry activities but the federal government, as

a policy-making body, has overriding authority. However, management authority is with the state governments. The organizational structure and operating procedures of the state Forest Departments, as lineal descendants of the colonial system of management, are almost similar in all the states of India. The forest policy is a complex balance between economic, social and political objectives in an environment where the forests and the institutions continuously change. The forest policy in India changed over a period of time. The forest policy discussions include a variety of topics like timber supply, sale and pricing, forest taxation, international trade, forest management standards, carbon sequestration, deforestation, forest ownership, property rights and policy reforms. Between 1800 and 1947 India witnessed rigorous policy interventions in forest management and there was much debate within the colonial bureaucracy on the subject of forest versus people. Since 1855, the establishment of railway network required large quantities of wood for sleepers and low-cost engine fuel and the expansion of railways and deforestation positively related to environment.

Forest Policy, 1855: In 1855, Lord Dalhousie framed the Forest Charter which leads regulation of wasteland by changing its status into government property in India. This was treated as a key intellectual transition of legal rights of wasteland which leads to forest conservation in the later period. The Forest Charter of 1855 put the Indian forestry on a solid scientific basis which introduced new environmental interventions which were paternalistic, radical and previously untried. Lord Dalhousie's new forest policies greatly expanded British authority over the land and people of India. British India's forest administrators feared the potential long-term environmental, economic and climatic effects of deforestation caused by indiscriminate logging which convinced Dalhousie to support modern scientific forestry methods and conservation.

Indian Forest Act, 1865: The organized forestry activity began in 1864, when the Imperial Forest

Department was established in India. The Imperial Forest Department attempted to establish its control over forests, by various legislations with the help of German Forester Dietrich Brandis, who was brought to look into the process of forest resource management in India. The Indian Forest Act, 1865 was legislated with the objective of asserting state monopoly on forest resources. Brandis argued about the influence of forest on climate, rainfall, and irrigation sources as a strong tool to the imposition of state control over forests. The property rights regime changed with the first Forest Policy Statement of Colonial British Government. In India, British rulers transformed the indigenous decentralized forest management systems into a centralized system, created a bureaucratic agency, Forest Department (FD) to meet their timber and revenue demands. The bureaucratic structure of the FD with its hierarchical working practices, though non-responsive to societal needs, was in line with the colonial government's requirements. The Indian Forest Act, 1865 was declared the British Administration's monopoly over the forests of India.

The Forest Act, 1878: In India, by the Forest Act of 1878, the British Administration acquired the sovereignty of all wastelands which by definition included forests. This Act also enabled the administration to demarcate reserved and protected forests. The local rights were refused in the case of protected forests while some privileges which were given to the local people by the government which can be taken away anytime. This Act classified the forests into three – reserved forests, protected forests and village forests. It was attempted to regulate the collection of forest produce by forest dwellers and some activities declared as offence and imprisonment and fines were imposed in this policy to establish the state control over forests.

National Forest Policy, 1894: The Forest Policy 1894, the first formal policy in India gave much importance to commercial exploitation of forest products, state custodianship and permanent cultivation. This policy is primarily based on Dr.

Voelcker's recommendations given in a report on 'Improvement of Indian Agriculture', 1893. Through this policy the British Administration encouraged the Zamindars to convert the open forests into agricultural land for enhancing the revenue earning of the state. Forests are treated as a source of revenue to the state and not to meet the needs of the people. In this policy, the forests were divided into four classes. The first class generally situated in hill slopes and essential to protect the cultivated plains from landslides and they played a conservation role for the benefit of cultivated plains and assured revenue to the state. The second class of forests consisted of valuable timber trees like Devadharu (*Cedrus deodara*), Sal (*Shorea robusta*) and teak (*Tectona grandis*), and due to commercial interest natural regeneration of Devadharu and Sal are promoted and artificial regeneration of teak was developed. The third class of forests as per the classification under this policy meant for minor forests, which yields low quality timber, fuelwood and fodder and for meeting the demands of local people. Finally, the fourth class covered the pastures and grazing lands, the local people were allowed to use them with restrictions.

Indian Forest Act, 1927: This Act impacted the life of forest dependent communities. The penalties and procedures given in this Act aimed to extend the state's control over forests as well as diminishing the status of people's rights to forest use. The village communities were alienated from their age-old symbiotic association with forests. Further amendments were also made to restrain the local use of forests mainly by forest dependent communities.

Indian Forest Policy, 1952: Forest degradation and deforestation sustained from colonial period to postcolonial period and emergence of a comprehensive forest policy arose to reduce the over exploitation of forests. There are three forest policies after independence, Indian Forest Policy, 1952, National Commission on Agriculture, 1976 and Indian Forest Policy, 1988. The Indian Forest Policy, 1952 was a simple extension of colonial forest policy. However, it became conscious

about the need to increase the forest cover to one-third of the total land area. At that time maximum annual revenue from forests is the vital national need. The two World Wars, need for defence, developmental projects such as river valley projects, industries like pulp, paper and plywood, and communication heavily depended on forest produce on national interest (Balaji, 2002). When National Forest Policy first came into existence in 1952, the use of forest by adjoining village communities was relatively restricted at the cost of national interests (Rishi, 2007). Forests are classified as protected forests, national forests, village forests and tree lands according to this policy with distinct uses. The protected forests are preserved for maintaining physical and climatic conditions and the commercial forests are to meet the demand from defence and communication industry. The forest dependent community can extract the produce of village forests for domestic uses. Independent India inherited this bureaucratic organizational structure of the FD. In 1952, new national forest policy did make some deviations from the colonial forest policy of 1894; however, these changes could not percolate down to the operational levels. In 1953, the Indian government nationalized the forests which were earlier with zamindars.

Forest (Conservation) Act, 1980: The Forest Conservation Act, 1980 serves to check the diversion of forest land for non-forestry purposes has become the cornerstone for conservation of forests. The Forest Conservation Act, 1980 stipulated that the central permission is necessary to practice sustainable agro-forestry in forest areas. Violation or lack of permit was treated as criminal offense. It targeted to limit deforestation, conserve biodiversity and save wildlife. Though this Act provides greater hope towards forest conservation it was not successful in its target. It resulted in increased deforestation and loss of biodiversity and wildlife because the rural population ignored the regulations and continued to use the forests for their survival.

Indian Forest Policy 1988: Indian Forest Policy, 1988 is the second forest policy after

independence of India and first forest policy which recognized the role of local people in forest protection and management of forests for achieving improvements in community livelihood (Behera and Engel, 2006). The ultimate objective of this forest policy is maintaining environmental stability and ecological balance through conservation of forests as a natural heritage. The National Forest Policy in 1988 made a very significant and categorical shift from commercial concerns to focus on the ecological role of the forests and participatory management. Community based forest management can be an effective tool for improving rural livelihood and ensuring sustainable management of forest resources.

Joint Forest Management in India: The Government of India formally adopted community-based forest management on July 1, 1990 which laid down broad guidelines for an institutional arrangement involving the local people to jointly protect and manage the forest resources in return for benefits from it. The village committees in association with the FD will manage specific forest blocks. Forest protection is the responsibility of the people. It brought positive effect in forest protection and management directed to the participation of 17 states in JFM by 1992 with 2 million hectares of forest land under protection.

EIA NOTIFICATION, 1994

The environment impact process was integrated into the Indian legal system in 1994 when Environment Impact Assessment (EIA) Notification came into existence. The objective of the Notification was to push for more sustainable industrialization process in the country after giving due consideration to environmental and social impacts. For doing so, the notification-imposed restrictions on setting up, modernizing or expanding any new project or proposal without getting an environmental clearance from the government. The notification specified the type of project/proposal that needed environmental clearance and thus would have to conduct the EIA. The Act made it mandatory for all projects

listed in schedule 1 to get an environmental clearance from the Central government, be it, for setting or expanding any plant anywhere in the country. It also listed a number of projects/proposals, which have been exempted from the environment clearance process or public hearing. The notification also made provisions for formation of an Impact Assessment Agency (IAA), which essentially consisted of experts for review of the documents submitted to the MEF for clearance. It defined the roles and responsibilities of the IAA and has fixed time frame for various stages of the environmental clearance process. The notification also made the provision for the proponent to reapply in case it was rejected due to lack of data. It, however, placed a penalty of automatic rejection in case of misrepresentation and concealing of factual data. Several changes were made to the original notification. The first amendment came within a few months of the notification on July 4, 2005. Many more were to follow. The EIA notification 1994 was amended 12 times in 11 years. While most of the amendments diluted the process of environmental clearance process, there were some, which also strengthened the process. Some of the key amendments are discussed as follows:

- **Amendment on April 10, 1997:** The process of environmental public hearing (EPH) was introduced in the environmental clearance process. The SPCBs were entrusted to conduct public hearing to get the views and concerns of the affected community and interested parties for the proposed project. It was also entrusted with forming an EPH committee to ensure fair representation in the public hearing process. This amendment also made some changes with reference to the environmental clearance required for power plants.
- **Amendment on June 13, 2002:** This amendment diluted the purpose of the notification exempting many industries from the EIA process or from the entire

- environment clearance process on the basis of level of investment.
- It exempted pipeline and highway projects from preparing the EIA report, but these projects would have to conduct public hearings in all the districts through which the pipeline or highway passes.
- A number of projects were totally exempted from the Notification if the investment was less than Rs 100 crore for new projects and less than Rs. 50 Crore for expansion/modernization projects.
- Most of the industries exempted from the clearance process had a very high social and environmental impact even if the investment was less than Rs 100 crore. For example, in case of hydel power projects, irrespective of the investment, there will be social impacts due to displacement.
- No EIA was required for modernization projects in irrigation sector if additional command area was less than 10,000 hectares or project cost was less than Rs. 100 Crore.
- **Amendment on 28th February, 2003:** This amendment added a little tooth to the notification. It took into consideration location-sensitivity into the environment clearance process. This amendment prohibited certain processes and operations in specified areas of the Aravalli range.
- **Amendment on 7th May 2003:** The notification was amended to expand the lists of activities involving risk or hazard. In this list, river valley projects including hydel power projects, major irrigation projects and their combination including flood control project except projects relating to improvement work including widening and strengthening of existing canals with land acquisition up to a maximum of 20 metres, (both sides put together) along the existing alignments,

provided such canals does not pass through ecologically sensitive areas such as national parks, sanctuaries, tiger reserves and reserve forests.

- **Amendment on August 4th 2003:** This amendment was similar to the one in February 2003 that tried bringing in location-sensitivity in the entire environmental clearance process. Any project located in a critically polluted area, within a radius of 15 kilometres of the boundary of reserved forests, ecologically sensitive areas, which include national parks, sanctuaries, biosphere reserves; and any State, had to obtain environmental clearance from the Central Government.
- **Amendment on September 2003:** Site clearance was made mandatory for green field airport, petrochemical complexes and refineries. Moreover, the amendment added that no public hearing was required for offshore exploration activities, beyond 10 km from the nearest habitation, village boundary, gothans and ecologically sensitive areas such as, mangroves (with a minimum area of 1,000 sq.m), corals, coral reefs, national parks, marine parks, sanctuaries, reserve forests and breeding and spawning grounds of fish and other marine life.
- **13th Amendment on 4th July 2005:** The amendment provided that projects related to expansion or modernization of nuclear power and related project, river valley project, ports, harbours and airports, thermal power plants and mining projects with a lease area of more than 5 hectares could be taken up without prior environmental clearance. The Central Government in the Ministry of Environment and Forests may, on case-to-case basis, in public interest, relax the requirement of obtaining prior environmental clearance and may, after satisfying itself, grant temporary working

permission on receipt of application in the prescribed format for a period not exceeding two years, during which the proponent shall obtain the requisite environmental clearance as per the procedure laid down in the notification. The grant of temporary working permission would not necessarily imply that the environmental clearance would be granted for the said project. There was a wide spread opinion that the EIA notification was not able to address all the concerns and had several weaknesses which was making the entire clearance process week. This was the reason why Union Ministry of Environment and Forest (MoEF) initiated the process of bringing in some significant modifications in the environment clearance process. A draft notification was published on September 15, 2005. This was put up for public comment for a year and has recently been notified in September 2006.

EIA NOTIFICATION, 2006

The objective of EIA Notification 2006 is to address the limitations in the old EIA Notification (1994). Therefore, various modifications have been incorporated in the old Notification, which the ministry claims have been done after taking into account the feedback from the different stakeholders. The New Notification has tried bringing in a greater number of projects within the purview of the environmental clearance process. As a result, a revised list of projects and activities has been redrawn that requires prior environmental clearance. Most importantly, there is no categorization of projects requiring EIA based on investment, rather size or capacity of the project determines whether it is cleared by the central or state government. The major difference in the New EIA Notification 2006 from the earlier one (1994) is its attempt to decentralize power to the State Government. Earlier all the projects under schedule 1 went to the Central Government for environmental

clearance. However, as per the new notification, significant number of projects will go to the state for clearance depending on its size/capacity/area. For this, the notification has made a provision to form an expert panel, the Environment Appraisal Committees (SEAC) at the State level. Though this is a good attempt to

reduce the burden on the central government, however, this provision can be misused as in many cases state government is actively pursuing industrialization for their respective state. The new notification has also failed to mention if there would be some sort of monitoring of state level projects by the central government.

Table 1. Major differences in New EIA notification 2006 and old notification (1994)

EIA Notification 1994 (including amendments)	EIA Notification 2006
<p>1. Projects in Schedule-1 have been divided into two categories, Category A and B. Category A project will require clearance from Central Government (MEF). Category B will require clearance from State Government. However, the state government will first classify if the B project falls under B1 or B2 category. B1 projects will require preparation of EIA reports while remaining projects will be termed as B2 projects and will not require EIA report. This has the potential of being a good move as decentralization of power may speed up the project clearance process. However, it may be misused and there is an urgent need to build the capacity of the state regulators to deal with their new responsibilities.</p>	<p>Proponent desiring to undertake any project listed in Schedule-1 had to obtain clearance from the Central Government.</p>
<p>2. Well defined screening process with projects divided into two categories: Category A: All projects and activities require EIA study and clearance from central government. Category B: Application reviewed by the State Level Expert Appraisal Committee into two categories - B1 (which will require EIA study) and B2, which does not require EIA study.</p>	<p>In screening, the project proponent assesses if the proposed activity/project falls under the purview of environmental clearance, than the proponent conducts an EIA study either directly or through a consultant.</p>
<p>3. Scoping has been defined in the new Notification. However, the entire responsibility of determining the terms of reference (ToR) will depend on the Expert Appraisal Committee. This will be done in case of Category A and Category B1 projects. However, the finalization of ToR by the EACs will depend on the information provided by the project proponent. There is however a provision that the EACs may visit the site and hold public consultation and meet experts to decide the ToR. However, if the EACs do not specify the ToR within 60 days, the proponent can go ahead with their own ToR. The final ToR shall be displayed on the website of the Ministry of Environment and Forests and concerned State/Union Territory Environment Impact Assessment Authority (SEIAA).</p>	<p>Scoping was not applicable. The terms of reference were completely decided by the proponent without any public consultation.</p>
<p>4. Public Consultation- All Category A and Category B1 projects or activities have to undertake public consultation except for 6 activities for which public consultation has been exempted. Some of the projects exempted include expansion of roads and highways, modernization of irrigation projects, etc. Some of these may have potential social and environmental impact. The responsibility for conducting the public hearing still lies with the state PCBs. Member- Secretary of the concerned State Pollution Control Board or Union Territory Pollution</p>	<p>The project proponent has to write to State Pollution Control Board to conduct public hearing. It was the responsibility of the State Boards to publish notice for environmental public hearing in at least two newspaper widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned.</p>

<p>Control Committee has to finalize the date, time and exact venue for the conduct of public hearing within 30 days of the date of receipt of the draft Environmental Impact Assessment report, and advertise the same in one major National Daily and one Regional Vernacular Daily. A minimum notice period of 30 days will be given to the public for furnishing their responses. The public consultation will essentially consist of two components – a public hearing to ascertain the views of local people and obtaining written responses of interested parties. There are no clear guidelines like in earlier Notification who all can attend the public hearing. The use of local people for public hearing raises doubt if the hearing can be attended by interested parties like NGOs, experts, etc. or is restricted to only locals. Is the role of NGOs/experts limited to the sending written letters/feedback to the PCB? The Notification makes provision that Ministry of Environment and Forest shall promptly display the Summary of the draft Environment Impact Assessment report on its website, and also make the full draft EIA available in Ministry's Library at New Delhi for reference. No postponement of the time, venue of the public hearing shall be undertaken, unless some untoward emergence situation occurs and only on the recommendation of the concerned District Magistrate. This was not a part of the earlier Notification.</p> <p>The SPCBs or Union Territory Pollution Control Committee shall arrange to video film the entire proceedings. This was also absent in the earlier notification and may be considered as a good move to ensure that public hearing is proper. Unlike the earlier notification, no quorum is required for attendance for starting the proceedings. This may be misused as the</p>	
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The proposed notification also talks about 'Scoping', which was completely missing earlier. The terms of reference (ToR) of the project will now be decided by the SEAC at the state-level and by Environment Appraisal Committees (EAC) at the Central level. It will be decided on the basis of the information provided by the proponent. If needed the SEACs and EACs would visit the site, hold public consultation and meet experts to decide the ToR. The final ToR has to be posted in the website for public viewing. Though this seems good on paper, however, the proponent itself is providing the information for finalization of ToR and moreover there is no compulsory provision for public consultation. Further, if the EAC does not decide the ToR within the stipulated time, the project

proponents can go ahead with their own ToR. Though there is clear mention of appraisal in the EIA process, there is no mention of post monitoring, a very important part of the entire EIA process. The area where there could have been major improvements in environment clearance process, *i.e.* public consultation, the new EIA notification is a major disappointment. The public consultation as was earlier done will still be conducted at the end of the environment clearance process where there is very little scope for the public to play any active role. Moreover, the new Notification has made few changes that weaken the public consultation process. There is a provision in the new notification where a public consultation can totally be foregone if the authorities feel the situation is not conducive for

holding public hearing. This can limit the involvement of people. Further, the consultation process has been divided into public hearing for local people and submission in writing from other interested parties. If this is the case, then NGOs/civil society organization will not be able to take part in the public hearing process, which will significantly affect the efficiency of the consultation process. The focus of the New Notification has been to reduce the time required for the entire environment clearance process. The earlier process took around 14-19 months for Rapid EIA and 21 to 28 months for comprehensive EIA. As per the new notification, the category A project will be completed only in 10.5 to 12 months. There seems to be no justification for this and may result in compromising on the efficiency and transparency of the clearance process, which was quite evident from the earlier notification even though the process had more time.

INDUSTRIAL PROJECTS

Industrial projects located in any of the following notified ecologically fragile/sensitive areas would require environmental clearance irrespective of the type of project:

- Religious and historic places
- Archaeological monuments
- Scenic areas
- Hill resorts
- Beach resorts
- Coastal areas rich in mangroves, corals, breeding grounds of specific species
- Estuaries
- Gulf areas
- Biosphere reserves
- National parks and sanctuaries
- National lakes and swamps
- Seismic zones
- Tribal settlements
- Areas of scientific and geological interest
- Defense installations, especially those of security importance and sensitive to pollution
- Border areas (international)
- Airports

There are 8 schedules as per EIA Notification 2006.

I. Mining extraction of natural resources and power generation (for a specified production capacity)

- 1(a) Mining of Minerals
- 1(b) Offshore and Onshore oil and gas exploration, development & production
- 1(c) River Valley Projects
- 1(d) Thermal Power Plants
- 1(e) Nuclear Power Projects and processing of nuclear fuel

II. Primary Processing

- 2(a) Coal Washeries
- 2 (b) Mineral Beneficiation

III. Materials Production

- 3(a) Metallurgical Industries (ferrous & nonferrous)
- 3(b) Cement Plants

IV. Materials Processing

- 4(a) Petroleum Refining Industry
- 4(b) Coke oven plants
- 4(c) Asbestos milling and asbestos based products
- 4(d) Chlor-alkali Industry
- 4(e) Soda Ash Industry
- 4(f) Leather/Skin/Hide processing industry

V. Manufacturing/Fabrication

- 5(a) Chemical fertilizers
- 5(b) Pesticides industry and pesticide specific intermediates (excluding formulations)
- 5(c) Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics)
- 5(d) Manmade fibers Manufacturing
- 5(e) petrochemical based complexes (processing other than cracking & reformation and not covered under the complexes)
- 5(f) Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic

organic chemicals and chemical intermediates)

5(g) Distilleries

5(h) Integrated paint industry

5(i) Pulp & Paper industry excluding manufacturing of paper from waste paper and manufacture of paper from ready pulp without bleaching

5(j) Sugar Industry

VI. Service Sectors

6(a) Oil & gas transportation pipeline (crude and refinery/petrochemical products), passing through national parks/sanctuaries/coral reefs/ecologically sensitive areas including LNG Terminal

6(b) Isolated storage & Handling of hazardous chemicals (as per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000)

Deleted on 13th June 2019 by S.O. 1960(E)

VII. Physical Infrastructure including Environmental Services

7(a) Air Ports

7(b) All ship breaking yards including ship breaking units.

7(c) Industrial estates/parks/complexes/areas, export processing zones (EPZs), Special Economic Zones (SEZs), Biotech parks, leather complexes.

7(d) Common hazardous waste treatment, storage and disposal facilities (TSDFs).

7(e) Ports, Harbors.

7(f) Highways.

7(g) Aerial Ropeways.

7(h) Common Effluent Treatment Plants (CETPs).

7(i) Common Municipal Solid Waste Management Facility (CMSWMF).

VIII. Building/Construction projects/Area Development projects and Townships

8(a) Building and Construction Projects (20,000 sq.m. to 150,000 sq. m.)

8(b) Townships and Area Development projects.

PARTICIPANTS IN EIA PROCESS

Proponent: It can be government agency or a private firm wishing to initiate the project.

Assessor: It is the agency, company or person having responsibility of preparing the EIA.

Reviewer: It is the agency, board or person having responsibility for reviewing the EIA and assuring compliance with published guidelines or regulations.

Decision maker: It can be a head of state, a group of ministers, an elected body or a single designated individual.

Expert advisors: They are persons with the specialized knowledge required to evaluate the proposed action, they may come from within or outside the government.

Special interest groups: They include environmental organizations (NGO), labour unions, professional societies and local associations.

Public: It includes citizens and the media.

Other government agencies: They are agencies with a special interest in the project. Components of central/state government or district, cities, talukas, villages.

KEYWORDS RELATED TO EIA

- Baseline Data (BLD) means data depicting the pre-project environmental scenario of the proposed project or activity at the site and immediate surroundings.
- EIA Report is the document that presents project description, baseline scenario, anticipated environmental impacts, mitigation measures, analysis of alternatives, environmental monitoring programme, project benefits, environmental management plan, additional studies as per the Terms of Reference prescribed by the regulatory authority in the generic structure specified in the appendix to the notification. The EIA Report is prepared by the project proponent through the Environmental consultant

organisations which are accredited for a particular sector and the category of project for that sector with the National Accreditation Board for Education and Training (NABET) of Quality Council of India (QCI) or any other agency as may be notified by the Ministry from time to time.

- Draft EIA is the EIA Report prepared for purpose of Public Consultation.
- Final EIA is the EIA Report by addressing the concerns raised by the public during the public consultation, time bound action plan along with budgetary provision for the commitments made therein by the project proponent for the purpose of appraisal.
- Expansion for the purpose of this notification, means any increase in mine lease area or length or numbers or generation capacity or culturable command area or production capacity or throughput or project area or handling capacity or built-up area, as applicable to the existing project or activity, resulting in capacity beyond the limits specified for the concerned project or activity, in the schedule or environmental clearance obtained earlier. Any capacity addition through modernization or change in product mix or change in the process shall also be considered as expansion
- Medium Enterprise means the project or activity as defined under Micro, Small and Medium Enterprises Development Act, 2006 and its subsequent amendments.
- Micro Enterprise means the project or activity as defined under Micro, Small and Medium Enterprises Development Act, 2006 and its subsequent amendments.
- Small Enterprise means the project or activity as defined under Micro, Small and Medium Enterprises Development Act, 2006 and its subsequent amendments.
- Notified Industrial Estate for the purpose of this notification is the Industrial estate including parks, complexes, areas, export processing Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather

Complexes which are notified by the Central Government or State Government or Union Territory administration prior to the 14th September, 2006 or which have obtained the prior environmental clearance as mandated under the EIA Notification, 2006 or subsequent amendments.

- Public Consultation refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. The Public Consultation shall ordinarily have two components comprising of:
 - The public hearing at the site or in its close proximity, district wise in case of the project area located in more than one district, to be carried out in the manner prescribed in the notification, for ascertaining concerns of local affected persons.
 - Inviting responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity.
- Protected Areas are areas as notified under the Wild Life (Protection) Act, 1972 (53 of 1972) from time to time.
- Eco-sensitive Areas or Eco-sensitive zones are area or zones as notified under subsection (2) of section 3 of the Environment (Protection) Act, 1986, from time to time.

EIA NOTIFICATION, 2020 (DRAFT)

There have been several amendments issued to the EIA Notification, 2006, from time to time, for streamlining the process, decentralization and implementation of the directions of Courts and National Green Tribunal. Though the EIA Notification, 2006 has helped in realizing necessary environmental safeguards by assessing environment impacts due to the proposed projects, that require Prior Environment Clearance at the planning stage itself, the Central

Government seeks to make the process more transparent and expedient through implementation of online system, further delegations, rationalization, standardization of the process, etc. MoEF&CC had issued the notification number S.O. 804 (E), dated the 14th March, 2017 laying down procedure for appraisal of the violation cases with a time window of six months. The said notification defined violation of projects which have started the construction work, or have undertaken expansion or modernization or change in product-mix without Prior Environment Clearance. However, such violations being recurring in nature may come to the notice in future during the process of appraisal or monitoring or inspection by Regulatory Authorities. Therefore, the MoEF&CC deems it necessary to lay down the procedure to bring such violation projects under the regulations in the interest of environment at the earliest point of time rather than leaving them unregulated and unchecked, which will be more damaging to the environment. Hence looking to all other scenario, MoEF&CC has issued draft notification EIA notification 2020 on 23rd March 2020 and this notification is applicable to whole of India including territorial waters. Instead of focusing on ensuring the protection of the environment, the draft EIA Notification March 2020 (EIA Notification, 2020) undermines the orders of the National Green Tribunal which had ruled against post-facto approvals. The purpose of this notification is to legitimise illegalities done by industries. It seems to be emphasising that an industrial project that has violated environmental rules will have a right to seek approval for it as long as that project is permissible in the area. Cases of violation mean instances where projects either started the construction work or installation or excavation or expanded the production or project area without prior environment clearance. In March 2017 (SO 804 (E) dated 14.3.2017), the national government had come out with a notification that provided industrial projects with a chance to regularise projects that started construction or undertook expansion and modernisation without prior

environment clearance. The draft EIA Notification 2020 goes a step further as it institutionalises this fait accompli situation. For example, the draft EIA Notification 2020 notes that such violations being recurring in nature may come to the notice in future during the process of appraisal or monitoring or inspection by regulatory authorities. The draft stresses that in cases wherein the project developer itself reports the violations, the appraisal committee shall stipulate the implementation of the environment management plan (EMP), comprising remediation plan and natural and community resource augmentation plan corresponding to the 1.5 times the ecological damage assessed and economic benefit derived due to violation while it will be two times the ecological damage in cases where the violation is found by government or during the appraisal by the appraisal committee.

In the environment clearance process, public consultation is an important component under which the concerns of local affected persons and others, who have a stake in the environmental impact of the project, are ascertained with a view to appropriately take into account while designing the project. In the latest draft, the MoEF&CC proposes to expand the list of projects that do not need to seek public consultation before they seek environment clearance. The draft says public consultation is exempted for projects including modernisation of irrigation projects, all building, construction and area development projects, inland waterways, expansion or widening of national highways, all projects concerning national defence and security or involving other strategic considerations as determined by the central government, all linear projects like pipelines in border areas and all the off-shore projects located beyond the 12 nautical miles. It also holds that all projects concerning national defence and security or involving other strategic considerations, as determined by the central government, shall require prior-environment clearance, from the ministry without any change in the category of the project but no information relating to such projects shall be placed in the

public domain. The EIA notification is considered to be an important instrument for enabling environmental democracy through meaningful public participation. This participation is sought to be done through public consultation comprising two components – a public hearing and inviting responses from those having a plausible stake in the environmental aspects of the project. The draft provides for a reduction of time period from 30 days to 20 days for the public to submit their responses during a public hearing for any application seeking environmental clearance. It also requires that the public hearing process be completed in 40 days – compared to 45 days under the 2006 notification. The main reason stated for reducing the time is that it would become easy for new investments to complete the formality of EIA. The danger is that if adequate time is not given for the preparation of views, comments and suggestions to those who would be affected by the project, then such public hearings would not be meaningful (as noted by the high court in the Samarth Trust Case). Unless a public hearing is meaningful, the whole EIA process would lack transparency and credibility. The reduction of time would particularly pose a problem in those areas where information is not easily accessible or areas in which people are not that well aware of the process itself. As the Supreme Court has said in several judgements over the years, the time for making any representation should be adequate and if it is not, then it would be a violation of the principles of natural justice. Hearings conducted across the country have been notorious for providing incomplete EIA reports, encouraging discussions on irrelevant details of the project, high levels of discrepancies in the information provided etc., thereby rendering the entire idea to involve citizens in environmental decision making, moot. The notification does not address these deficiencies pertinent in the process of public consultation, nor does it seek to ensure the authenticity or increased reach of information, that is critical for the concerned citizens to effectively participate in the process. Another contentious point is that linear projects like

pipelines and highways in border areas are exempted from the public hearing. Here the term border area is defined as an area falling within 100 kilometres aerial distance from the line of actual control with bordering countries of India which will end up covering a huge area in regions like northeast or northern India.

This draft is more investor friendly than environmentally friendly. This is evident from the extension of the time given for submitting a compliance report throughout the term of the project. The earlier notification required that the project proponent submit a report every six months, showing that they are carrying out their activities as per the terms on which permission has been given. However, the new notification requires the promoter to submit a report only once every year. During this period, certain irreversible environmental, social or health consequences of the project could go unnoticed because of the extended reporting time. For example, if a mining project is being carried out at some place which can be potentially hazardous to the nearby population and can contaminate the air, and water nearby, a half-yearly compliance report would better help in addressing these concerns. Any hazardous activity can then be stopped through timely reporting. However, providing a longer period for filing reports can lead to disastrous consequences. In such a situation, the concerned authority will not have the opportunity to question the promoters for not following the terms of clearance. The only remedy would be to impose a fine or punishment; but that would not reverse the detrimental consequences on the environment. Further, the compliance mechanism requires the promoters to file the documents on which the environmental impact is to be assessed. This leaves a lot of room for promoters to pick and choose the data and information which is to be supplied. Arguably, if a proponent is engaged in developmental activity, he has the scope of either hiding data about the detrimental consequences of the activity or downplaying its impact. Large multinational

corporations work with the objective of profit and are less concerned about the environmental consequences of their actions. This can be seen from the example of Sterlite Industries Ltd (a subsidiary of Vedanta), which constructed its refinery projects without even disclosing its mining business at the first stage. In the Vedanta case of the Niyamgiri forest, legal provisions were violated and bent for the corporation's benefit, ignoring the plight of the Adivasi population. Verification by the government would avoid situations like this. If the government relies only on information provided by the project proponent, this would mean that unless someone complains about a problematic aspect, the problem would go unnoticed.

An EIA is considered an important tool to achieve sustainability. The Supreme Court has observed in *Vellore Citizens Welfare Forum vs UOI* that companies are vital for countries' development, but having regard to pollution, the doctrine of 'sustainable development' must be adopted by them as a balancing concept. If final clearance is granted after taking into account the environmental, social, health concerns, then it can be said that the government is using this process as a tool to ensure sustainability. But if we look at several aspects of the new draft notification, it seems that the government is compromising on the process – thus promoting 'development' without taking into account other concerns.

DEVELOPMENTS IN EIA NOTIFICATION/EC PROCESS

1977-78: Concept of EIA/EC process begins with River valley projects. No legislation support.

23rd May 1986: Environment Protection Act 1986, after Bhopal Gas Tragedy (2-3 Dec. 1984).

27th Jan. 1994: First Notification under EPA 1986 was issued. EIA process became statutory requirement rather than administrative for project/activities.

27th October, 2003 [S.O.1236 (E)]: Draft Amendments: Any construction project falling under entry 31 of Schedule-I including new

townships, industrial townships, settlement colonies, commercial complexes, hotel complexes, hospitals and office complexes for 1,000 (one thousand) persons or below or discharging sewage of 50,000 litres per day or below or with an investment of Rs.50,00,00,000/- or below.

Any industrial estate falling under entry 32 of Schedule-I including industrial estates accommodating industrial units in an area of 50 hectares or below but excluding the industrial estates irrespective of area if their pollution potential is high.

7th July 2004 [S.O.801 (E)]: I. In paragraph 3- Any construction project falling under entry 31 of Schedule-I including new townships, industrial townships, settlement colonies, commercial complexes, hotel complexes, hospitals and office complexes for 1,000 (one thousand) persons or below or discharging sewage of 50,000 litres per day or below or with an investment of Rs.50,00,00,000/- or below.

Any industrial estate falling under entry 32 of Schedule-I including industrial estates accommodating industrial units in an area of 50 hectares or below but excluding the industrial estates irrespective of area if their pollution potential is high.

II. In Schedule-I, after item 30 and the entry relating thereto, the following shall be inserted, namely:

31. New construction projects.

32. New industrial estates.

14th Sept. 2006: Revised EIA notification-Different projects divided into 8 heads requiring EC either from MoEF or SEAC. Projects were divided into A and B (B1 & B2) category A and B1 require EIA studies along with Public Hearing as per notification.

11th Oct. 2007 [S.O. 1737 (E)]: New national/state highway and its expansion and GC apply for item 1(a).

19th Jan. 2009 [S.O. 195 (E)]: Revised threshold criteria for different categories. Public hearing agenda placed into Public domain for easier process of EIA and EC.

In said notification, in para 2 after subpara (iii) - However, modernization or expansion proposals without any increase in pollution load and or without any additional water and or land requirement are exempted from the provision of this notification.

In para 3 for subpara (7) - All decisions of SEIAA shall be taken in a meeting by majority.

In para 4, in subpara (iii) - In absence of a duly constituted SEIAA or SEAC, a category B project shall be considered at the Central level. However, category B projects are exempted from scoping for three years from the date of issue of this notification shall be substituted.

In para 7(i), in subpara III (Stage 3 of PH)-

(i). Dredging provided the dredged material shall be disposed or dumped within port limits.

(ii). All building or construction projects or area development projects (which do not contain any category A projects and activities) and Township (item 8).

Some other amendments in schedule and category on mining were incorporated.

15th April, 2019: Zero Draft of Environment Impact Assessment Notification, 2019 excluding 6(b) Isolated storage & handling of hazardous chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amended 2000)

Building and Construction Projects – Cat B2 and Built-up area >50,000 to <1,50,000 m²

For small scale industries EC is exempted for various industries.

23rd March 2020: Draft EIA Notification 2020. Draft Notification available in public domain (http://environmentclearance.nic.in/writereaddata/Draft_EIA_2020.pdf) for suggestions and objection on it.

SOME MAJOR CHANGES IN EIA NOTIFICATION, 2006

- I. Standard ToR for scoping for all industry - April 2015.

- II. Baseline data in EIA - valid for 3 years – 29th Aug. 2017.
- III. Public hearing exemption – 27th April 2018.
- IV. Form 2 for EIA submission – 20th April 2018.
- V. CER instead of CSR or ESC- 1st May 2018.
- VI. Violation case- 14th March 2018, then 30th May 2018.
- VII. Guidelines for continuous emission monitoring systems- June 2018.
- VIII. Standard EC conditions – 9th Aug. 2018.
- IX. Mining area changed from 50 ha to 100 ha- 14th Aug. 2018.
- X. DEAC/DEIAA - dissolved and public hearing is required more than 5 ha. – as per NGT verdict on 13th Sept. 2018.
- XI. Building or construction projects with built-up area $\geq 20,000\text{m}^2$ change to $\geq 50,000\text{m}^2$ – 15th Nov. 2018.
- XII. Zero draft of environment impact assessment notification, 2019 – 15th April, 2019.
- XIII. Molasses based distilleries (5g) > 100 KLD will be treated as cat. A & < 100 KLD will be treated as cat b - 13th June 2019.
- XIV. 6(b) (Isolated storage & handling of hazardous chemicals) omitted from EIA notification – 13th June 2019.
- XV. Certifying instruments and equipment for monitoring emissions and ambient air – 22nd Aug. 2019.

CHAPTERS OF EIA REPORT

Structure of EIA document in terms of the EIA notification, the generic structure of the EIA document should be as per given in table 2.

Table 2. Structure of EIA report and its Contents

S.No	EIA Structure	Contents
1.	Introduction	<ul style="list-style-type: none"> ▪ Purpose of the Report ▪ Identification of Project and Project Proponent

S.No	EIA Structure	Contents
		<ul style="list-style-type: none"> ▪ Brief description of nature, size, location of the project and its importance to the country, region. ▪ Scope of the Study – details of regulatory scoping carried out (As per terms of reference). ▪ Site Selection Criteria
2.	Project Description	<p>Condensed description of those aspects of the project (based on project feasibility study), likely to cause environmental effects. Description contains the details of the following:</p> <ul style="list-style-type: none"> ▪ Type of Project ▪ Need for the Project ▪ Location details showing general location, specific location, project boundary and project site layout. ▪ Size or Magnitude of Operation ▪ Project description including drawings showing project layout, components of project etc. ▪ Proposed schedule for approval and implementation, ▪ Technology and Process Description, ▪ Schematic representations of the feasibility drawings which give information important for EIA purpose. ▪ Description of mitigation measures incorporated into the project to meet environmental standards, environmental operating conditions, or other EIA requirements
3.	Description of the Environment	<ul style="list-style-type: none"> ▪ Study Area, Period, Components and Methodology. ▪ Establishment of baseline for valued Environmental Components, as identified in the scope. ▪ Study Period: 17th Dec., 2019 to 16th March., 2020. ▪ Base maps of all Environmental Components.
4.	Anticipated Environmental Impacts and Mitigation Measures	<ul style="list-style-type: none"> ▪ Details of Investigated Environmental impacts due to project location, possible accidents, project design, project construction, regular operations. ▪ Measures for minimizing and/or offsetting adverse impacts identified. ▪ Irreversible and Irretrievable commitments of environmental components. ▪ Assessment of significance of impacts (Criteria for determining significance, Assigning significance), ▪ Impact scores and Mitigation Measures. ▪ Air Modeling.
5.	Analysis of Alternatives (Technology and Site)	<p>In case, the scoping exercise results in need for alternatives:</p> <ul style="list-style-type: none"> ▪ Description of each alternative ▪ Selection of alternative
6.	Environmental Monitoring Program	<p>Technical aspects of environmental monitoring for the effectiveness of mitigation measures (including measurement methodologies, frequency, location, data analysis, reporting schedules, emergency procedures, detailed budget and procurement schedules)</p>
7.	Additional Studies	<ul style="list-style-type: none"> ▪ Risk Assessment ▪ DMP
8.	Project Benefits	<ul style="list-style-type: none"> ▪ Improvements in physical infrastructure, ▪ Improvements in social infrastructure, ▪ Employment potential – Skilled; semi-skilled and unskilled, ▪ Other tangible benefits of the project

S.No	EIA Structure	Contents
9.	Environmental Cost Benefit Analysis	During the scoping/ToR stage, no recommendation of environmental cost benefit analysis was suggested by the appraisal committee.
10.	Environment Management Plan	<ul style="list-style-type: none"> ▪ Description of the administrative aspects of ensuring that mitigation measures are implemented and their effectiveness monitored, after approval of the EIA. ▪ Explanation of how, adverse effects have been mitigated.
11.	Summary and Conclusion	Overall justification for implementation of the project,
12.	Disclosure of Consultant Engaged	The names of the Consultants engaged with their brief resume and nature of consultancy rendered.

BASELINE SCENARIO OF ENVIRONMENT

As per standard ToR available on MoEFCC portal, the current scenario of environment in terms of air, water, soil, noise, geology, hydrology, land forms, ecology & biodiversity and socioeconomic conditions of local area is required to present in chapter 3 of EIA. Base line Environmental Studies includes:

- i. **Ambient Air Quality Survey:** Collection of Ambient Air samples and monitoring and analysis thereafter for the Parameters like PM₁₀ & PM_{2.5}, SO₂, NO_x, HC and CO as per MOEF&CC guidelines.
- ii. **Surface Water Quality Survey:** Collection of Surface water samples and analysis for the parameters like pH, SS, TDS, BOD, COD, Chloride, Sulphate, Sulphide, Total Hardness etc. from the River, Nala, Open Well etc.
- iii. **Ground Water Quality Survey:** Collection of Ground water samples and analysis for the parameters like pH, SS, TDS, BOD, COD, Chloride, Oil & Grease, Sulphate, Sulphide, Total Hardness etc. from the ground water sources (Borewell, Dug well, tubewell, etc.) as per MOEF guidelines.
- iv. **Soil Survey:** Collection of soil samples and analysis for the Moisture Content, Textural Classification, pH, Chloride, Total Organic Content, Phosphate, NH₄, Oil & Grease etc. as per MOEF&CC

guidelines for agriculture and non-agriculture area.

- v. **Meteorological Survey:** Meteorological data for the monitoring period should be collected and utilized for EIA study purpose. The data for annual rainfall, humidity, temperature, wind velocity, wind direction etc. should be collected as per MOEF&CC requirements.
- vi. **Noise Survey:** Noise Survey should be carried out for day time as well as night time within the study area as per the MOEF guidelines at least 8 locations.
- vii. **Socio- Economic Survey:** Socio-Economic Survey should be carried out within the study area (10 km radius wrt project site) with respect to name of villages, Population, Commercial activities, Hospitals, Schools, National Parks, Agriculture land, Water body, Historical Monuments etc. The social status of the areas should be assessed and impacts of the proposed project should be identified.
- viii. **Ecology and Biodiversity Survey:** A detailed Ecology survey should be carried out to assess the baseline ecological status and prevalent biodiversity of the study area. Buffer and Core Zone should be identified biodiversity experts. Survey should be conducted for flora –herbs, shrubs, trees and mangroves, fauna-mammals, reptiles, amphibian and others.

Endangered endemic, and scheduled-1 species data should be recorded during the survey. Aquatic and Terrestrial biodiversity survey should be conducted using approved methodologies.

- ix. **Survey for Coastal & Marine survey:** A complete coastal and marine environment survey (as per requirement of ToR) should be carried out to study the tidal effect during High Tide and Low Tide on the Marine Environment. Hydrodynamic model study for waves and currents and identifying the shoreline changes and developing a solution for prevention of silting /erosion should be presented as per the requirement. A proper plan for disposal of dredged material, mangrove management, oil spill contingency, should be prepared and included in the EIA report. Samples should be collected during both the Tides and should be tested for identifying zooplankton, Phytoplankton, Benthos, etc., Samples of marine water & sediment should be collected and analyzed for necessary parameters in EIA report.

PROCEDURE FOR ENVIRONMENT CLEARANCE

In case of EIA notification 1994 and its amendments the proponent requires EC from the Central Government as per schedule 1 in EIA notification 1994. But according to EIA notification 2006, schedule 1 is divided in to two categories A and B. Category A requires EC from Central Government (MoEF) and Category B requires EC from state government. The State Government classifies the Category in B1 and B2. B1 category requires EIA preparation and B2 category does not requires preparation of EIA. Overall decentralized process makes Environment clearance more effective efficient EC procedure is divided in four steps given below.

a) Screening

In case of EIA notification 2004, where screening was not required and 32 categories were selected for which EIA notification is required as no categorization was done in EIA notification 1994. Where in EIA notification 2006, Screening is applicable for only B category of projects/activities and State level Expert Appraisal Committee will decide whether project is needed environmental studies for preparation of an Environmental Impact Assessment (EIA). Depending upon the nature and location, projects requiring EIA report shall be termed as Category B1 and remaining projects shall be termed as Category B2 which does not require EIA. This categorization is done by State Level Expert Appraisal Committee applied in Form 1 by project proponent.

b) Scoping

Scoping was not applicable in EIA notification 1994 and entire TOR was decided by project proponent without ant public consultation. In EIA notification 2006, Scoping is done by the EAC in the case of Category A projects or activities, and SEAC in the case of Category B1 projects or activities determine detailed and comprehensive Terms of Reference (TOR) based on the information provided by the project proponent. The TOR is determined on the basis of the information furnished by the applicant. Application in form 1, prefeasibility report and draft TOR by project proponent is submitted to EAC/SEAC respectively to central/state government from which EAC/SEAC decides TOR for EIA preparation. After deciding TOR, EIA draft report is prepared. TOR should be prepared within 60 days by EACs if not done project proponent can go ahead with their own TOR.

c) Public Consultation

In case of EIA notification 1994, the project proponent should write the SPCB or district magistrate office for organizing public consultation and it is responsibility of SPCB to publish notice for environmental public hearing in at least two newspapers widely

circulated in region and one of the newspapers should be in local language. In EIA notification 2006, SPCB is responsible for conducting public consultation. All category A and B1 projects/activities shall undertake public consultation. It is not applicable to:

1. Modernization of irrigation projects.
2. All projects or activities located within industrial estates or parks) approved by the concerned authorities, and which are not disallowed in such approvals.
3. Expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.
4. all Building /Construction projects/Area Development projects and Townships
5. All Category 'B2' projects and activities.
6. All projects or activities concerning national defense and security or involving other strategic considerations as determined by the Central Government.

These are the two components of public consultation

1. Public hearing to ascertain the views of local affected people.
 - Public hearing shall be conducted by the State Pollution Control Board (SPCB) within 45 days and if SPCB fails to engage the public hearing within 45 days, central government in Ministry of Environment and forest for Category A and SEIAA for Category B1 appoint another independent organization to do the same within another 45 days.
 - If the public agency nominated by SPCB reports that it is not possible to conduct the public hearing in a manner which will enable the views of the concerned local persons to be freely expressed. It shall report the facts in detail to the concerned regulatory authority.

- After due consideration of the report shall rule that the public consultation in the case need not include the public hearing
2. Obtaining written responses from interested parties
 - Within seven days of the receipt of a written request for arranging the public hearing Confidential information including non-disclosable or legally privileged information involving Intellectual Property Right shall not be placed on the website.
 - Make available on written request from any concerned person the Draft EIA report for inspection at a notified place during normal office hours till the date of the public hearing
 - All the responses received as part of this public consultation process shall be forwarded to the applicant through the quickest available means and shall be display on the website.

After public consultation, applicant shall address all environmental concerns expressed during this process and make appropriate changes in the draft EIA and Final EIA report shall be submitted by the applicant to the concerned regulatory authority for appraisal. Involvement of the public is one of the fundamental principles of a successful EIA process. It not only provides an opportunity to those directly affected by a project to express their views on the environmental and social impacts of the proposal but also brings about transparency in the environmental clearance system. Nearly all EIA systems make some sort of provision for public involvement. This could be in the form of public consultation or dialogue or public participation which is a more interactive and intensive process of stakeholder engagement. Most EIA processes are undertaken through public consultation rather than participation. Public consultation refers to the process by which the concerns of the local

people regarding the adverse impacts of a project are ascertained and taken into account in the EIA study. This concept was legally introduced in India in the form of public hearing in 1997. Since then the public hearing process has been conducted as a mandatory step of environmental clearance for most projects and activities. The public consultation process ensures an equitable and fair decision-making process resulting in better environmental outcomes. The type of consultation, whom to consult during EIA activities, when and how to do so and who should do it all vary significantly from project to project. This depends on the needs of the project. However, it is an important component for all kinds of project. This is because public consultations help allay the concerns of the local community, and reduce inaccurate information in the EIA report. Ideally public consultation should start from when the idea of the project is conceived and continue throughout the course of the EIA. The five main stages when public involvement can take place in the EIA process are screening, scoping, impact analysis and mitigation, review of EIA quality, and implementation and follow up. In India, the role of the public in the entire environment clearance process is quite limited. Public consultation happens at a very late stage when the EIA report is already prepared and the proponent is about to present it to the review committee for clearance. Even if the members of the community raise certain issues in the public hearing process, they have no means of knowing if it actually gets addressed in the final EIA report as they have no access to it. There are several weaknesses in the public hearing process as it exists now. Instead of becoming a participatory forum it has become a mere procedure. There was a chance to address some of these weaknesses in the new notification and give more teeth to the entire public hearing process. However, there is very little improvement in the new notification; instead, it has now added a provision which makes it possible to completely forego the public hearing process if the situation is not conducive for conducting hearing as felt by

the local administration. This provision can be misused to further limit the role of the public in the entire process. There have been several cases in the past that have shown that the public hearing process has failed to meet its objective of effectively involving people in the clearance process. Several means have been devised to keep the public away such as poor circulation of notice, politics, etc.

d) Appraisal

Appraisal means the detailed study by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents submitted by the applicant for grant of environmental clearance. It is carried out on the basis of final EIA report and outcome of public consultation. Appraisal of all projects or activities which are not required to undergo public consultation, or submit an EIA report *i.e.* Category B2 projects/activity shall be carried out on the basis of prescribed application Form 1, Form 1A and any other relevant information. Appraisal should be done within 60 days of receipt of final EIA submission.

PROCEDURE FOR APPRAISAL FOR ENVIRONMENTAL CLEARANCE

The applicant shall apply to the concerned regulatory authority through a simple communication with the following documents where public consultations are mandatory (For Category A & B):

- a) Final Environment Impact Assessment Report (hard copies and soft copy)
- b) A copy of the video tape or CD of the public hearing proceedings
- c) A copy of final layout plan
- d) A copy of the project feasibility report

These documents shall be scrutinized in office within 30 days from the date of its receipt by the concerned Regulatory Authority strictly with reference to the TOR and the inadequacies noted shall be communicated electronically or otherwise in a single set to the Members of the EAC/SEAC enclosing a copy each of the Final

EIA Report including the public hearing proceedings and other public responses received along with a copy of Form -1 or Form 1A and scheduled date of the EAC /SEAC meeting for considering the proposal. Where a public consultation is not mandatory (Category B1) and therefore a formal EIA study is not required, the appraisal shall be made on the basis of the prescribed application Form 1 and a pre-feasibility report in the case of all projects and activities other than Item 8 of the Schedule. In the case of Item 8 of the Schedule, considering its unique project cycle, the EAC or SEAC concerned shall appraise all Category B projects or activities on the basis of Form 1, Form 1A and the conceptual plan and stipulate the conditions for environmental clearance. As and when the applicant submits the approved scheme/building plans complying with the stipulated environmental clearance conditions with all other necessary statutory approvals, the EAC /SEAC shall recommend the grant of environmental clearance to the competent authority. The minutes of the EAC /SEAC meeting shall be finalized within 5 working days of the meeting and displayed on the website of the concerned regulatory authority. In case the project or activity is recommended for grant of EC, then the minutes shall clearly list out the specific environmental safeguards and conditions. In case the recommendations are for rejection, the reasons for the same shall also be explicitly stated. In case of environmental clearance for expansion with increase in the production capacity beyond the capacity for which prior environmental clearance has been granted under this notification or with increase in either lease area or production capacity in the case of mining projects or for the modernization of an existing unit with increase in the total production capacity beyond the threshold limit prescribed in the Schedule to this notification through change in process and or technology or involving a change in the product –mix shall be made in Form I and they shall be considered by the concerned Expert Appraisal Committee or State Level Expert Appraisal Committee within sixty days, who will

decide on the due diligence necessary including preparation of EIA and public consultations and the application shall be appraised accordingly for grant of environmental clearance.

GRANT OR REJECTION OF ENVIRONMENTAL CLEARANCE

The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the EAC/ SEAC concerned (or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report), and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except the regulatory authority disagrees the recommendation of EAC/SEAC, the regulatory authority shall request reconsideration by the EAC or SEAC concerned within 45 days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. After reconsideration, irrespective of views of Expert Committee, decision of the regulatory authority concerned shall be final. If decision not granted within specified time, the applicant may proceed as if the environment clearance sought for has been granted / denied by the regulatory authority in terms of the final recommendations of the Expert Committee concerned. Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection. Rejection of an application or cancellation of a prior environmental clearance already granted shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.

VALIDITY OF ENVIRONMENTAL CLEARANCE

The Validity of EC means the time period for which a prior environmental clearance is valid by the regulatory authority. The prior environmental

clearance granted for a project or activity shall be valid for a period of ten years in the case of River Valley projects, thirty years for mining projects and five years for other projects.

Table 3. Validity of Environmental Clearance

Project/ Activity	OM S.O. 1141(E) on dated 29 th April, 2015		Total Validity (EIA, 2019)
	Validity	Extension of Validity	
All the projects/ activates except Major Irrigation and River valley Projects, Nuclear Power Plants, Mining Projects	7 Years	3 Years	10 years
Major Irrigation and River valley Projects	10 Years	5 Years	15 years
Nuclear Power Plants	10 Years	5 Years	15 years
Mining Projects	Project life as estimated by Expert Appraisal Committee or SEAC or DEAC to a maximum of 30 years	No Extension	Coterminous with the validity of mining lease.

POST ENVIRONMENT CLEARANCE MONITORING

The EIA Notification 2006 makes it mandatory for the project management to submit half- yearly compliance. The EIA Notification makes it mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior Environmental clearance terms and conditions. This has to be done in both hard and soft copies and has to be submitted to the regulatory authority concerned, on the 1st of June and 1st of December of each calendar year. All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the concerned regulatory authority. The latest such compliance report shall also be displayed on the web site of the concerned regulatory authority. EIA involves a systematic process to evaluate the environmental impacts of a proposed development or action. EIA notification 2006 involves the brief study about the project or activity and also its categorization according to plant size and capacity. This divides the load on the central government (Category A) to State government (Category B1). Public participation is essential in good practice EIA, and there are both costs and benefits associated

with implementation. Principles and practice of EIA administration and technical processes are introduced and these will be examined in more detail in Environment Clearance process. EIA helps to identify the impacts of proposed project on environment and the study gives the option for remedial measures to control the degradation of the environment due to proposed activity or plant and help to achieve sustainable development.

EXECUTIVE SUMMARY

Executive summary of a report is defined (Business Dictionary, 2018) as a brief but comprehensive synopsis of a business plan or an investment proposal, which highlights its key points and is generally adapted for the external audience. Executive summary is an extremely important part of an EIA report since only this part of the EIA report is often read by most of the stakeholders including decision makers. Executive summary of an EIA report achieves a great importance especially in the large developing economies where a large number of development projects are proposed and the competent authority is under severe pressure of time for taking decision on the proposals in a time bound manner. Executive summary (World Bank, 1999) is a concise discussion of significant

findings and recommended actions. It highlights the key findings (MTR Corporation, 2018) of the environmental impact assessment (EIA) for the proposed project to meet with the EIA regulatory stipulations. The key aspect of the executive summary is that it clearly brings out the action points which are needed for implementation (DEAT, 2004). In addition to describing the essential features of the project, the executive summary needs to include (COA, 2014) the objective of the report, the major potential impacts and the action plan proposed for addressing these impacts (Rathi, 2018). Contents which are necessary in executive summary are listed below:

- i. Project location,
- ii. Product and capacities,
- iii. Land requirement, raw material, water, power, fuel with source of supply,
- iv. Process description,
- v. Measures for mitigating the impact on the environment and mode of discharge or disposal,
- vi. Capital cost of project, estimated time of completion,
- vii. Site selected for the project-nature of land-agricultural, barren, government/private, status of acquisition, nearby water body, industries nearby 10 km, forest, eco-sensitive zones, etc.,
- viii. Baseline environmental data-air, surface and ground water, soil characteristics, flora and fauna, socio-economic condition of population,
- ix. Identification of hazardous in handling processing and storage of hazardous materials and safety system provided to mitigate the risk,
- x. Likely impact of project on air, water, land, flora-fauna nearby population,
- xi. Emergency preparedness plan in case of natural or in plant emergencies,
- xii. Issues raised during public hearing and response given,
- xiii. Occupational health measures,
- xiv. Post project monitoring plan.

CONCLUSION

Environmental Impact Assessment (EIA) is a plan to any industrial activity or developmental activity for controlling the adverse impacts and it is important tool for decision-making process to ensure environmentally sound and sustainable development. An EIA concentrate on problems, conflicts and natural resource constraints which might affect the viability of a project. It also predicts how the project could harm to people, their habitat, their livelihoods and the other nearby developmental activities. The environment clearance process is step wise procedure for getting non-objection certificate (NOC) from concerned central or state government depending upon the project category decided by the ministry of India. Environment clearance is necessary for all new projects/activities, expansion and/or moderation of existing project/activity and change in product mix listed in schedule of EIA notification 2006. The environmental clearance process is required for 37 (40-3 = 37 Sectors) types of projects and covers aspects like screening, scoping and evaluation of the upcoming project. As per EIA Notification 2020, there are 43 sectors of developmental activities. The environmental clearance process is required for all scheduled industrial, infrastructure projects and covers aspects like screening, scoping and evaluation of the upcoming project. The EIA personnel should focus to assess impact of the planned project on the environment and people and to try to abate/minimize the same.

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Source of Financial Support: None

Conflict of Interest: None, Declared.