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Environmental Impact Assessmemt

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Abstract: Our analysis shows that the use of ICT in environmental research is of great importance in the scientific community, but it can also play a crucial role in the policy context, as well as in the business sector.

Keywords: Information and Communication Technology (ICT), Environmental. Assessment.

1. INTRODUCTION

The Environmental Impact Assessment (EIA) is an effort to anticipate measure and weigh the socio-economic and biophysical changes that may result from a proposed project. It assists decision-makers in considering the proposed project's environmental costs and benefits. When the benefits sufficiently exceed the costs, the project can be viewed as environmentally justified.

This is a relatively new planning and decision-making tool first enshrined in the United States in the National Environmental Policy Act of 1969. It is a formal study process used to predict the environmental consequences of any development project.

Environmental Assessment enables us in carrying out Environmental Cost-Benefit Analysis of projects at an initial stage. It is thus a pre-cursor to detailed analysis of environmental impacts, which are taken up only if a need for the same is established. It gives a view of the Actors involved in the 'development-environment linkages. This is required in view of the fact that the community at large is always at a loss in terms of deterioration of living environment that accompanies industrial development. Based on Environmental Assessment, the regulatory measures can be identified and the roles of concerned agencies defined for achieving more efficient environmental management.

In view of the fact that development is an ever-growing process, its impact on the environment is also ever increasing, leading to rapid deterioration in environmental conditions. As such, Environmental Assessment provides a rational approach to sustainable development.

EIA, in brief, extrapolates from scientific knowledge to assess the problem consequences of some human interventions on nature. Although EIA uses the techniques of science, it differs from ordinary scientific inquiry, because it is dealing with events, which have not yet occurred, may not occur, and whose chances of occurrence the very Statement that they may occur may change.

Some measures are required to be taken in the future to reduce the anticipated environmental degradation. Before starting a major project, it is essential to assess the present environment without the project, and the likely impact of the project on the environment, when it is completed. Therefore, an Environment Impact Assessment has to be made before starting a project. For analysis of environmental impacts, many professions and disciplines have to be involved. Like economic and engineering feasibility studies, Environmental Impact Assessment is a management tool for officials and managers who make important decisions about major development projects. The Environmental Impact Assessment has the following objectives:

i) Production of environmental impact of projects
ii) Finding ways and means to reduce adverse impacts
iii) Shaping project to suit local environment
iv) Presenting the predictions and options to the decision-makers

2. EVOLUTION OF EIA

The phrase 'Environmental Impact Assessment 'comes from Sec. 102 (2) of the National Environmental Policy Act (NEPA), 1969, USA. Some rudiments of EIA are implicit even in early examples of environmental legislation. Napoleon in 1910 issued a decree, which divided noxious occupations into categories: those, which must be far removed from habitations, those that may be permitted on the outskirts of towns, and those, which can be tolerated even close to habitations, having regard to the importance of the work and the importance of the surrounding dwellings.

3. EIA IN INDIA

Prior to January 1994, EIA in India was carried out under administrative guidelines, which required the project

proponents of major irrigation projects, river valley projects, power projects, ports and harbors, etc., to secure a clearance from the Union Ministry of Environment and Forests (MEF). The procedure required the Authority to submit environmental information to the MEF by filling out questionnaires or checklists. The Ministry's Environmental Appraisal Committees carried out the environmental appraisal.

On 27 January 1994, the MEF notified mandatory EIA's under rule 5 of the Environment (Protection) Rules of 1986 for 29 designated projects. The notification made it obligatory to prepare and submit an EIA, an Environment Management Plan (EMP), and a project report to an Impact Assessment Agency and was required to consult a Multi-disciplinary Committee of experts. Under the January 1994 notification any member of the public was to have access to a summary of the Project Report and the detailed EMPs. Public hearings were mandatory. This represented India's first attempt at a comprehensive EIA scheme. The environmental Action formally started with the participation of late Smt. Indira Gandhi in the UN Conference on Human Environment in Stockholm in 1972. A National Committee on Environmental Planning & Coordination (NCEPC) was established to be the apex body in the Department of Science and Technology.

The term 'Environment figured for the first time in the Fourth Five Year Plan (1969-74) which recorded that 'harmonious development was possible only on the basis of a comprehensive appraisal of environmental issues. The Tiwari Committee (Committee on Review of Legislative Measures and Administrative Measures), headed by Shri N.D. Tiwari, the then Deputy Chairman of The Planning Commission, in its report in 1980, recommended creation of a Department of Environment as a nodal agency to ensure environmental protection, to carry out environmental impact studies of proposed development projects, and to have administrative responsibility for pollution monitoring and control. The Department came into being in 1980 within the Ministry of Science and Technology under the charge of the then Prime Minister. Later on, the subjects of wildlife and forestry were added to the list and a new Ministry of Environment and Forests was created with the Prime Minister holding its charge. Since its inception the Department (under the Ministry) has issued various guidelines on EIA for various projects.

4. EIA PROCESS AND PROCEDURES

The EIA process in India is made up of the following phases (As recommended by the Ministry of Environment and Forest, Government of India).

Screening

Screening is done to see whether a project requires environmental clearance as per the statutory notifications

Scoping and Consideration of Alternatives

Scoping is a process of detailing the terms of reference of EIA. It has to be done by the consultant with the project proponent and guidance, if need be, from Impact Assessment Agency.

Baseline Data Collection

Baseline data describes the existing environmental status of the identified study area. The site-specific primary data should be monitored for the identified parameters and supplemented by secondary data if available.

Impact Prediction

Impact prediction is a way of 'mapping' the environmental consequences of the significant aspects of the project and its alternatives.

5. ASSESSMENT OF ALTERNATIVES, DELINEATIONS OF MITIGATION MEASURES AND ENVIRONMENTAL IMPACT STATEMENT

For every project, possible alternatives should be identified and environmental attributes compared. Alternatives should cover both project location and process technologies. Alternatives should consider 'no project' option also. Alternatives should then be ranked for selection of the best environmental optimum economic benefits to the community at large.

5.1 Public Hearing

After the completion of EIA report the law requires that the public must be informed and consulted on a proposed development after the completion of EIA report.

5.2 Decision-making

Decision making process involve consultation between the project proponent and the impact assessment authority.

5.3 Monitoring the Clearance Conditions

Monitoring should be done during both construction and operation phases of a project. This is not only to ensure that the commitments made are complied with but also to observe whether the predictions made in the EIA reports were correct or not.

6. ECO-MARKS SCHEME

Scheme of Labelling of Environment Friendly Products (ECO-MARKS). This scheme aims at Labelling of Environment Friendly Products. The scheme operates on a national basis and provides accreditation and labelling for household and other consumer products, which meet certain environmental criteria along with quality requirements of the Indian Standards for that product. Any product, which is made, used or disposed of in a

way that significantly reduces the harm it would otherwise cause the environment, is considered as Environment Friendly Product.

This scheme was introduced with the following objectives :

- To provide an incentive for manufacturers and importers to reduce adverse environmental impact of products.
- To reward genuine initiatives by companies to reduce adverse environmental impact of their products.
- To assist consumers to become environmentally responsible in their daily lives by providing information to take account of environmental factors in their purchase decisions.
- To encourage citizens to purchase products which have less harmful environmental impacts?
- Ultimately to improve the quality of the environment and to encourage the sustainable management of resources.

REFERENCES

[1] Ayers, R.S. and Westcot, D.W. 1985. Water quality for agriculture. *Irrigation and Drainage Paper 29 (Revised).* FAO, Rome, Italy.

[2] Biswas, A.K. and Qu Geping. 1987. *EIA for Developing Countries*. Tycooly Publishing, London.

[3] Blum, B. 1984. *A Handbook on EIA for Public Decision Makers*. UNEP, Paris, France.

[4] Chambers, R. 1981. *Rural Development - Putting the Last First*. Longman, London, UK.

[5] Craine, L.E. 1971. Institutions for managing lakes and bays. *National Resources Journal* II.

[6] EBRD. 1992. *Environmental Procedures*. EBRD, London.

[7] ESCAP. 1985. *EIA Guidelines for Planners and Decision Makers*. ESCAP, Geneva, Switzerland.

[8] Holling, C.A. 1978). *Adaptive Environmental Assessment and Management*. John Wiley, London.

[9] Munasinghe, M. 1993. *Environmental Economics and Sustainable Development*. World Bank, Washington D.C., USA.

[10] OECD. 1986. Environmental assessment and development assistance. *Environment Monographs No 4*. OECD, Paris.

[11] UN. 1994. *Trends in EIA of Energy Projects*. UN, New York, USA.

[12] UNECE. Policies and systems of EIA. *Environmental Series No 4*. UNECE, New York.

[13] WHO. 1993. *Guidelines for Drinking Water Quality*. Vol 1. Recommendations. WHO, Geneva, Switzerland.

[14] World Bank. 1993. *World Development Report - Investing in Health*. Oxford University Press, Oxford, UK.

[15] Wramner, P. 1989. *Procedures for EIA of FAO's field projects.* FAO, Rome, Italy