CHAPTER III
ENVIRONMENTAL IMPACT ASSESSMENT LAW & POLICY- INTERNATIONAL SCENARIO

PART ONE
ENVIRONMENTAL IMPACT ASSESSMENT – THE GENESIS AND DEVELOPMENT

It is essential to note the historical development of Environmental Impact Assessment all over the globe, briefly to appreciate its importance in environmental protection. Environmental Impact Assessment has spread like wild fire through out the world and its popularity as a unique process of environmental decision making is noteworthy. This study will also help us to note the popularity of the Environmental Impact Assessment as a unique process of environmental ‘decision-making’. Earlier the project proponents were using the ‘cost and benefit analyses’ before translating their project into reality. The ‘cost and benefit analysis’ refers to a systematic study where the value (in monetary term only) of all the inputs that are needed in starting an industry are to be added and finally compared with that of the estimated benefit from the venture. If there is excess of benefit over the cost, then indication is that, the project will be successful. On the other hand where the cost exceeds estimated benefits – the project is unviable, hence not ventured in to.

There was a long felt need to formulate a system, which will take into consideration all possible costs into account in general environmental
and ecological costs in particular. The limitations of the cost and benefit analysis paved the way for better system to highlight the importance of environmental safeguards to be taken while implementing the developmental projects. Environmental Impact Assessment emerged as the next alternate system to the cost and benefit, which attracted the policy practitioners' world wide and soon attained tremendous popularity.

**EVOLUTION OF EIA**

The United States of America was the first country to assign 'mandatory status' to Environmental Impact Assessment through, National Environmental Protection Act, 1969 (NEPA). A host of industrialized/developed countries have since then implemented Environmental Impact Assessment procedures. Canada, Australia, Netherlands and Japan have adopted Environmental Impact Assessment by suitably altering their laws in 1973. The European Community (EC) issued a directive making environmental assessments mandatory for certain categories of projects in its jurisdiction.¹

Among the developing countries, Columbia was the first Latin American country to institute a system of Environmental Impact Assessment in 1974. In Asia and Pacific region, Thailand and Philippines have long established procedures for Environmental Impact Assessment. A manual for Environmental Impact Assessment was prepared and published in 1988 in Sri Lanka is testimony to the fact of increasing
Environmental Impact Assessment process in Africa is sketchy, although a number of nations including Rwanda, Botswana and Sudan have some experience of Environmental Impact Assessment (though not on expected scale and way).\(^2\) It is not completely out of place to mention that, in the African region the overall momentum is presently towards strengthening the process of Environmental Impact Assessment.\(^3\) Partly this is due to the popularity of the system and rest is due to international funding agencies, who are making it mandatory for the nation states to adopt the process of Environmental Impact Assessment before taking financial assistance for the developmental projects.

In International arena bilateral and multilateral agencies have also recognized the value of Environmental Impact Assessment, as an effective tool of decision-making. The Organization for Economic Co-operation and Development (OECD),\(^4\) in 1974 (and again in 1979) issued recommendations encouraging its constituent states to adopt the process of Environmental Impact Assessment before starting developmental projects. Further, OECD issued guidelines for good practices in Environmental Impact Assessment in 1992. Considering the fact the OECD is primarily a conglomeration of business community world wide, the interest it has shown in developing Environmental Impact Assessment, is remarkable.
United Nations Environment Programme (UNEP) in 1980 provided guidelines for Environmental Impact Assessment of the development proposals and supported research on Environmental Impact Assessment, especially in the developing countries. This is a clear indication of the acceptability of EIA as the most reliable one. Moving further in this direction UNEP in 1987 set out goals and principles of Environmental Impact Assessment for the member countries and provided technical guidance on basic procedures for Environmental Impact Assessment in 1988.

In the year 1980 the World Conservation Strategy heralded the greater need to integrate environmental considerations with development. This provided further stimulant to the Environmental Impact Assessment process, as this was time tested tool of integration, by then. With no chance to look back, since 1987 Environmental Impact Assessment has become an integral part of World Bank policy which states that environmental issues must be addressed as part of overall economic policy. Closer look of the World Bank experience indicates that, the Bank has learnt the importance of environmental issues (in development) through hard way, when most of its ambitious projects were made to face stiff resistance from local environmental groups.

In 1989 the World Bank issued the Operational Directive on Environmental Assessment [O.D. 4.00] which was revised and updated later in October 1991 [O.D. 4.01].
published guidelines for Environmental Impact Assessment.\textsuperscript{6} Importance of Environmental Impact Assessment as an effective system and important tool of modern decision making was echoed in the famous Brundtland Report\textsuperscript{7} and at United Nations Earth Summit on Environment and Development held at Rio de Janeiro in 1992.\textsuperscript{8} This was highlighted, as the most crucial recognition the system of Environmental Impact Assessment could ever get.

Since then there should be any reservations to categorically state that, the Environmental Impact Assessment is the most popular and proper tool of integrating ecological needs with developmental greed of any community. Ever since its inception the system is going from strength to strength, learning from its implementation experience world over. Respecting the space and time opinions expressed world wide in support of Environmental Impact Assessment as a tool of decision making keeping in view of environmental conservation.

The evolution and developments in Environmental Impact Assessment can be recorded in the following table:

\textbf{Table I: Evolution and Development of EIA}

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<tr>
<th>STAGES OF EVOLUTION</th>
<th>SALIENT FEATURES OF DEVELOPMENT</th>
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<td>STAGE ONE</td>
<td>• No formal accounting system;</td>
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<td>• Decisions made on interest group lobbying with the regulators – by demonstrating mere engineering feasibility;</td>
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<td>• Primary emphasis was on 'ECONOMIC</td>
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\textsuperscript{59}
| STAGE TWO | • Emergence of 'Cost and Benefit Analysis' as scientific accounting system of decision making;  
• Emphasis on efficiency criterion and engineering feasibility;  
• Major concern was still 'ECONOMIC DEVELOPMENT' |
| STAGE THREE | • Innovations in 'Cost and Benefit Analysis';  
• Use of multiple objectives and discount rates (but not concentrating much upon 'environmental inputs')  
• Imaginative proxy pricing mechanisms;  
• 'Economic Development' considered as one of the objectives (as concerns about environmental and social concerns slowly started creeping in);  
• Need felt for new efficient system, which can integrate all the elements of development. |
| STAGE FOUR | • Emergence of Environmental Impact Assessment system;  
• Emphasis upon bio-physical changes due to developmental activities;  
• Reduced importance to mere 'economic development'. |
| STAGE FIVE | • Clear conceptualization of Environmental Impact Assessment as a tool of decision making;  
• Emphasis to ecological conservation;  
• Integration of conservational needs with developmental needs;  
• Environmental Impact Assessment was accepted as an effective tool for integrating 'development' with 'ecological conservation'. |
The decade of 1990s is vital for any one interested in Environmental Impact Assessment. It is during this decade major developments have occurred in the Environmental Impact Assessment law and procedure world over. These include enactment of Environmental Impact Assessment statutes by developing countries (e.g. Benin), reforms to well established Environmental Impact Assessment systems in industrial/developmental countries (e.g. Canada) and the introduction of Strategic Environment Assessment provisions in some other countries (e.g. Hong Kong).

Not just implementation of proper legal environment for adopting Environmental Impact Assessment programme in to one's system, but several nations have gone further to improve their respective systems by learning from their past experience (e.g. Canada). Other countries are following the suit by undertaking review of their existing Environmental Impact Assessment programme (e.g. Japan and India). Some of the key developments reported at the policy forum are worth noting and are listed below. A quick look of the following list will help the reader to understand how rapidly things are changing world over with respect to Environmental Impact Assessment:

AUSTRALIA: all jurisdictions have implemented the guidelines and criteria for determining the need for Environmental Impact Assessment. A national agreement has been drafted to provide a firm inter-jurisdictional basis for process harmonization and accreditation.
BENIN: since 1995 the enactment of international EIA framework legislation has overlain the procedures and requirements of lending aid agencies like the Africa Development Bank. There are continuing problems relating to the implementation of the law, the lack of capacity and expertise at all levels and constraints on data gathering, analysis and preparation of EISs. Partnership and training programmes are being instituted as trial ‘solutions’.

CANADA: The focus is on interpreting and operationalizing the Canadian Environmental Assessment Act (which deals with projects) and Cabinet Directive on Policy and Programme Assessment. Various regulatory, procedural training and research and development initiatives are being taken to support the implementation of the Act and Directive.

FRANCE: The French system celebrated its 20th anniversary of Environmental Impact Assessment system in October 1997. To mark the occasion there was a resolve passed to take stock of past experiences and to develop much more effective policy strategy to strengthen the programme. Steps were also taken to implement recent national legislation (Law on Air, 1996) and the European Community EIA Directive (97/11/EC) and to prepare for the forthcoming European Community Directive on SEA (strategic Environmental Assessment) of plans and programmes (1998).

HONG KONG: Major initiatives include enactment of the Environmental Impact Assessment Ordinance (which was brought into
effect in 1998); the regulators are now concentrating upon development of comprehensive specification of guidelines and criteria for effective implementation of the process. The effort to publish a generic environmental monitoring and audit manual and preparation of SEA of the Territorial Development Strategy is currently on going.

JAPAN: Following public review of Japanese (and international) experience, a law is brought into force in the year 1997. Through this review new screening, scoping, are introduced. Further review and follow-up procedures are expected to be introduced, and the transparency and scope of public participation are being improved on greater public demand.

NETHERLANDS: For the second time, the Dutch EIA system has been reviewed by an Evaluation Commission. The Commission’s report is positive but also makes several major recommendations for further strengthening of the process. Currently, these are being reviewed under three main categories of action relating to obligatory EIA and screening, the application of EIA to land use planning and the relationship of EIA and environmental licensing.

UNITED STATES OF AMERICA: In 1997 the Council on Environmental Quality completed two important reviews, focusing on consideration of cumulative effects under the National Environmental Policy Act and the effectiveness of the process after 25 years of experience. The council also issued draft guidance to all agencies on implementing an Executive order on Federal actions to address
Environmental Justice in Minority Populations and Low-income Populations.

UNITED KINGDOM: Options for the implementation of European Directive [97/11/EC] are being reviewed. The Directive increases the number of projects which may require EIA and changes the way member states may determine Annex II projects. The UK Government’s preferred approach is to build on the existing system by introducing a combination of exclusive [categorical] and indicative [case by case] thresholds to provide a clear, consistent and appropriate guidance on the projects to be covered.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO): The use of EIA in developing countries to review industrial projects is constrained by many issues. These include limited availability of data and methodologies narrow scope of analysis (e.g. omitting examination of site and of technological alternatives), absence of follow-up, and insufficient linkages to other processes instruments for environmental management, such as life cycle analysis, health and safety systems and ISO standards.

All the above developments not only highlight the galloping popularity of the Environmental Impact Assessment Programme all over the world, but also the way this decision making tool is getting improvised day by day through the reviews. Even India is not exception to all this.
Currently the Indian review (of its Environmental Impact Assessment Programme) is over and draft regulations are out for public comments.

PART TWO

INTERNATIONAL OBLIGATION TO ADOPT ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

The earliest traces of environmental impact assessment can be found in the 1972 Stockholm Declaration, which is the first ever international meeting on environmental matters. Again after twenty years, during the second international conference on the Environment and Development, the obligation of adopting Environmental Impact Assessment process was reemphasized. Underlining the importance of Environmental Impact Assessment, the Rio Declaration in its principle 17 stated that: "...environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse effect on the environment..."

Not just the Rio Declaration, many international environmental agreements have highlighted the vital part played by the Environmental Impact Assessment programme in integrating the environmental aspects into the developmental programmes. The following are some of the most important International conventions making Environmental Impact Assessment mandatory: Firstly Article 206 of the 1982 United Nations Convention on the Law of the Sea requires the environmental impact assessment of any activity likely to cause pollution of or significant and harmful changes to the sea. Secondly, Article 2 of the United Nations
Convention on Environmental Impact Assessment in a Trans-boundary Context (Espoo Convention) states that an environmental impact assessment shall be undertaken prior to a decision to authorize or undertake a proposed activity that is likely to cause a significant adverse trans-boundary impact. Thirdly, the United Nations Convention on the Protection and use of Trans-Boundary Watercourses and International Lakes stress on notifying other states of projects with potential environmental effects and provides for the participation of the public that may be affected and establishes a system of post-project monitoring and analysis; and finally, Convention on the Law of Non-Navigational uses of International Watercourses, 1997 refers directly to environmental impact assessment and its significance as tool of decision-making for developmental practitioners.

PART THREE

EIA LEGISLATIONS IN SELECT COUNTRIES

This part reviews some leading (and much debated) Environmental Impact Assessment systems from the select countries. It is believed that such review will help in understanding, comparing and contrasting the Indian impact assessment system. Further, this review of Environmental Impact Assessment systems and the concerned legal frame-work (especially in the last two decades) will bring to the fore the way tracks of Environmental Impact Assessment has changed over a period of time, and the way this system has gained more and more significance by laps of
time. The countries have changed the Environmental Impact Assessment
process with a view to draw upon benefit gained in various countries and
for meeting the ever increasing environmental challenges.

As highlighted earlier, all most all countries in the globe now have
environmental impact assessment systems of their own. Some are
claimed to be working very well, and some are not. Studying all these
world systems is impossible, considering the time and resource
constraints. Realistically, it might not be needed also. Hence, a careful
selection is being made to present the study of the world’s environmental
impact assessment systems. United States of America’s system was
obviously the first, and is reliably learnt that the US system of
environmental impact assessment is working successfully than any where
else.\textsuperscript{10}

The Netherlands is yet another country from the developed
countries segment selected. It is also interesting to note that the
Netherlands’ system was closely reviewed by the Indian Ministry of
Environment and Forest before introducing the recent draft.

The experts interviewed for the study did opine that study of a
developing country is also must. They further expressed that, study of
Malaysian system would be ideal. Their choice of Malaysia was
supported by two strong reasons. The first being - it is one among the
major developing countries of the globe and situated in the south Asian
region, where greater similarities are being found with that of Indian
system. Experts also opined that, it will be worthwhile (to consider the Malaysian system) as they are one among the Recently Industrialized Economies (RIEs) having greater thrust upon development yet vying to protect their environment and natural resources. Rapid industrialization and economic growth over past two decades have transformed Malaysia from a predominantly agricultural country to an industrialized one. Industrialization and the exploitation of the vast natural resource base, deforestation, depletion of fisheries, air and water pollution and contamination by industrial wastes have in recent years become serious environmental concerns in Malaysia. Unfortunately except the bare statute of Malaysian law i.e. Environment Quality Act, 1974 nothing was available to the Researcher's reference. Even the regulations promulgated under the Statute were also not available. Hence it was decided to leave the study of Malaysian system. Although comparing Indian impact assessment system with other world systems is not the major methodology adopted, this stands as one of the grave limitation of the present Research.

There are other countries whose systems are being inserted at summery level. It is due to lack of availability of sufficient information and data. This section is only intended to provide some broad birds vision of the world systems and in-depth analysis was not possible.
UNITED STATES OF AMERICA

United States is the pioneer in the field of environmental impact assessment, and brought into force the National Environmental Policy Act, 1969 (NEPA) to make the environmental impact a compulsory affair for some of the projects. The broad policy parameters are clearly stated in the NEPA to achieve the objectives of the enactment. The Act explicitly incorporated the following guiding principles viz. to (i) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (ii) assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings; (iii) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; (iv) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice; (v) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and (vi) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The Council on Environmental Quality established in the Executive Office of the President of US, is the institution, for the enforcement of NEPA. The functions of the Council are: (i) to advise the president and assist in the preparation of the Environmental Quality Report; (ii) to
gather information about current and future trends in environment, to verify whether such trends interfere with the policy objective of NEPA; (iii) to evaluate various federal programmes to find out how fare these programmes are in consonance to the objective of NEPA and make suitable recommendations to the President; (iv) to develop and recommend to the President such national polices to foster and promote the improvement of environmental quality; (v) to conduct investigations, studies, surveys, research and analyses relating to ecological systems and environmental quality; (vi) document the changes happening in the environment including bio-sphere and bio-diversity; (vii) to report at least once each year to the President on the state and condition of the environment; and (viii) to make and furnish such studies, reports thereon, and recommendations with respect to matters of policy and legislation as the President may request.

The United States Environmental Impact Assessment system adopts the 'discretionary approach' to screening. The NEPA requires the federal government agency, responsible for a project to prepare an Environmental Impact Statement for 'major federal actions significantly affecting the quality of human environment'. A 'major federal action' encompasses more than projects that are directly proposed by an agency of the federal government. Projects partially financed, regulated, assisted, or approved by a federal agency are also covered by NEPA's requirements. Thus, in practice, almost any economic activity large
enough to require the attention of federal regulators may fall under NEPA and require an Environmental Impact Statement. This makes the requirement of impact assessment, in all but all cases. In addition, many of the 50 state governments have adopted their own Environmental Impact Assessment laws, which may apply directly to private activities and have significance thresholds lower than the federal NEPA. With respect to federal actions, NEPA’s threshold determination has been further defined by the Council on Environmental Quality (CEQ), and narrowed to a single question of ‘significance’.

CEQ regulations, which often are supplemented by regulations from individual federal agencies, detail the process for determining whether an action is significant and therefore requires a federal Environmental Impact Statement. Many different inquiries factor into a significance determination, including the proposed activity’s proximity to historic resources or particularly sensitive ecological areas, such as wetlands. In addition, under the CEQ regulations, the cumulative impacts of an activity must be considered during screening, which means determining “whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

NEPA confers on agencies the authority to simplify the screening procedure by identifying categories of actions that typically require an Environmental Impact Statement and those that typically do not. The latter are termed “categorical exclusions”, and are presumed to be exempt
from the EIS requirements. If an action does not fall under either category, the federal agency will then prepare an environmental assessment (EA) in order to ascertain whether there is a need for a full EIS. In essence, the EA is a short form EIS that serves as the basis for screening decision. If the EA concludes that a project is likely to have significant environmental impacts of the kind contemplated by NEPA, then the agency will go forward with a full EIS; if the EA concludes that there will not be significant impacts, the agency must prepare a document known as a “finding of no significant impact” (FONSI). The FONSI document is a procedural safeguard to ensure that the agency conducted the EA properly, adequately evaluated potential environmental impacts, and made sufficient investigations before deciding not to conduct a full EIS.

**Scoping**

The US system has a well defined scoping phase with ample space for public consultation. Under the NEPA, after the screening is completed, the agency responsible for the project must publish a ‘notice of intent’ in the Federal Registrar. The regulation mandates that ‘the NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments and public scrutiny are essential to implementing NEPA’.16 This serves to notify the public that the agency intends to prepare an Environmental Impact Statement and invites public
participation. In this way the public is encouraged to participate in the scoping process and to provide critical inputs on issues including impacts, alternatives and mitigation possibilities.

For complex projects, the US system employs a multi-step approach called ‘tiering’ that allows for EIAs at various stages of the project to differ in terms of scope and detail.\(^\text{17}\) This results in the preparation of an initial EIS for a large scale proposal and subsequent EISs for specific components of the proposal. This tiering system eliminates repetitive discussions of the same issues and to focus on the actual issues ripe for decisions at each level of environmental review. The EIS is prepared by the federal agency that has approval authority for the project.

Under the US law, the responsible agency or agencies must explore and objectively evaluate all reasonable alternatives, and also explain why certain alternatives were eliminated from more detailed study.\(^\text{18}\)

The obligation imposed on the agencies lie at the heart of the entire NEPA process. NEPA regulations provide that the EIS should present the environmental impacts of the proposal, the alternatives in a comparative form, to the decision-makers and the public with a degree of clarity, defined options from which the choices can be made.
Public Consultations

In NEPA there is a significant stress to the 'public participation'. Not only public there is a provision Act to consult the relevant agencies (about the proposed project) to bring harmony in multi agency systems. It is stated that, 'prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved'. There is a mandate to the Council that it shall – (i) consult with the Citizens' Advisory Committee on Environmental Quality, and with such representatives of science, industry, agriculture, labor, conservation organizations, state and local governments and other groups, as it deems advisable; and (ii) utilize, to the fullest extent possible, the services, facilities and information (including statistical information) of public and private agencies and organizations, and individuals, in order that duplication of effort and expenses may be avoided, thus assuring that the Council's activities will not unnecessarily overlap or conflict with similar activities authorized by law and performed by established agencies.

Quality of Environmental Impact Statement

There is greater stress upon the quality (rather than quantity) of the environmental impact assessment process in the NEPA regulations. It is categorically stated that 'environmental impact statements shall serve as the means of assessing the environmental impacts of proposed agency
actions, rather than justifying decisions already made. Environmental impact statements are being advised to be prepared 'using an interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts'. To make the statement documents readable, there is page limit of 150 in case of normal projects and 300 pages in case of 'unusual scope' or projects with greater complexity. This limitation makes the proposed statement to be extremely precise and focused. This also encourages and enables the decision maker (and the public) to go through the statement. It is natural that, during the assessment there might be some information lacking. Whenever there is lack of information the agency shall make it clear (in the statement) that, the information provided is incomplete or unavailable. There is also specification that, when the unavailable information is very important piece and very useful to choose among the alternatives, then the agency shall try to get the information by incurring reasonable costs. If the cost of obtaining the information is exorbitant then the agency shall make a statement in the environmental impact statement to the effect that (i) such information is incomplete or unavailable; (ii) a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment; (iii) a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and (iv) the agency's evaluation of
such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section 'reasonably foreseeable' includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.25

There is a mandate that 'environmental impact statements shall be written in plain language and may use appropriate graphics so that decision-makers and the public can readily understand them'. To achieve this mandate the agencies are encouraged to 'employ writers of clear prose or editors to write, review, or edit statements, which will be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts'.26 To have standardized approach, there is format recommended in the regulations.27 While preparation of EIS the agency shall insure the professional integrity, (including scientific integrity) of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.28 The EIS shall also list all federal permits, licenses, and other entitlements which must be obtained in implementing the proposal. The EIS may also indicate, if there are some uncertainties about the licenses and permits etc.29 Finally each
environmental impact statement shall contain a summary which adequately and accurately summarizes the statement. The summary shall stress the major conclusions, areas of controversy (including issues raised by agencies and the public), and the issues to be resolved (including the choice among alternatives). The summary shall normally not exceed 15 pages.30

**Inter-agency Cooperation and Commenting**

There are provisions, in the US legislation facilitating smoother functioning of the environmental assessment and coordination between various federal agencies and local departments concerned. The US law stresses the need to "integrate the requirements of NEPA with other planning and environmental review procedures required by law or by agency practice so that all such procedures run concurrently rather than consecutively". This is in addition to the policy statement with regard to encourage and facilitate public involvement in decisions which affect the quality of the human environment.31 Further when the draft environmental impact statement is prepared, before it is to be finalized there is a mandate to the agency that it shall obtain the comments of any Federal agency, which might be (i) having special expertise with respect to some of the environmental impacts involved in the project; or (ii) has the authorization to develop and enforce the environmental standards.32 The agency shall also request the comments from (i) any appropriate State and local agencies which are authorized to develop and enforce
environmental standards; (ii) Indian tribes, when the effects may on a reservation; and (iii) any agency which has requested that for the receipt of the statements of the proposed project. This mandate is important one from the point of view of developing greater coordination between various agencies at all levels. Lack of such provisions, will pose grater hurdles in effective implementation of the programme. This further may lead to lot of heart burn among different agencies.33 There is a duty cast upon the Federal agency having jurisdiction or expertise to comment upon the draft environmental statement. At least the agency shall make a note to the effect that, it has 'no comment' to make, as all the matters of concern are being assessed in the report (and report being satisfactory one).34 It is very interesting to note that, along with the mandate to comment, the NEPA regulations further detail out the commenting standards in elaborate way. This reduces the scope for the federal agency to write one line 'no comment' statement. Further, if the assessment is challenged in the court of law, there is greater scope for the court to look into the aspect of 'review' standards and 'application of mind' by the subsequent agency (which is placed under the duty to comment). It is worthwhile to note the following specified in the regulations, relating to comments - “(a) Comments on an environmental impact statement or on a proposed action shall be as specific as possible and may address either the adequacy of the statement or the merits of the alternatives discussed or both; (b) When a commenting agency criticizes a lead agency's predictive methodology,
the commenting agency should describe the alternative methodology which it prefers and why; (c) A cooperating agency shall specify in its comments whether it needs additional information to fulfill other applicable environmental reviews or consultation requirements and what information it needs. In particular, it shall specify any additional information it needs to comment adequately on the draft statement's analysis of significant site-specific effects associated with the granting or approving by that cooperating agency of necessary Federal permits, licenses, or entitlements; (d) When a cooperating agency with jurisdiction by law objects to or expresses reservations about the proposal on grounds of environmental impacts, the agency expressing the objection or reservation shall specify the mitigation measures it considers necessary to allow the agency to grant or approve applicable permit, license, or related requirements or concurrences."

The Agency is required to respond to the comments, making the process of accepting comments a meaningful one. An agency preparing a final environmental impact statement shall access and consider comments both individually and collectively, and shall respond to all the comments. These responses may be in the form of (i) modifying alternatives including the proposed action; (ii) developing and evaluating alternatives not previously given serious consideration by the agency; (iii) supplementing, improving, or modifying the entire analyses adopted during the assessment and preparation of draft assessment statement; (iv) making
factual corrections; and (v) explaining why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency’s position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response. This regulation imposes heavy accountability upon the agency not only to receive comments, but also to seriously consider them before finalizing its assessment statement and take decision. Stating with clarity even smaller details strengthens the assessment programme in US to greater extent. If there are any conflicts, between the federal agencies before taking final decision about the project, the same may be referred to the Council for settlement.

Decision Making by the Agency

After the observance of due procedures the agency will take its final decision. The same is recorded for the public/official purposes. The decision shall state (i) number of alternatives considered by the Agency in reaching to the final decision; (ii) how the present proposed alternative is ideally suited; (iii) preferences given to the various other alternatives on factors including economic and technical considerations; (iv) that, all practicable elements are taken into account and means are adopted to avoid or minimize environmental harm from the alternative selected; and (v) a monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation.
Clear mandate to state all necessary details in the decision report, acts as a check upon the agency to grant permissions indiscriminately. There is also possibility for the court to reconsider the decision of the agency, on the basis of its articulation of reasons for the decision. At later point of time, any body interested in the matter may consult this document, to find out, how and why the decision was granted. This has great documentation value for future reference, and also to learn from the past experience to further improve the system.

In conclusion, it may be stated that the US/NEPA system scores above rest of the EIA systems in the world (especially compared with those of developing countries), because of its care for minor details. Separate legislation at the outset is greatest virtue for the system to implement itself. In case of India the whole EIA programme is, for example, established upon bunch of regulations (through delegated legislation), being prepared by the Ministry of Environment and Forest (equivalent to US agency). This makes the regulations to be changed very easily and some times (in fact most of the times) the ministry might not be ready to impose heavy burden upon itself to safeguard minor details like in the NEPA system. The NEPA guidelines are very elaborate in all respects and based upon three important policy structures viz. (i) greater stress upon inter-disciplinary approach in assessing the environmental impacts of any project (not heavily leaning to the scientific methodologies); (ii) greater scope for the public consultations at all levels.
of the assessment (and the consultation begins very early in the assessment stage); and (iii) practicality of approach by introducing a mechanism to have greater coordination between various agencies before the decision is taken. Apart from these broader principles NEPA system avoids complexities by providing clear definitions of the terms used in the law and regulations. There is greater importance assigned to the documentation of all assessment details, comments, conflicts raised and resolved, and final decision taken. This document helps to further enrich and strengthen the NEPA programme to serve the society better for all the days to come and achieve the policy objectives for which the entire system of NEPA was being built.

NETHERLANDS

Netherlands continues to be one of the leading European nations in terms of economics. The system of environmental management in Netherlands is considered to be one of the most sophisticated in the world.38

Environmental impact assessments, in Netherlands, are meant for major projects with ‘significant environmental consequences’. The Dutch Environmental Impact Assessment Decree contains two appendices that list thresholds. These thresholds are determined by two lists appended to the Dutch law viz. ‘List C’ and ‘List D’. Environmental Impact Assessment is mandatory for projects that exceed the thresholds given in the ‘C list’; the projects that exceed the thresholds in the ‘D list’ may require an
Environmental Impact Assessment at the discretion of the competent authority. During the recent reengineering of Indian Environmental Impact Assessment programme, the Dutch system of environmental management in general and the impact assessment system in particular was studied to suggest several changes. The Dutch system is based on constitutional monarchy, with strong federal structure. Along with the centre there are twelve provinces working in complete cooperation.

The Environmental Management Act, 2004 is the main statute dealing with the environmental management in Netherlands. The statute is very comprehensive one taking into its ambit almost all leading environmental issues to address. Ministry of Housing, Spatial Planning and the Environment is the apex state agency to deal with environmental matters in the country. The act recognizes clearly the ‘duty’ of every person to take due care about environment at the very outset.

There is The Environmental Impact Assessment Committee constituted under the Act, comprising of experts to aid and advice (also to make recommendations) to the Minister in charge of Environment and Minister of Agriculture, Nature Management and Fisheries. The recommendations are with respect to applications for exemption from the obligation to draw up an environmental impact statement. This includes making recommendations to the competent authority in accordance with the law, with respect to environmental impact statements.
The Dutch Environmental Management Act, 2004 contains provisions for granting an exemption from the obligation to prepare an EIS. This is possible for an activity that is nearly identical to a concrete project for which an EIS has been published at an earlier stage, on the condition that the data on the environmental consequences are still up-to-date and that there have been no changes to the proposed activity with potentially negative consequences for the environment. Applications for exemption are decided by the ministers of Housing, spatial planning and the environment and of agriculture, nature and food quality who are in turn advised by the NCEIA.

The EU Directive on Strategic Environmental Assessment (SEA), which came into force in July 2004, makes environmental assessment mandatory for certain plans and programmes prepared by government authorities. For this type of environmental assessment too, scoping is essential to ensure that SEA matches the planning process. The description of impacts can often be less detailed and more qualitative than for project EIAs. The Netherlands Commission for Environmental Impact Assessment (NCEIA) applies this experience in the advice it provides. Strong leaning towards transparency and public participation are the other two greater hall marks of the Dutch system.
OTHER COUNTRIES

EIA Frame-work in Japan

The Environmental Impact Assessment Law of 1997 defines the process of environmental impact assessment as "environmental impact assessment shall mean the process of (a) surveying, predicting and assessing the likely impact that a project [herein after meaning changes in the shape of the terrain (including dredging being conducted simultaneously) and the establishing, modifying, and expanding of a structure for specific purposes] will have on various aspects of the environment (if the purpose of the project includes business activities and other human activities on the project land or within a project structure after the implementation of a project, the impact of such activities is included); (b) studying possible environmental protection measures relating to the project; and (c) assessing the likely overall environmental impact of such measures".

The law of environmental impact assessment in Japan goes for project classification to determine which of the projects require the EIA to be done as;

1. CLASS 1 PROJECTS – A large scale project that is designed by government ordinance and is likely to have a serious impact on environment; and
2. CLASS 2 PROJECTS – A project that is on a scale commensurate with that of class 1 project and for which a determination as to whether it will have a serious impact on the environment or not must be made.
In this system the proponent is required to prepare a scoping document concerning the environmental impact assessment. The scoping document needs to present information regarding the scope of the environmental impact assessment (limited to those items relating to survey, prediction, and assessment activities) relating to the relevant project. The competent cabinet minister (if the competent cabinet minister is the head of an agency within the Prime Minister’s office, then the Prime Minister) consults with the Director-General of the Environment Agency and prepares ministerial regulations setting forth standards to ensure that such scope is appropriate. For the purpose of inviting comments regarding both the items to be considered in an environmental impact assessment and the survey, prediction, and assessment methods to be utilized the proponent, upon preparing the scoping document makes public the facts that scoping document has been prepared and makes the scoping document available for public review in the area for one month from the date on which the scoping document is made known to the public.

**EIA Law in United Arab Emirates**

EIA requirements in UAE are defined under federal law No.24 of 1999 for the protection and development of the environment. Here in this enactment EIA is defined as “the study and analysis of environmental feasibility of activities, the establishment and practice of which may affect environmental safety”. The law requires that the Federal Environmental Agency (FEA) in consultation with the competent authorities and
concerned parties to set the standards, specifications, principles and regulations for the assessment of environmental impacts of projects and establishments applying for license and to specially undertake the following acts; (i) identification of categories of projects, which are due to their nature may cause harm to the environment; (ii) identification of areas and sites of special environmental importance or sensitivity such as historical and archaeological sites, wet lands, coral reefs, natural reservations and public parks; and (iii) identification of natural resources and major environmental problems of special importance.

The FEA is required to decide on the applications submitted, within a period not exceeding one month from the date of submission of the application. The applicant is notified of the decision and the reasons for rejection of his application if rejected. The period stated above is allowed to be extended by one more month if need arises. The law also addresses EIA of Handling of Hazardous Substances and wastes and Medical Wastes. The following are few other important duties assigned to the FEA – (i) Evaluation of technology vis-à-vis environmental quality; (ii) defining environmental parameters; (iii) defining monitoring frequency; (iv) Preparation emergency plans for addressing environmental disasters.

**EIA Law in China**

The People's Republic of China's new Environmental Impact Assessment Law clarifies and strengthens environmental impact assessment (EIA) requirements affecting the establishment, expansion or
renovation of business facilities, and applies similar requirements to the drafting of government plans. The law was passed on October 28, 2002 and has become effective on September 1, 2003.45

This law defines three different levels of EIA documents. Wherein a project’s potential impact upon the environment is significant (or major) – an environmental impact report is required, together with a comprehensive assessment of the resulting environmental impact. Where the potential impact is not so significant (or light) an environmental impact report form is sufficient, containing an analysis or special assessment of the resulting environmental impact. Where the potential impact is very small, filling of an environmental impact registration form is sufficient.

The law requires re-submission of revised EIA documents, including major changes to measures taken for preventing pollution and ecological damage in addition to the ‘major changes to project’s nature, scale, location or production processes’. If the actual environmental impact of construction or operation differs from the approved EIA documents, the unit is required to assess and correct the difference, and to file a report on the same with the original EIA approval authority and project approval authority. The environmental protection authority is required to conduct follow-up monitoring of actual environmental impact and is entitled to instruct the unit to assess and correct any non-confirmation with the approved EIA documents.
The most important requirement in the law is that it relates the EIA of government plans. The law requires government plans to undergo varying types of EIA, some of which are subject to comments by experts, by concerned units and by the public. The law sets out two different EIA requirements, depending on the category of government plan. One category contains special plans for development of industry, agriculture, animal husbandry, forestry energy resources, water conservation, traffic, city construction, tourism and natural resources. These special plans must be accompanied by an environmental impact report. The report must be examined by and include the written opinions of an examination team that includes experts selected randomly from a list to be established in accordance to rules issued by the State Environmental Protection Agency. If a special plan is likely to cause an adverse impact on the environment that directly involves the environmental rights and interests of the public, then comments need to be invited from the public as well as experts and concerned units, unless State regulations require secrecy. Another category contains plans on land utilization, and plans on construction, development and utilization of regions, watershed areas and sea areas. For this category of plan the EIA requirement is merely that the draft plan be accompanied by writings or explanation of the plan's environmental impact. The law does not indicate the legal status of an improperly approved plan, or whether a company or individual affected by an approved plan would have the standing to raise objections. The law
stipulates fines on non-complying companies and their personnel and extends penalties to personnel of more government departments for additional types of misconduct. However, the law does not address the liability of units to provide compensation to persons damaged by non-compliant environmental impact but this type of liability is address by other laws.

PART FOUR

THE PRACTICE OF INTERNATIONAL ORGANIZATIONS:

As the focus on Environmental Impact Assessment grew, the need to adopt some broad governing guidelines became imperative. Various countries and world bodies, which were financing large projects across the world, wanted to understand the environmental implications of the project before committing any financial aid. In this section the discussion will be on Environmental Impact Assessment requirements of two such important institutions viz. the World Bank and Asian Development Bank.

WORLD BANK

The World Bank was founded in 1944, when 43 countries met at a conference at Bretton Woods, USA. The Bretton Woods Conference established the International Monetary Fund (IMF) to stabilize currencies and the International Bank for Reconstruction and Development (IBRD) to provide loans for reconstruction after World War II. As it turned out, IBRD did not play the foreseen instrumental role in the reconstruction of Europe,
but the institution quickly evolved into the world's biggest developmental organization, and later became known as the World Bank.

From the beginning the World Bank mainly financed dams, highways and other big infrastructure projects. Electricity supply, often connected to large dam projects, represented half of total lending. During seventies World Bank’s lending increased dramatically. Originally the World Bank was to give loans only to specific projects, but this changed with the advent of the international debt crisis in the early 1980’s. By the end of the eighties roughly 25% of the Bank’s lending went to restructuring of the economies of developing countries, through ‘structural adjustment programmes’. In countries with structural adjustment programmes these loans amounted to 50% or more of total lending. Conditionality connected to structural adjustment loans implies devolutions, reductions in public sector spending and cuts in subsidies. In many cases this includes subsidies on basic food supplies. The programmes have often involved export orientation based on raw materials and natural resources.

Over the last few years the World Bank has become more important: both in the international development debate and in the environmental arena. Especially in connection to the UNCED conference in Rio (1992) the Bank was portrayed as a suitable institution for taking care of global environmental issues. One of the best examples of this is the World Bank’s influence on Global Environmental Facility (GEF), which is supposed to act as a financial mechanism to help the South to
contribute to the solution of so-called 'global environmental problem', like emission of greenhouse gases and loss of bio-diversity etc.

After massive criticism from the environmental movement and documented social and environmental destruction as a consequence of World Bank’s projects, reorientation in World Bank policies was carried out in 1987. In accordance to the new reformed mandate, more environmental portfolio managers were hired, new regulations concerning environmental assessments were approved and ‘local participation’ entered the Bank’s vocabulary.

In January 1991, World Bank came out with Operational Directive i.e. ‘OD 4.01: Environmental Assessments’ to deal with Environmental Impact Assessment. This directive describes World Bank procedures for Environmental Impact Assessment and states that it is meant to improve the decision making process and to ensure that the project options under consideration are environmentally sound and sustainable. The policy of the World Bank heavily focuses upon prevention of environmental damage than concentrating upon mitigation or compensatory measures (wherever possible). World Bank operational manual defines Environmental Impact Assessment as “an instrument to identify and assess the potential environmental impacts of proposed project, evaluate alternatives, and design appropriate mitigation, management, and monitoring measures. Projects and subprojects need EIA to address important issues not covered by any applicable regional or sectoral EA”.

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It is extremely important to note that the wordings include almost all environmental impacts possible by an economic activity upon the human environment. Section (2) of the policy states that the environmental assessment of any project shall take into account (i) the natural environment (air, water and land); (ii) human health and safety; (iii) social aspects (like involuntary resettlement, indigenous people and cultural property); and (iv) trans-boundary and global environmental aspects. But considering the wide range of canvass over which this parameters are to work, the policy envisages to accommodate local regulations, polices and conditions.49

It is seen that these are the most predominantly used guidelines and borrowers generally prefer to follow these guidelines rather than guidelines laid down in their respective regulations. The reasons for this are two fold. Firstly, the Bank's guidelines would apply to any project they provide funding to and this essentially covers a majority of the projects that are undertaken world-wide. Also, most projects try to get funding from the World Bank because once the World Bank agrees to sanction a loan to a project; it is generally seen as a justification for the project and getting other necessary funding becomes easier. Secondly, the guidelines laid down by the World Bank are comprehensive and very extensive. They happen to cover almost every sort of precaution that would seem ideal while making an environmental impact assessment. The borrower is
responsible for getting the Environmental Assessment done for the project, which deserves assistance from the World Bank.

The Bank divides the projects into four categories viz. A, B, C and FI - for the purpose of Environmental Assessment requirements. Category A projects are those likely to have 'significant' environmental impacts.\(^{50}\) Category B projects are those which have lesser degree of impact than those mentioned in category A,\(^{51}\) and category C projects are those having minimal or no adverse environmental impacts.\(^{52}\) Finally, category FI projects are those projects which involve investment of bank funds through financial intermediaries.\(^{53}\) In case of category A projects there is a stipulation that the project borrower (or proponent) has to have (i) an internationally acknowledged consultant/expert for getting the Environmental Assessment done and (ii) an independent Advisory Panel (again an international one) to advise him on the environmental matters.\(^{54}\) In certain cases, where the borrower has completed the environmental assessment either completely or partially, before approaching the Bank for its assistance, the Bank has the prerogative to assess the 'Environmental Assessment' done by the borrower already. If the Bank comes to the conclusion, that there is need for another fresh Environmental Assessment study or public consultation - it can certainly ask for the same.\(^{55}\) There is demand for Regional or sectoral Environmental Assessment wherever the project has regional or sectoral impact in the view of the Bank.\(^{56}\)
The Bank policy requires the Financial Intermediary to screen the projects to ensure environmental safety. If the Bank feels that the local capacity at the Borrower’s country is not sufficient to have effective Environmental Assessment and its implementation (in terms of environmental management and mitigation measures), then the project cost should also involve the local capacity building so that there is effective management of environment not only during the construction of project but later too.

It is interesting to note that, the World Bank policy on environmental assessment stresses the need for public consultations while implementing the projects. There is specification that (for both Category A and B projects) there shall be public consultations. The bank policy also highlights that, there shall be at least two such consultations and preferably such consultations shall commence at the early stage of the project. There are good details spelt out to make all the disclosures to make these consultations meaningful. Sections 15, 16 and 17 are very important in this regard. The Section 15 mandates that the borrower provides relevant material in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted. Section 16 calls the borrower to provide ‘a summary of the proposed project’s objective, description, and the Environmental Assessment’s conclusions. In addition, for a Category A project: the borrower makes the draft Environmental Assessment report available at a
public place accessible to project-affected groups and local NGOs. For SILs and FI operations, the borrower/FI ensures that, the Environmental Assessment reports for Category A subprojects are made available in a public place accessible to affect groups and local NGOs. Finally the section 17 states that "any separate Category B report for a project proposed for International Developmental Agency (IDA) financing is made available to project-affected groups and local NGOs. Public availability in the borrowing country and official receipt by the Bank of Category A reports for projects proposed for IBRD or IDA financing, and of any Category B Environmental Assessment report for projects proposed for IDA funding, are prerequisites to Bank appraisal of these projects". Initial consultation with the local community (as early as possible while installing a project), continuing the channel of consultation during implementation of the project and making the project Environmental Assessment information available to the community well in advance (and as easily as possible) are the hallmark of the Bank policy guidelines.

There are three annexes to the operational policy viz. A, B and C. The first annex A provides various definitions to understand, with precision and clarity, the operational policies of the Bank. There are eight definitions in all, but definitions regarding Environmental Management Plan, Project area of influence, Regional EA and Sectoral EA are the important ones to note. This is another important milestone to be considered. These definitions assign clarity to the phrases used in the
operational guidelines. In the Indian system of Environmental Impact Assessment there is lack of clarity and is always criticized for being too specific or too broad giving lot of scope for manipulations. Annex B provides greater level of details for the Category 'A' projects, as they are likely to affect, significantly the environment. Finally, Annex 'C' provides the details about the inputs to be provided in the typical Environmental Management Plan. These details are very comprehensive inputs to the assessor of the project to understand clearly the impacts upon the environment due to commencement of the project. Again the Indian system does not speak so clearly about the inputs to be provided into the EIA document. The check-lists are not very comprehensive in this regard and are also not up-dated regularly. Due to lack of mandatory prescriptions and definitions – quality of Environmental Impact Assessment statements is not very high and being criticized heavily.

The World Bank’s operational directive on Environmental Impact Assessment applies only to public sector projects financed by the Bank.\textsuperscript{65} It covers specific projects that are likely to have “significant adverse impacts that may be sensitive, irreversible and diverse”. It also covers changes in World Bank policy at the sectoral level. Although technically the Bank’s EIA procedures apply only to projects funded after those procedures have been implemented, the Bank has applied its EIA procedures retroactively in cases of public controversy.
Basic Project Cycle

Every project, except category C projects, that are willing to seek World Bank funding requires a full scale EIA. The following are the steps involved in any project that is taken up – (i) identification; (ii) pre-feasibility studies, identifying possible socio-cultural and environmental impacts; (iii) project preparation; (iv) feasibility studies, containing a more detailed evaluation of alternative solutions, as well as economic, social, cultural, environmental, legal institutional and technical consequences. Environmental impact assessments are made in this phase; (v) detailed design of the project; (vi) project appraisal and approval from the regional environment bureau/organization; (vii) detailed design of the project; (viii) negotiations, concerning among other socio-cultural and environmental obligations; (ix) board handling and approval; (x) implementation of the project; (xi) monitoring of implementation, with routine reports and evaluations; (xii) independent auditing and evaluation executed by the Bank evaluation division.

Screening

Once it has been decided that the activity under consideration is of a type that may require an EIA, a preliminary assessment is made to determine whether an EIA is in fact required or not. This process is often referred as 'screening'. Some laws screen actions strictly by category; if the action is among the types listed in the law an EIA is required. Other laws give the decision-making body a discretion to decide whether that
particular action requires an EIA, or in some cases a less thorough environmental evaluation. Some laws utilize both approaches, requiring an EIA for one category of actions and leaving the decision to the discretion of the decision-making body for others. World Bank EIA procedures call for screening of proposed projects to determine the type and extent of assessment required. The World Bank classifies, as stated above, projects into three categories.

**The Responsibility of EIA**

The preparation of EIA analysis is generally the responsibility of the borrower; the Bank’s Task Manager and the appropriate Regional Environmental Division assist and monitors the EIA process. The Bank screens the project (decides whether to place the project in category A, B or C) and for category A projects, assists the borrower in determining the scope of the EIA and preparing the terms of reference only. For projects with potentially major adverse environmental impacts Bank procedures suggest, but do not require that, the borrower retain an advisory panel of independent environmental specialists not affiliated with the project to advice on the preparation of the EIA and implementation of its recommendations.

In principle the costs incurred in preparing an EIA should be borne by the proponent of the project (i.e. the sponsor or developer). Thus EIAs for private projects should not be paid for with the public funds. The borrower is responsible for paying for the EIA.
however, request financial assistance from the Bank for preparation of the EIA through a Project Preparation Facility advance, from the Technical Assistance Grant Programme or from the trust fund. The EIA is supposed to start at a very beginning of the project cycle (preferably at the project identification stage). It begins with the identification of key environmental issues and assignment of the project to a category by the Task Manager after consultation with the Regional Environmental Division. The identified issues and project category are included in the Initial Executive Project Summary.

**Scooping**

In procedure, scooping is done partly within the Bank and partly in consultation with between the Bank and the borrower. After consultation with the Regional Environmental Division, the project Task Manager indicates in the Initial Executive Summary the key environmental issues, the project category the type of environmental work needed, and a preliminary EIA schedule. The Bank then discusses the scope of the EIA with the borrower and assists the borrower in preparing the TOR for the EIA.

Scoping is more than simply determining the scope of the EIA document. It is the process of identifying issues, alternatives, and impacts that must be considered in preparing the EIA. It is an opportunity to determine which are the key issues that must be examined in depth; and which issues are of less importance and can be downplayed or
disregarded. Scoping also provides an opportunity to allocate work assignments, determine timing of various stages of the process, set time or page limits for EIA document, and generally plan and remainder of the EIA process. Scoping should occur early to avoid wasting time and money on tangential or secondary issues. It should also be public to ensure that issues of concern to the community are addressed, and because investigators may learn a great deal from citizens who often have first hand knowledge of local conditions and resources. World Bank procedures do not explicitly provide for public participation early in the scoping process, when key decisions are made. The bank does, however, encourage borrowers to consult with “affected groups” and non governmental organizations shortly after the EIA category has been assigned (screening). Scoping is done partly internally within the Bank and partly in consultations between the Bank and the borrower. After consultation with the Regional Environmental Division, the project Task Manager indicates in the Initial Executive Summary the key environmental issues, the project category, the type of environmental work needed, and preliminary EIA schedule.71

The Bank then discusses the scope of the EIA with the borrower and assists the borrower in preparing the terms of reference for the EIA. The terms of reference are to provide for ‘adequate interagency coordination and consultation with affected groups and local non-
governmental organizations'. For category A projects, Bank staff are advised to attend scoping meetings.

**Alternatives and Mitigation Measures**

The 'alternatives' section has been called the heart of the EIA document because it organizes and clarifies the choices available to the decision-maker. Alternatives can be generated by the proponent of the action, the agency overseeing the process, or even by the public. Alternatives should include the proposed action, alternative actions, and the 'no action' alternative as well. Alternatives should present different ways of accomplishing the proposed action (e.g. by exploring different siting, size, or timing options) as well as different ways of accomplishing the purpose and need not be defined so narrowly that environmentally preferable options are excluded. World Bank guidelines require a systematic comparison of the proposed investment design, site, technology, and operational alternatives. They are to be considered in terms of their potential environmental costs and benefits are to be quantified to the extent possible, and economic values attached wherever feasible. The basis for the selection of the alternative proposed for the project must be stated.

As far as mitigation measures are concerned, the EIA document should include a mitigation plan that identifies feasible and cost effective measures that may reduce potentially significant adverse environmental impacts to acceptable levels. The plan should estimate the potential
environmental impacts of those measures, their capital and recurrent costs, their suitability under local conditions, and related institutional, training, and monitoring requirements. The bank's decision to support a project will be in part predicated on the expectation that the mitigation plan will be executed effectively.

**Completion of EIA Document**

The purpose of EIA is "to help public officials make decisions that are based on understandings of environmental consequences, and take actions that protect, restore, and enhance the environment". For this purpose to be accomplished, it is important that the EIA document be completed before decisions are made or actions are taken which might have an adverse environmental impact or would limit the choice of reasonable alternatives. The World Bank operational directive says that, the EIA document must be submitted to the Bank before the Bank's appraisal team leaves the project site, in other words before the project is appraised. The EIA should be prepared as part of overall feasibility study or project preparation, so that it can be incorporated into the project's design. For major projects, 6 to 18 months should be allowed for preparation of EIA.

**Review and Decisions**

For category A projects (projects requiring a full EIA) the EIA document is reviewed by the Bank's Task Manager. The Task Manager assesses the document to see whether it complies with the Terms of
Reference and adequately takes into consideration the views of affected groups and local NGOs. The Regional Environmental Division also reviews the EIA document. If it is not satisfied with the document it may recommend that the appraisal be postponed. If the decision is made to proceed with the appraisal, the Appraisal Mission reviews the EIA document with the borrower and resolves any remaining issues. Once the Regional Environmental Division is satisfied that all issues have been resolved, it gives formal environmental clearance and negotiations can be authorized by the Regional Vice President. After the EIA document has been reviewed, a decision is made whether to proceed with the proposed action or not. If the EIA document is satisfactory, and all issues have been resolved, the Regional Environmental Division chief issues formal environmental clearance for the project. The Regional Vice President can begin negotiations with the borrower once clearance is issued but not before. In the negotiations, covenants to implement mitigation measures, monitor programmes, correct unanticipated impacts, and comply with environmental conditional-ties may be discussed and incorporated into the loan agreement.

Public Participation

No aspect of the EIA process is more important than public participation. A process which is open to public scrutiny and responsive to public concerns is more likely to reflect diverse views, address key facts and issues, and ensure an outcome that is satisfactory both to the
proponent and to the community. Ideally public should be involved at every stages of the EIA process, but public participation in scoping and the review and comment stages are critical. It is also crucial that the public be fully informed, as well as have an opportunity for a full hearing of its view. As far as the World Bank guidelines go, the Bank suggests that the borrower consults with the affected groups and NGOs shortly after screening (i.e. after the project has been assigned to a category). The guidelines however, do not require the borrower to include citizens or NGOs in the scoping process. The kind of information that is given to citizens is quite limited consisting in the initial stage only of a summary of the project description and objectives. The bank however, does specify that the borrower makes the EIA document available at some public place accessible to affected groups and to the local NGOs. As regards a public hearing, the Bank's EIA Operational Directive calls for consultations with affected groups and NGOs, but not a hearing per se. However, there is no Bank procedure for informing citizens of its decision and for citizens to challenge the EIA.

ASIAN DEVELOPMENT BANK

Asian Development Bank is the leading multilateral developmental financial institution in Asia and pacific region of the globe. ADB is owned by 64 members from the Asia and Pacific regions, including India, and 18 members from other parts of the globe. Like World Bank ADB aims at irradiation and reduction of poverty, and also improving the welfare of the
people in Asia and Pacific, particularly the 1.9 billion people who live on
less that $2 per day situation. The study of bank’s policy is also
significant because of (i) many projects being funded by ADB in India and
(ii) the policies of the ADB will affect nearly one third of the population and
more than three fourth’s of worlds poor. The ADB follows almost the
same guidelines as are followed by the World Bank in case of
Environment Impact Assessment. But the operational guidelines of ADB
are more detailed and comprehensive in many respects than the World
Bank’s. Let us take a detailed overview as to what these guidelines are.

At the very outset ABD’s policy recognizes the importance of
sustainable development (and environmental sustainability) in both,
developmental activities and poverty irradiation in clear terms. BP No. 1
reads “(T)he Environmental Policy of the Asian Development Bank (ADB)
is grounded in ADB’s poverty reduction strategy and long-term strategic
framework. The poverty reduction strategy recognizes that environmental
sustainability is a prerequisite for pro-poor economic growth and efforts to
reduce poverty. Environmental sustainability is also one of three
crosscutting themes of the long-term strategic framework. The
Environment Policy reinforces and complements the environmental issues
and concerns addressed in ADB’s sector and crosscutting policies”. This
is clear policy goal to integrate the entire bank’s activity to achieve the
golden goal of environmental sustainability. Here ABD’s policy certainly
scores over the World Bank’s Operational Policies.
All loans and investments are subject to classification for the purpose of determining environmental assessment requirements. Environmental categories are determined using Regional Environmental Assessment (REA). REA uses sector-specific checklists developed based on the ADB’s past knowledge and experience. These checklists consist of a set of questions relating to – (i) the sensitivity and vulnerability of environmental resources in a project area; and (ii) the potential for the project to cause significant adverse environmental impacts.84

The process of determining a project’s environment category is to be initiated by the RD sector division, which will prepare a REA screening checklist, taking into account the type, size and location of the proposed project. Through REA a project is classified as one of the environmental categories [A, B, C, or FI]. The RD sector Division Director will submit proposed environmental category and the check-list to the Director, RSES for concurrence or further discussion as required. Final categorization will be the responsibility of the Chief Compliance Officer (CCO). As defined in OM, 20 projects are classified into the following categories:

a) Category A: Projects with potential for significant adverse environmental impacts. An environmental impact assessment is required to address significant impacts;85

b) Category B: Projects judged to have some adverse environmental impacts, but of lesser degree and/or significance than those in category A projects. An initial environmental examination (IEE) is required to determine whether or not significant environmental impacts warranting an EIA are likely. If an EIA is not needed, the IEE is regarded as the final environmental assessment report;86
c) Category C: Projects unlikely to have adverse environmental impacts. No EIA or IEE is required, although environmental implications are still reviewed.87

d) Category FI: Projects are classified as category FI if they involve a credit line through a financial intermediary or an equity investment in a financial intermediary. The financial intermediary must apply an environmental management system, unless all subprojects will result in insignificant environmental impacts.

**The Category Based on the Most Sensitive Component**

The determination of the environment category is to be based on the most environmentally sensitive component of the project. This means that if one part of the project is with potential for significant adverse environmental impacts, then project is to be classified as Category A regardless of the potential environmental impact of other aspects of the project. Similarly, if the most sensitive component is classified B, then the project is to be classified B. Of course only those aspects of the project with potential for significant adverse environmental impacts need to be assessed in detail. The scoping for the environmental assessment and the terms of reference (TOR) for the environmental assessment report should focus on the significant environmental issues. Again, here the ABD operational policy takes progressive root over the World Bank guidelines.88

**Confirmation of Categorization**

Projects are tentatively assigned a category during an initial screening of anticipated potential environmental impacts on the basis of a concept document. This category is reconfirmed by the Chief Compliance
Officer at the time of the management review meeting. However, categorization is an ongoing process, and the environment category can be changed at any time with the approval of the Chief Compliance Officer as more detailed information becomes available and project processing proceeds.  

*Environmental Assessment Reporting*

The borrower prepares EIA reports for Category A projects and IEE reports for category B projects. The borrower also prepared the summary EIA (SEIA) or summary IEE (SEIA) reports highlighting the main findings of the IEE or EIA. ADB recognizes that conventional project-focused EIA has limited application to policy-based lending instruments, like program loans. There is no specific prescribed methodology for writing the above reports. On the other hand the format of the environmental assessment report for program loans is flexible, but includes a matrix describing the environmental consequences and mitigation measures for the policy actions underpinning program loan. For sector loans, the content of the environmental assessment report will include a description of the institutional arrangements and process to be followed for environmental assessment of subprojects to be approved during implementation. For projects that are classified as category FI, the environmental assessment report will include a description of the environmental management system to be applied by the financial intermediary. The results described in environmental assessment reports, including environmental management
plans, should be reflected in the report and recommendations of the President (RRP). There is also a clear specification for some unanticipated environmental impacts, which may come in the way during implementation of the project.90

Public Consultation & Information Disclosure

ADB guidelines like World Bank procedures require public consultations in the environmental assessment process.91 For Category A and B projects, the borrower must consult with groups affected by the proposed project and local non-government organizations. The consultation should be carried out as early as possible in the project cycle so that views of affected groups are taken into account in the design of the project and its environment mitigation measures. Such consultation will also take place during project implementation to identify and help address environmental issues that arise. For category A projects, the Borrower will ensure that consultation will take place at least twice – (i) once during the early stages of EIA field work; and (ii) once when the draft EIA report is available, and prior to loan appraisal by ADB. The public consultation process needs to be described in the EIA and SEIA reports.92

In cases where the environmental assessment report for a project has been completed prior to ADB involvement in the project, ADB will review the public consultation and disclosures carried out by the project sponsor during and after preparation of the environmental assessment report. If necessary, ADB and the project sponsor should then agree on a
supplemental public consultation and disclosure program to meet the requirements of OM 20 and address any deficiencies identified by ADB. If the project is classified as Category A, and non consultation whatsoever has been carried out, then the sponsor should agree to – (i) consult with stakeholders on the draft EIA and incorporate their views in a revised EIA; and (ii) consult stakeholders on the revised EIA, and how it addresses their concerns.

Information Disclosure

There are good amount of specifications mentioned in the operational policy of ADB stressing the requirement of providing sufficient information, well in advance to all the stakeholders, to make the consultations meaningful. Environmental assessment reports for ADB projects are accessible to interested parties and general public. The SISE and SEIA reports are required to be circulated worldwide, through the depository library system and on the ADB web site. The full EIA reports are also made available to interested parties on request. There is interesting ‘120 day rule’ which requires that SIEA or in the case of category B projects that are deemed environmentally sensitive, the SI EE is available to the general public at least 120 days before ADB’s Board of Directors considers the loan, or in relevant cases, before approval of significant changes in project scope or subprojects. The 120 day rule applies to all public and private sector category A projects and to those category B projects deemed to be environmentally sensitive. This will help
the project affected people to raise their voice before the Board takes decision (and makes the project clearance fate accomplice). To facilitate the required consultations with project-affected groups and local non-government organizations, the borrower will provide information on the project's environmental issues in a form and language accessible to those being consulted.

**Environmental Management Plans and Loan Covenants**

Category A and Category B projects deemed to environmentally sensitive require, as part of the environmental assessment process, the development of EMPs that outline specific mitigation measures, environmental monitoring requirements, and related institutional arrangements, including budget requirements. Loan agreements include specific environmental covenants that describe environmental requirements, including the EMPs. The provisions for the EMPs must also be fully reflected in the project administration memorandums.

**Assessment and Review of Project Loans**

Environment must be considered at all stages of the project cycle from the project identification through implementation. This section provides a detailed description of the environmental assessment and review process for project loans in terms of activities that take place during the project cycle. The environmental assessment requirements depend on the environmental category. Category A projects have the most stringent requirements and reed the highest level of effort and resources;
Category B have less stringent requirements, and Category C, has the minimum requirements.

**THE EUROPEAN UNION**

In strict sense, the European Union can't be considered along with World Bank or Asian Developmental Bank. As the focus of the present study is to understand the international initiatives in environmental impact assessment, the present part is being included. The focus of this part is to study the environmental impact assessment policy of the European Union. This is very significant institution having immense presence in the Europe. Hence the study of European Council's Directive is of immense help to the current study, in understanding comprehensively the International scenario.

The basic document is the Council Directive No. 85/337/EEC of 27th June 1985, which mandates the member countries to include formal environmental impact assessment process into their regulations, before sanctioning any 'development consent'. The preamble to the Directive identifies, the stress (by member states) that 'the best environmental policy consists in preventing the creation of pollution or nuisances at source, rather than subsequently trying to counteract their effects; whereas they affirm the need to take effects on the environment into account at the earliest possible stage in all the technical planning and decision-making process; whereas to that end, they provide for the implementation of procedures to evaluate such effects', as the basis for
The preamble also highlights that 'the effects of a project on the environment must be assessed in order to take account of concerns to protect human health, to contribute by means of a better environment to the quality of life, to ensure maintenance of the diversity of species and to maintain the reproductive capacity of the ecosystem as a basic resource for life' – as the basic underlining policy behind the entire exercise of environmental impact assessment.

The Directive applies to both public and private projects which are likely to have significant environmental impact. The term 'project' is meant to include (i) the execution of construction works or of other installations or schemes; (ii) any interventions in the natural surroundings and landscaping; and (iii) extraction of mineral resources. Hence, the terminology includes almost any set of (public or private) economic activity having significant environmental impact to a great extent. All the 'projects serving national defense purposes' are not covered by this Directive.

**Screening of Projects**

The methodology adopted for screening the projects is through pre-identified categories. There are two Annexes appended to the Directive. The Annex I, consists of twenty one listed items. The presumption is that these listed items have significant environmental impacts, hence require a proper environmental impact assessment, according to procedure prescribed by the Directive. Annex II includes twelve listed items. There is options provided to the member countries to adopt a suitable
methodology to grant development consent either on (i) case by case examination of the project proposed; or (ii) thresholds or some criteria set by the member country in this regard. The member country can prepare its threshold criteria based upon the (i) characteristics of the project (which includes elements like the size of the project; the cumulation with other projects; the use of natural resources; the production of waste; pollution and nuisances; the risk of accidents, having regard in particular to substances or technologies used), (ii) location of the project (the location of the project playing very important role; if the project is to be located near wetlands, coastal zones, mountain and forests, nature reserves and parks, areas classified or protected through relevant legislations, areas in which the environmental quality standards laid down in community legislation have already been exceeded, densely populated areas, landscapes of historical, cultural or archeological significance etc., then there can be some regulation), and (iii) characteristics of potential impact. The screening of the projects is through mix of discretionary and specific category of methods. The annexes appended to the directive give wide spectrum of activities which have some greater impacts upon the environment, and the remaining activities, are not completely eliminated for assessment, but the state agencies will look into those activities and determine (either from case to case, or threshold level) whether they require any impact assessment, before they are granted clearance.
Scoping

There are not much of details included into the directive regarding the scoping of the projects. This lack of details may be taking into consideration the wide canvass to which these directives are going to be applied, and respecting the member states autonomy to prepare their own guidelines. The project proponent is responsible for getting all the relevant impact assessment studies done (like in Indian system). The details, strategies and methodology of this assessment can be determined by the member states.\textsuperscript{104} The concerned state agency, if it is so requested by the project proponent, can let the project proponent know before he makes an attempt to undertake the assessment, as to what are the details he shall collect and the kinds of impacts s/he should study. Before giving such information to the proponent, the agency shall consult all other such state agencies, which might be having interest in the project.\textsuperscript{105} Irrespective of the opinion and information provided by the agency, the project proponent may proceed further to conduct detailed environmental assessment. This is an important provision, where there is possibility for the project proponent to understand the possibility of his project getting permission from the state agency. If there is good number of concerns expressed by the state agency, then the proponent may, instead of carrying out detailed assessment and incurring expenditure, shift to some other alternatives instead. The practical approach is missing in many of the legal systems (including Indian EIA system).
The information, after environmental assessment, shall have some minimal inputs like (i) a description of the project comprising information on the site, design and size of the project; (ii) a description of the measures envisaged in order to avoid, reduce and if possible, remedy significant adverse effects; (iii) the data required to identify and assess the main effects which the project is likely to have on the environment; (iv) an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects; and (v) a non-technical summary of the information mentioned in the previous indents. The concerned state agency may provide all necessary information; it has to the project proponent, while he is conducting the environmental impact assessment to eliminate duplication of efforts on his part.

As stated above, there are not much of the details regarding the 'scooping' of the projects, but the broad parameter is being drawn in the Directive stating that, while assign the project for environmental impacts the following factors shall be borne in mind viz: (i) human beings, flora and fauna; (ii) soil, water, air climate and landscape; (iii) the interactions between the factors mentioned in the first and second indents; and (iv) material assets and cultural heritage. It is important to note the spirit behind the directive is to submit the proposed project to all possible environmental impacts, not just confining to physical environment, but also social and cultural environment. The member states have been given an
opportunity to elaborate these parameters further depending upon their local conditions.

**Public Participation**

Although this directive is very stretchy in its approach, there is ample emphasis provided to the element of people's participation, while taking the decision of permitting any project. The opportunity to consult public is being envisaged at the very early stage of screening itself. If the project is to be exempted by (reasons best known to the state agency) from detailed assessment, then there is mandate that such decision of the member state shall be made available to the public concerned. This acts as greater check upon the public authorities (in discretionary model of environmental impact assessment) in taking decisions to exempt assessment requirement to some of the projects. The designated state agency shall consult interested public, while deciding upon the project permission. Further to make the consultation meaningful, the member states are given space to provide details as to (i) determine, who are the 'public' to be consulted; (ii) specify the places where the relevant information regarding the project, to be displayed or provided; (iii) specify the way in which the public may be informed (for example by bill-posting, publication in local newspapers, organization of exhibitions with plans, drawings, tables, graphs, models etc.,); (iv) determine the manner in which the public is to be consulted (for example by written submissions or by public enquiry etc.,); and (v) fix appropriate time limits for the various
stages of the procedure in order to ensure that a decision is taken within a reasonable period.111 This is schematic provision, leaving lot of space again for the concerned member states to fill in the details. However, the spirit behind the provision is worth noting, that, the public is taken as the important constituency, while deciding upon environmental matters.

Decision-Making

The designated agency is mandated to consult other relevant and related agencies/authorities before taking decision of granting environmental consent. During this consultation all such agencies have to be provided with necessary information, including the information being provided by the developer, so that the agencies concerned might express their views knowing fully about the details.112 When it is within the knowledge of the member state, that the proposed project will affect the environment of other member country/s, then it shall arrange to send all relevant information to such other member state/s. The other member state, to which the information is being forwarded, shall be provided with reasonable time to indicate whether it wishes to participate in the Environmental Impact Assessment procedure.113 This provision facilitates to assess inter-state environmental impacts and also the develop cooperat on between neighboring countries to develop plans for improving their environmental decision-making.

Following all the procedure mentioned above, the competent state agency may take the decision of granting permission to the project
developer or not. When the decision to grant or refuse development consent is taken, the competent authority is required to inform the public thereof in accordance with the appropriate procedures and shall make available to the public the following information:  

(i) the content of the decision and any conditions attached thereto; (ii) the main reasons and considerations on which the decision is based; (iii) a description, wherever necessary, of the main measures to avoid, reduce and if possible, offset the major adverse effects. In case, as specified above if the project is going have international impact (i.e. to other member state/s) then the decision information shall be provided to such other member state/s as well.

**Post Project Monitoring**

As this international document directive is to prompt each of its member states to adopt comprehensive environmental impact assessment process, does not talk about the post project monitoring aspects. Which is probably implied to be taken care by the concerned member state, while it develops its own detailed environmental consent procedure. Expecting such an international document have regulations regarding post project monitoring is rather impractical.

But, there are interesting provisions in the directive, to make the system developed in each state to strengthen further during future times to come. The mandate in the directive requires each member state (i) to exchange information with the Commission (meaning apparently to
exchange with other members) about its experience gained in applying the directive; (ii) the kind of criteria and threshold basis developed to its local needs; and (iii) also other relevant details, which will help the member states to understand and gain from each others experience. It was also decided to have revision of the directive implementation after five years from bringing the directive into force. This is welcome sign for any programme, which is freshly implemented.

In conclusion, it can be noted that, although this is very first attempt by the European Union, the directive takes care of all the basic needs of introducing the environmental impact assessment programme in its member countries. The stress given the component of public participation and coordination between various state agencies is remarkable. All the member states have adopted this directive into the domestic laws. Due to this directive the entire Europe is now following environmental impact assessment programme while granting permission to various developmental activities.
Notes and References


3 Id, at p. 349.

4 The Organization for Economic Co-operation and Development groups 30 member countries having a commitment to democratic government and the market economy. With active relationships with some twenty other countries, NGOs and Civil Society has a global reach. The OECD plays prominent role, in fostering good governance in public service, and in corporate activity. It helps governments to ensure the responsiveness to key economic areas with sectoral monitoring. The OECD is well known for its publications based on surveys, facts and figures.

5 United Nations Environmental Programme is the voice for the environment within United Nations system. It is an advocate, educator, catalyst and facilitator promoting the wise use of the planet’s natural assets for sustainable development. UNEP works with UN entities, International Organizations, National Governments, NGOs, Business, Industry, media and Civil Society. The Mission statement of UNEP reads as "to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations".


10 Upon consultation, many experts in the field also felt the study of US system is must.

11 Sec. 2 of NEPA spells out the purpose of the legislation as "to declare a national policy which will encourage productive and enjoyable harmony
between man and his environment; to promote efforts which will prevent or
eliminate damage to the environment and biosphere and stimulate the health
and welfare of man; to enrich the understanding of the ecological systems
and natural resources important to the Nation; and to establish a Council on
Environmental Quality".

12 Id. Sec. 101.

13 Id. Sec. 202 – There are three members who are in the Council appointed by
the President and one among them will be designated as Chairman. Each
members appointed on the committee shall be a person 'who, as a result of
his training, experience, and attainments, is exceptionally well qualified to
analyze and interpret environmental trends and information of all kinds'. The
Council may further appoint staff to effectively function, including hiring of
experts wherever necessary.

14 Id. Sec. 204.

15 Which the President is to present annually to the Congress, in accordance to
Sec. 201 of NEPA.

16 Sec. 1500.1 of CEQ Regulation 1500.

17 Id. at Sec. 1502.20 – "Agencies are encouraged to tier their environmental
impact statements to eliminate repetitive discussions of the same issues and
to focus on the actual issues ripe for decision at each level of environmental
review (Sec. 1508.28). Whenever a broad environmental impact statement
has been prepared (such as a program or policy statement) and a
subsequent statement or environmental assessment is then prepared on an
action included within the entire program or policy (such as a site specific
action) the subsequent statement or environmental assessment need only
summarize the issues discussed in the broader statement by reference and
shall concentrate on the issues specific to the subsequent action. The
subsequent document shall state where the earlier document is available.
Tiering may also be appropriate for different stages of actions (section 1508.28).

18 Based on the information and analysis presented in the sections on the
Affected Environment and the Environmental Consequences, it should
present the environmental impacts of the proposal and the alternatives in
comparative form, thus sharply defining the issues and providing a clear
basis for choice among options by the decision-maker and the public. In this
section agencies shall:
   a. Rigorously explore and objectively evaluate all reasonable
alternatives, and for alternatives which were eliminated from detailed
study, briefly discuss the reasons for their having been eliminated;
   b. Devote substantial treatment to each alternative considered in detail
including the proposed action so that reviewers may evaluate their
comparative merits;
c. Include reasonable alternatives not within the jurisdiction of the lead agency;
d. Including the alternative of no action;
e. Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference;
f. Include appropriate mitigation measures not already included in the proposed action or alternatives.

19 Supra; n. 11 at Sec. 102.
20 Id. at Sec. 205.
21 Id. at Sec. 1500.4 -- "Agencies shall reduce excessive paperwork by: (a) reducing the length of environmental impact statements (sec. 502.2(c)), by means such as setting appropriate page limits (sec. 1501.7(1) and 1502.7)."
22 Supra; n. 17 at Sec. 1502.2 (g).
23 Id. at Sec. 1502.6.
24 Id. at Section 1502.7.
25 Id. at Sec. 1502.22.
26 Id. at Sec. 1502.8.
27 Sec. 1502.10 -- "Agencies shall use a format for environmental impact statements which will encourage good analysis and clear presentation of the alternatives including the proposed action. The following standard format for environmental impact statements should be followed unless the agency determines that there is a compelling reason to do otherwise:
   (a) Cover Sheet.
   (b) Summary.
   (c) Table of Contents.
   (d) Purpose of an need for action.
   (e) Alternatives including proposed action (sections 102(2)(C)(iii) and 102(2)(E) of the Act).
   (f) Affected Environment.
   (g) Environmental consequences (especially sections 102(2)(C)(i), (ii), (iv) and (v) of the Act).
   (h) List of preparers.
   (i) List of Agencies, Organizations, and persons to whom copies of the statement are sent.
   (j) Index.
   (k) Appendices (if any).
If different format is used, it shall include paragraphs (a), (b), (c), (h), (i) and (j), of this section and shall include the substance of paragraphs (d), (e), (f),
The same provision also mandates the Agency to receive comments from the applicant (i.e. project proponent and the public, before final decision is taken in this regard.

Supra; n. 17 at Sec. 1503.2.

Id. at Sec. 1503.4.

Part 1504 of Regulations.

Supra; n. 17 at Sec. 1505.4.

Many technical experts who were consulted by the Researchers opined that way.


Drenthe, Flevoland, Friesland, Gelderland, Groningen, Limburg, Noord-Bradat, Noord-Holland, Overijssel, Utrecht, Zeeland, Zuid, and Zuid-Holland are the Dutch provinces.

There are 22 Chapters having number of sections and appendix appended to the act.

Section 1.1a. – Every person shall treat the environment with due care.

1. The care referred to in subsection 1 shall in any event mean that any person who knows or may reasonably suspect that his acts or omissions may have damaging effects on the environment shall be obliged to refrain from such acts in so far as this can reasonably be demanded of him, or to take every possible measure which may reasonably be demanded of him to prevent these effects or, in so far as these effects cannot be prevented, to minimize or rectify them.

2. the provisions of subsection 1 and 2 shall not affect liability under civil law and the right of legal persons to take legal action on that account, as referred to in article 1, Book 2 of the Civil Code.

Section (1) of the Operational Policy reads “The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making”.

Id. at Section (2) - “EA is a process whose breath, depth, and type of analysis depend on the nature, scale, and potential environmental impact of the proposed project. EA evaluates a project’s potential environmental risks and impacts in its area of influence; examines project alternatives; identifies ways of improving project selection, sitting, planning, design and implementation by preventing, minimizing, mitigating, or compensating for adverse environmental impacts and enhancing positive impacts; and includes the process of mitigating and managing adverse environmental impacts throughout the project implementation. The Bank favors preventive measures over mitigate or compensatory measures, whenever feasible.

In Section (2) of the Definition (Annex A), January 1999.

Section (4) - “…Environmental Assessment considers natural and social aspects in an integrated way. It also takes into account the variations in project and country conditions; the findings of country environmental studies; national environmental action plans; the country’s overall policy framework, national legislation, and institutional capabilities related to the environment and social aspects; and obligations of the country, pertaining to project activities, under relevant international environmental treaties and agreements. The Bank does not finance project activities that would contravene such country obligations, as identified during the EA. EA is initiated as early as possible in project processing and is integrated closely with the economic, financial, institutional, social, and technical analyses of a proposed project.”

Supra n. 48.

Section (8) (a) - “Category A: A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. EA for a Category A project examines the project’s potential negative and positive environmental impacts, compares them with those of feasible alternatives (including the without project situation), and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. For a Category A project, the borrower is responsible for preparing a report, normally an EIA (or a suitably
comprehensive regional or sectoral EA) that includes, as necessary, elements of the other instruments referred to in Para. 7.

51 Supra; n. 48, at Section (8) (b) - "Category B: A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas, including wetlands, forests, grasslands, and other natural habitats are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigatory measures can be designed more readily than for Category A projects. The scope of EA for a Category B project may vary from project to project, but it is narrower than that of Category A EA. Like Category A EA, it examines the project’s potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance. The findings and results of Category B EA are described in the project documentation (Project Appraisal Document and Project Information Document).

52 Supra; n. 48 at Section (8) (c) - "Category C: A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further EA action is required for a Category C project”.

53 Supra; n. 48, at Section (8) (d) - "Category FI: A proposed project is classified as Category FI if it involves investment of Bank funds through a financial intermediary, in subprojects that may result in adverse environmental impacts”.

54 Supra; n. 48, at Section (4) - “The borrower is responsible for carrying out the EA. For Category A projects, the borrower retains independent EA experts not affiliated with the project to carry out the EA. For Category A projects that are highly risky or contentious or that involve serious and multidimensional environmental concerns, the borrower should normally also engage an advisory panel of independent, internationally recognized environmental specialists to advise on all aspects of the project relevant to the EA. The role of the advisory panel depends on the degree to which project preparation has progressed, and on the extent and quality of any EA work completed, at the time the Bank begins to consider the project”.

55 Supra; n. 48 at Section (5) - “the bank advises the borrower on the Bank’s EA requirements. The Bank reviews the findings and recommendations of the EA to determine whether they provide an adequate basis for processing the project for Bank financing. When the borrower has completed or partially completed EA to ensure its consistency with this policy. The Bank may, if appropriate, require additional EA work, including public consultation and disclosure.”

56 Supra; n. 48, at Section (7) - “depending on the project, a range of instruments can be used to satisfy the Bank’s EA requirement; environmental impact assessment (EIA), regional or sectoral EA, environmental audit,"
hazardous or risk assessment, and environmental management plan (EMP). EA applies one or more of these instruments, or elements of them, as appropriate. When the project is likely to have sectoral or regional impacts, sectoral or regional EA is required.

57 Id. at Section (10) - “for Financial intermediary (FI) operation, the Bank requires that, each FI screen proposed subprojects and ensure that subborrowers carry out appropriate EA for each sub project. Before approving a subproject, the FI verifies (through its own staff, outside experts, or existing environmental institutions) that the subproject meets the environmental requirements of appropriate national and local authorities and consistent with this OP and other applicable environmental policies of the Bank”.

58 Id. at Section (13) - “When the borrower has inadequate legal or technical capacity to carry out key EA – related functions (such as review of EA, environmental monitoring, inspections, or management of mitigatory measures) for a proposed project, the project includes components to strengthen that capacity.

59 Id. at Section (14) - “for all Category A and B projects proposed for IBRD or IDA financing, during the EA process, the borrower consults project- affected groups and local non governmental organizations (NGOs) about the project’s environmental aspects and takes their views into account. The borrower consults these groups at least twice; (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the borrower consults with such groups throughout the project implementation as necessary to address EA – related issues that affect them”.

60 (1) Environmental Audit; (2) Environmental Impact Assessment; (3) Environmental Management Plan; (4) Hazard Assessment; (5) Project Area of Influence; (6) Regional EA; (7) Risk Assessment; and (8) Sectoral EA.

61 “An instrument that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures. The EMP is an integral part of Category A EAs (irrespective of other instruments used). EAs for Category B projects may also result in an EMP.

62 “The area likely to be affected by the project, including all its ancillary aspects, such as power transmission corridors, pipelines, canals, tunnels, relocation and access roads, borrow and disposal areas, and construction camps, as well as unplanned developments induced by the project (e.g., spontaneous settlement, logging or shifting agriculture along access roads). The area of influence may include, for example, (a) the watershed within which the project is located; (b) any affected estuary and costal zone; (c) off-site areas required for resettlement or compensatory tracts; (d) the air shed (e.g., where airborne pollution such as smoke or dust may enter or leave the area of influence; (e)
migratory routes of humans, wildlife, or fish, particularly where they relate to public health, economic activities, or environmental conservation; and (f) area used for livelihood activities (hunting, fishing, grazing, gathering, agriculture, etc.,) or religious or ceremonial purposes of a customary nature”.

“An instrument that examines environmental issues and impacts associated with a particular strategy, policy, plan, or program, or with a series of projects for a particular region (e.g., an urban area, a watershed, or a costal zone); evaluates and compares the impacts against those of alternative options; assesses legal and institutional aspects relevant to the issues and impacts; and recommends broad measures to strengthen environmental management in the region. Regional EA pays particular attention to potential cumulative impacts of multiple activities”.

“An instrument that examines environmental issues and impacts associated with a particular strategy, policy, plan, or program, or with a series of projects for a specific sector (e.g., power, transport, or agriculture); evaluates and compares the impacts against those of alternative options; assess legal and institutional aspects relevant to the issues and impacts; and recommends broad measures to strengthen environmental management in the sector. Sectoral EA pays particular attention to potential cumulative impacts of multiple activities”.

The International Finance Corporation, the component of the Bank which funds private projects, has its own EIA procedure which applies to those projects.

Operational Directive 4.01 at p.4.

Id. at 4.01, Annex D at 1.

Id. at 4.01 at 5.

Id. at 4.01 at 1.

Id. at 4.01, Annex D at 1.

Id. at 4.01, Annex D at 1.

Id. at 4.01, Annex B at 1.

Ibid.

Id. at 4.01, Annex B para 2(g).

40 C.F.R.

4.01, Annex D, at 2, Supra; n. 68.

Id. at 1.
Id. at 4.01, Annex D, at 2.


Operational Directive 4.01, at 5.

See generally official website of ADB at www.adb.org.

In some respects the ADB Environmental Assessment Operatives refer to the World Bank policies and manuals. For example Operational Procedure No. 23 states that ‘in determining appropriate environmental standards for ADB projects, ADB will follow the standards and approaches laid out in the World Bank’s Pollution Prevention and Abatement Handbook’.

Also see generally Bank Policies (OM Section 20: Issued on 28th February 2003 – Environmental Considerations in ADB Operations) Nos. 2, 3, 4, 5, 6, 7 and 8.


OP No. 6.

Ibid.

Ibid.

OP No. 7 – “A project’s environmental assessment category is determined by the category of its most environmentally sensitive component, including direct and indirect impacts. The process of determining a project’s environment category is initiated by the regional department sector division, which prepares a project environment screening checklist, taking into account the type, size, and location of the proposed project. The sector division director submits the checklist and proposed environment category to the director of RSES, for concurrence or further discussion as required. Final classification will be the responsibility of ABD’s chief compliance officer. Projects are tentatively classified at initial screening of anticipated potential environmental impacts on the basis of a concept document, and this classification is reconfirmed by the chief compliance officer at the time of the management review meeting. However, classification is an ongoing process, and the environment category can be changed at any time with the approval of the chief compliance officer as more detailed information becomes available and project processing proceeds. Project categorization lists are updated periodically by RSES as additional information on the project becomes available during preparation”.

OP 28 – “Uncertainties in locations and alignments of Infrastructure. For most environmentally sensitive projects, especially category A projects, major site selection issues will have been addressed by the time of Board approval.
Where uncertainty exists about specific locations or alignments of major infrastructure or project facilities at the time of Board approval, the EIA or IEE will include an EMP that presents full details on the agreed process to be followed for environmental assessment, including any special studies of environmental issues and specification of environmental mitigation measures during project implementation. The pertinent details will be presented in the SEIA or SIEE, and summarized in the RRP. The details will also be reflected in the loan agreement.

90 OP No. 29—"Unanticipated Environmental Impacts - Where unanticipated environmental impacts become apparent during project implementation or after project completion, ADB will assist executing agencies and other relevant government authorities to assess the significance of the impacts, evaluate the options, and estimate the costs of mitigation. ADB will also help DMCs find the resources needed to mitigate the damage. Project completion review missions will place special emphasis on reviewing project-induced environmental concerns, and will be expected to make appropriate recommendations to address them. ADB resident missions will take on an increasing role in working with DMCs to resolve outstanding issues. If unanticipated impacts are identified after a loan is closed, ADB will encourage, and assist as required, the borrower to plan and implement remedial measures."

91 Id. at OP 9.

92 Chapter X, Asian Development Bank Environmental Assessment Guidelines, 2003 (this chapter describes the best practice for consulting stakeholders and providing access to information).

93 OP 10—"Information Disclosure – Environmental assessment reports for ADB projects are accessible to interested parties and the general public. The SICC and SEIA reports are required to be circulated worldwide, through the depository library system and on the ADB web site. The full EIA or IEE reports are also made available to interested parties on request. ADB’s “120 day rule” requires that the SEIA or in the case of category B projects that are deemed environmentally sensitive, the SIEE, is available to the general public at least 120 days before ADB’s Board of Directors considers the loan, or in relevant cases, before approval of significant changes in project scope or subprojects. The 120 day rule applies to all public and private sector category A projects and to those category B projects deemed to be environmentally sensitive. To facilitate the required consultations with project-affected groups and local non-government organizations, the borrower will provide information on the project’s environmental issues in a form and language(s) accessible to those being consulted."

94 Name given since the ratification of the treaty of European Union or Maastricht Treaty, to the European Community, an economic and political confederation, that are responsible for common foreign and security policy for cooperation on justice and home affairs.
The EC, which is the core of European Union, originally referred to the group of Western European Nations that belong to each of the three treaty organizations viz. – (i) The European Coal and Steel Community (ECSC); (ii) The European Economic Community (EEC); and (iii) The European Atomic Energy Community (Euratom). In 1967 these organization were consolidated under a comprehensive governing body composed of representatives of member nations and divided into four major branches viz. – (i) European Commission (formerly the Commission of the European Communities); (i) The Council of European Union (formerly the council of Ministers of the European Communities); (iii) The European Parliament; and (iv) The European Court of Justice.

The present member countries of EU are 25. They are (i) Austria; (ii) Belgium; (iii) Cyprus; (iv) Czech Republic; (v) Denmark; (vi) Estonia; (vii) Finland; (viii) France; (ix) Germany (originally West Germany); (x) Great Britain; (xi) Greece; (xii) Hungary; (xiii) Ireland; (xiv) Italy; (xv) Latvia; (xvi) Lithuania; (xvii) Luxembourg; (xviii) Netherlands; (xix) Poland; (xx) Portugal; (xxi) Slovakia; (xxii) Slovenia; (xxiv) Spain; and (xxv) Sweden.


‘Developmental Consent’ is the word used in the directive, which can be used as equivalent to ‘environmental clearance’ used in this study.

112 Id. at Art. 6(1).
113 Id. at Art. 7(1).
114 Id. at Art. 9(1).
115 Id. at Art. 9(2).
116 Id. at Art. 11(1) and (2).
117 Id. at Art. 11(3).