

## 2. History of EIA Systems and Measures taken around the World

### 2.1 Historical Background of EIA

Introduced in the US as its beginning, several countries have followed and applied EIA systems. At the same time, international efforts in sustainable development have been promoting to assist developing nations. In recent years, the concept of strategic environmental assessment (SEA) – applying EIA consideration in earlier stage of policy-making, become prevailing and some practical cases are reported.

#### Beginning of the System

US was the first country to develop a system of environmental impact assessment (EIA). When “Silent Spring” written by Rachel Carson was published in 1962, social awareness to environmental issues in the US had reached high proportions and grew as very intense movements at the latter half of 1960’s. With these social backgrounds, the National Environmental Policy Act (1969) of the United States of America (NEPA) was constituted and for the first time, EIA requiring environmental consideration in large-scale projects was enforced as legislation. The influence of NEPA in which the concept of EIA system as its bedrock was extended beyond the US and provoked the introduction of EIA policy in many countries in Europe and Asia. Following the US initiative, several countries began to provide EIA systems; for example Australia (1974), Thailand (1975), France (1976), Philippines (1978), Israel (1981) and Pakistan (1983).

Generally, EIA is more efficient and effective to be implemented as early as possible, for example at the policy or project-planning phase. In practice however, the implementation period of the EIA, as well as its scope and procedures vary by each country and agency, and each system holds their own unique characteristics.

International Efforts

International efforts are classified into the following four areas:

- 1) Legally binding international documents such as international treaty and protocol.
- 2) Non-legally binding international documents such as resolutions, recommendations and declarations by international organizations.
- 3) Guidelines for development assistance.
- 4) Guidelines for overseas projects.

Spurred by several recommendations by international organizations, in particular, the Organization for Economic Cooperation and Development (OECD) and the European Union (EU), EIA had been prevailed throughout the world in 1980s.

**【Treaty】**

Aside from the United Nations Law of the Sea Treaty, which was adopted in 1982, many other international treaties and protocols with provisions relating to EIA were concluded in the 1990's. e.g. Convention on Environmental Impact Assessment in a Transboundary context (the Espoo Convention) (1991), Protocol on Environmental Protection to the Antarctic Treaty (1991), Biodiversity Treaty (1992), United Nations Framework Convention on Climate Change (1992).

Efforts of International Organizations

**【UNEP - United Nations Environmental Programme】**

Activities of the United Nations began in 1982, with the adoption of World Charter for Nature at the United Nations General Assembly. The Charter stated that environmental impact assessment should be ensured to minimize adverse effects on nature, nature assessments should be included in the fundamental elements of all planning and should be publicly disclosed and deliberated. The United Nations Environment Program (UNEP) took these stipulations on board, set up an EIA expert committee and common guidelines for the promotion of EIA, examined standards and regulatory models, and then in 1987 adopted the "Goals and Principles of Environmental Impact Assessment". The 13 rules stipulated here were to facilitate introduction and promotion of EIA systems in member country as well as promote development of international EIA procedure in the case of individual countries may give rise to significant transboundary impacts on other countries.

**【OECD - Organization for Economic Cooperation and Development】**

The OECD “Declaration on Environmental Policy” (1974) was the first international document to incorporate EIA. This declaration was the follow up activities after the United Nations Conference on the Human Environment (1972) and it set the trend for environmental policy in OECD member countries. Article 9 of the declaration stated that it was critical that environmental impact of significant public or private activities be assessed prior to implementation. The oldest of recommendations and declarations concerning matters relating to environmental impact assessment procedures was the OECD “Council Recommendation on Assessment of Projects which may have Significant Effects on the Environment” (1979) where there are 8 articles covering recommendations for EIA procedures of member countries. In 1983, a special group “The Ad Hoc Committee on Environmental Assessment and Development Assistance” was established under the Environment Committee to examine EIA procedures, methods and implementation mechanisms while maintaining close relations with the Development Assistance Committee (DAC). In 1985, “Council Recommendation on Environmental Assessment of Development Assistance Projects and Programmes” which gave examples of EIA implementations and targets of EIA was adopted. In 1986, “Council Recommendations on Measures Required to Facilitate the Environmental Assessment of Development Assistance Projects and Programmes” concerning EIA procedures and organizational system were adopted. The recommendations stipulated the “the Recommendation”. Then in 1989, checklist for possible use by high-level decision-makers in bilateral and multilateral development assistance institutions was drafted and was released as executive committee recommendations. Based on these three recommendations, DAC also adopted “Good Practices for Country Environmental Surveys and Strategies”, “Good Practices for Environmental Impact Assessment of Development Projects”, “Guidelines for Aid Agencies Involuntary Displacement and Resettlement in Developing Countries” and “Guidelines for Aid Agencies on Global Environmental Problems” in 1991.

**【EU - European Union】**

The EU directive relating to EIA was adopted in 1985. This directive required a defined EIA to be implemented prior to official authorisation for projects with potential significant environmental impact and required member countries to introduce formal EIA systems by 1988 in order to realise the above. From 1985, the provision of EIA systems in European countries has been progressed centering on the EU member countries.

Later on, due to the increasing divergence of measures among each member country, a revised bill was passed in December 1995 at the Environment Ministers' Summit and it subsequently came into force in January 1998. In the "5<sup>th</sup> Action Plan on the Environment – Towards the Realization of Sustainable Development" (1993), the introduction of strategic environmental assessment was proposed which implements environmental considerations before the adoption stage of a basic plan or implementation plan that forms the framework for the approval of development. In other words, attempt the environmental conservation from the initial stage of policy makers to the latter stage of project implementation. Deliberations are currently taking place for its adoption.

Development  
Assistance  
Agencies

**【World Bank】**

The World Bank (WB) is an exponent multilateral development bank that provide loan and finance to the developing countries and development assistance projects. The World Bank's "Environmental Policy and Procedures" adopted in 1984 stated the integration of environmental consideration at the initial stages of defining and preparation of a project. Furthermore, in 1989 the WB established the Operation Directive: OD relating to EIA in order to outline the methods and procedures for EIA implementation in proposed projects to WB staff, and the related guidelines "Environmental Assessment Source Book", with the aim of providing sector specific manuals. The OD became an independent operational directive 4.01 in 1991 and was further revised in 1998. In January 1999, the OD compilation "Operational policies 4.01, OP", "Bank Procedures, 4.01, BP" and "Good Practices 4.01, GP" were published as 3 types of operational directives. (See Appendix 2 & 3)

**【JICA – Japan International Cooperation Agency】**

Following the above-mentioned OECD recommendations, the Japan International Cooperation Agency (JICA) has been co-operating with the Overseas Economic Cooperation Fund (OECF, now reborn and Japan Bank for International Co-operation) and in 1988 “Sectoral Study for Development Assistance – Environment” was completed. Based on this report, covering 20 different fields relating to development studies have been drafted. (See section 5.2 and Appendix 4)

**【JBIC – Japan Bank for International Cooperation】**

In 1989, the OECF, the forerunner or JBIC, published the “OECF Environmental Guidelines for ODA Loans”. These guidelines were revised in 1995 and the second edition has been in use since 1997. The OECF merged with the Export-Import Bank of Japan on 1<sup>st</sup> October 1999 and reborn as the Japan Bank of International Cooperation (JBIC). JBIC have decided to draft new environment guidelines. (See Clause 5.3 and Reference Appendix 5)

Global  
Environmental  
Problems &  
Japan

With the start of 1990's, amidst a background of high recognition relating to global environmental problems such as depletion of ozone layer, global warming and acid rain, the UN Conference on the Environment and Development (Earth Summit) was held in Rio de Janeiro, Brazil in 1992, and the Agenda 21 which aims at the realization of sustainable development, was adopted. In compliance with this, Japan established the Environment Basic Law in 1993, replacing the Basic Law for Environmental Pollution Control, and in 1997 established the Environmental Impact Assessment Law.

Efforts in  
Developing  
Countries

In developing countries, the Asian countries started taking environmental measures very early, with many countries having an EIA system in place by the 1980's. On the other hand, the Latin American countries did not start making legislation until the latter half of the 1980's. Legislative moves in the developing African countries have yet to become popular. A survey conducted by the Environmental Agency of Japan in 1996 reveals that currently over 50 countries have provided EIA related systems and legislation.

Move towards  
Strategic  
Environmental  
Assessment  
(SEA)

In recent years, the significance of EIA in various administrative policy- and plan-making levels is being recognized by countries such as Canada, the Netherlands, Denmark and based on the concept of Strategic Environmental Assessment (SEA) cases of implementation can be seen. Within the EU, the “5<sup>th</sup> Environmental Action Plan- Towards the Realization of Sustainable Development” (1993) was a plan that indicated the incorporation of environmental consideration or assessment in the European administration policy and planning. “The Directive on Environmental Assessment in Basic Plans and Implementation Plans (draft)” was proposed in 1996 and is currently under examination.

In addition, when the Diet Resolution on the EIA Law was passed in Japan, the following was added as one of the supplementary resolution. “To ensure environmental consideration in top level planning and policymaking, the research and studies on strategic environmental assessment should be implemented and concrete consideration should be promoted to smoothly lead the establishment of SEA system based on international trend and state of Japan”.

## 2.2 EIA in Environmental Laws of Various Countries Developed Countries

### 【US】

EIA system was introduced with the enforcement of the National Environmental Policy Act (NEPA) in 1969. Only fundamental items were stipulated in NEPA, and supplemented some specific system in Regulations of National Environmental Policy Act set up in 1978. The NEPA procedures contain unique specifications not found in the EIA systems of other countries, such as EIA should be applied not only to project approval action but action on legislative and other such proposals (SEA), and EIA statements should be prepared by federal agencies.

### 【Canada】

EIA was introduced in 1973 with the passing of a federal cabinet directive. Following this, the Canadian Environmental Assessment Act (CEAA) was passed in 1992 and came into force in January 1995. The CEAA includes class-screening procedures for implementing simple assessments utilizing the existing EIA previously appointed. The procedures for public review for analyzing the contents of an EIS based on third party arbitrator or committee, establishment of public registers for disclosing information & documentation relating to EIA, and the establishment of funds to facilitate public participation

**【UK】**

Local government covers administration of regional land use programs & development control by the Town and Country Planning Regulations in which EIA procedures are stipulated. Approval for highways, power stations & other major infrastructure projects however, is issued by the national government in accordance with relevant laws, e.g. the Highways Act or Electricity Act. EIA procedures for these projects are stipulated in the individual laws. Individual laws are made to comply with EC directives for maintaining an approval system that is used by both national & local governments. In EIA procedures the significant role local government agencies play as regional planning agencies in development regulation administration & flexible cooperation between agencies & project executors from the early stages of project development.

**【Netherlands】**

Under the EC Directive, EIA systems in the Netherlands are stipulated in the provisions of the Environmental Management Act which was prepared by compiling approval & other regulations relating to environmental policy. EIA regulations stipulating the types of projects requiring EIA and approval procedures was issued in 1987 and put into operation the same year. EIA systems include such features as the contribution of public participation in the development of scoping guidelines that determine the scale of surveys & other procedures for each project. And the establishment of an independent EIA committee to ensure that the information provided in the EIS is sufficient. The Environmental Management Act and EIA Regulations were amended in 1994 to include screening procedures to narrow down categories of projects requiring EIA.

**【France】**

EIA systems were introduced into French legislation with the passing of Law on Nature Protection in 1976 and its government ordinance the following year. This was the first legislative system incorporating EIA in Europe. The EIA system in France is classified into three types: projects exempted from EIA procedures including public projects, private projects requiring public agency approved, and Town planning, projects requiring a simple EIA, and projects requiring the implementation of a detailed EIA.

**【Italy】**

Under the EC Directive, EIA procedures were stipulated in Law n.349 (which established the Italian Ministry of the Environment) (1986), and "Regulations on Environmental Adoptability" was set up in 1988 to require EIA of projects of certain categories. The main features of the Italian systems include co-ordination of studies from the initial stages based on notification from the project executors of implementation research projects, and the establishment of an independent committee to evaluate the technical items of EI Statements.

### **【Germany】**

In 1975, the "Cabinet Directive on the Environment Assessment Principle for Federal Public Measures was promulgated whereby the possible environmental consequences of all federal planning and authorization procedures were subject to examination. Following this, the "Act on Implementation of the Council Directive on the Assessment of the Effects of Certain Public and Private Projects on the Environment" was issued in 1990 in compliance with the European Directive. In addition to stipulating the type of projects requiring EIA and the necessary procedures, this law also incorporates them into the authorization procedures for the concerned acts.

Source : "Current Environmental Impact Assessment System (1995)", Study Group for Environmental Impact Assessment System

### Developing Countries

#### **【China】**

It is stipulated in the "Environmental Protection Law (pilot-phase)" (1979) that all construction related projects must implement EIA. EIA procedures were clearly defined in the Basic Construction Items Environmental Preservation Management Law established in 1981. The main features of the administrative systems in China include the fact that no provisions are made for public participation, the EIA work is carried out by qualified executive EIA organizations. Filling out of simple EIS forms is sufficient for small-scale projects.

#### **【Philippines】**

Regional branches of Environmental Management Bureau (EMB), Department of Environment and Natural Resources (DENR) are primarily responsible. Projects that are environmentally critical or located in environmentally sensitive areas are subject to EIA. Projects cannot be implemented unless an environmental compliance approval has been issued by the EMB. Two types of documents are produced as part of the EIA process: Project Descriptions and Environmental Impact Statements. A public hearing is conducted if the project is large or located in a particularly sensitive area. After project approval, the compliance with the EIA recommendations are monitored usually by the DENR regional offices (a mixed team including project organizers, the local community and Non-Government Organizations).

**【Indonesia】**

EIA system is known as AMDAL (Analisis Mengenai Dampak Lingkungan) & its overall management rests with BAPEDAL (the Environmental Impact Management Agency). Indonesia simplified EIA procedure in 1993. Under the new regulation, the AMDAL committee includes more NGO representatives, has extended the review concept to regional planning activities, & speeded up the process. BAPEDAL has also been given greater responsibilities for supervising EIA procedures. All projects implemented since 1987 needed to be reviewed. Public participation is allowed at any stage of EIA process, at the discretion of the committee. Public agencies are also required to disclose information to the

**【Sri Lanka】**

In Sri Lanka, the National Environmental Acts was amended in 1988 to provide for regulations pertaining to environmental impact assessment. The Central Environmental Authority is responsible for guidelines, project selection, and coordination of various project-approving authorities related to EIA. The procedures include provisions for public hearings, public announcement of approvals, and appeals against unsuccessful projects.

**【Thailand】**

National Environment Quality Act was passed in 1975, and the EIA system was determined by the following revision in 1978. Target projects were determined according to a decree from the Ministry of Science, Technology, and Environment in 1987. In 1992, a new National Environment Quality Act was passed. Regulating in detail the EA process, the time required for completion was shortened. The necessity for receiving approval for government projects from the cabinet, the issuers of the proposal have compiled an environmental assessment report, which they have presented to the National Environmental Board. In the report, the Board & the Office of the Environment Policy & Planning conduct investigations, decide the project approval. For public or private projects not requiring cabinet approval, the report presents an environmental assessment to the Office of the Environment Policy & Planning, which then presents its findings to the National Environmental Board.

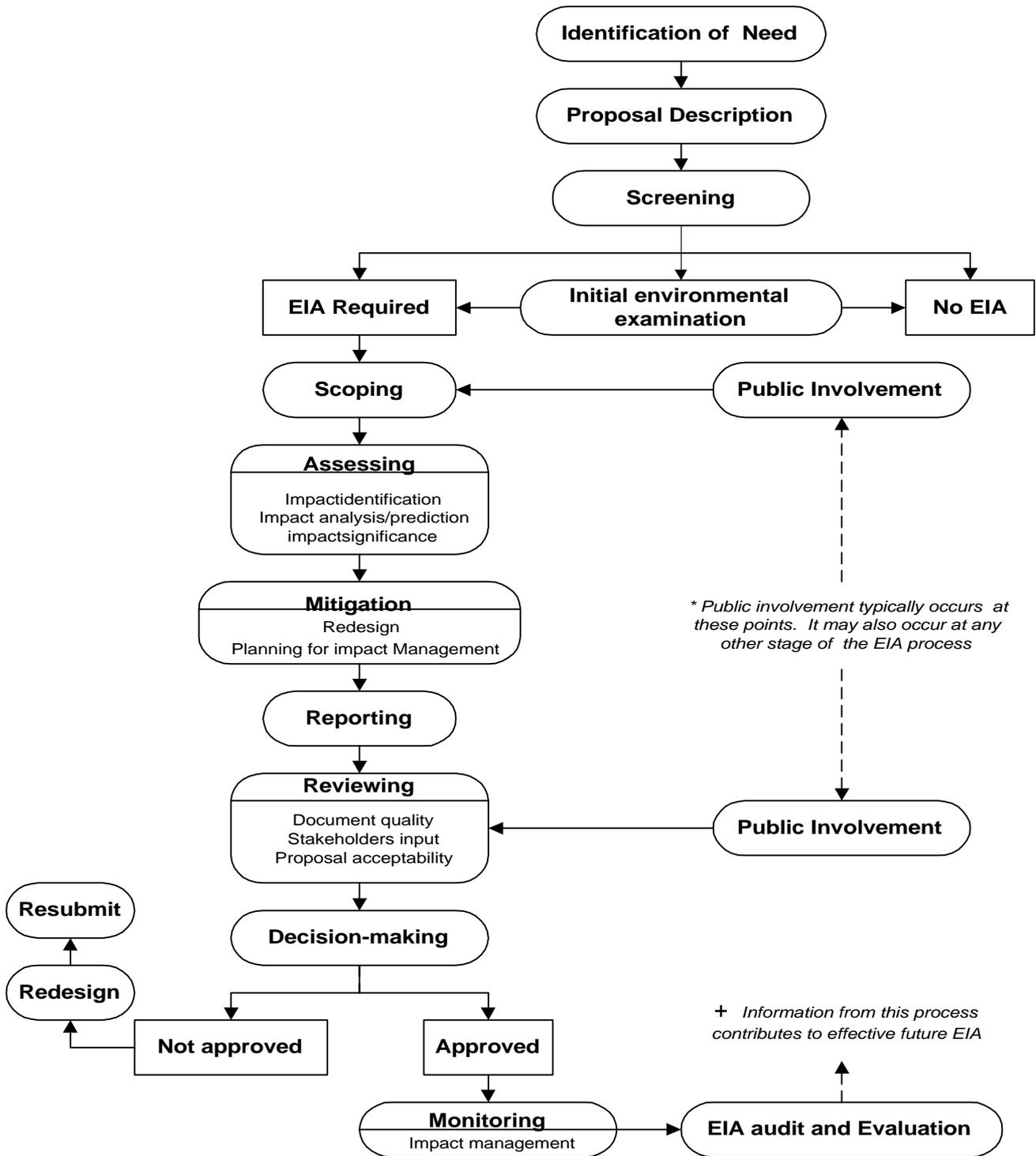
**【Pakistan】**

EIA procedures were determined in the Pakistan Environmental Protection Ordinance passed in 1983. However, in reality this law has not been implemented. In 1992, regulation of the administrative bodies began to see the law implemented. All people planning projects that could adversely affect the environment are obligated to present a detailed environmental assessment, which includes the following, to the Pakistan Environmental Protection Council when their project is at the planning stage.

- A) Impacts of the planned activities.
- B) Environmental protection measures
- C) Unavoidable adverse affects on environment

Countermeasures discussed by the project planning report to minimize adverse affects on the environment.

Source: "Development and Environment Series 6, Environmental Law in Developing Countries, Southeast and East Asia" (1994). Institute of Developing Economics.



Source: UNEP EIA Training Resource Manual

Figure 1 The EIA Process