



## Islamic Relief

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### **Incorporating Climate Change Adaptation in Environmental Impact Assessments and Programme Planning**

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## Climate Change in Environmental Impact Assessments

### Incorporating Climate Change Adaptation in Environmental Impact Assessments and Programme Planning

#### Methodology

Since both adaptation to and mitigation of climate change need to be addressed at the programme level and implemented locally, regionally and globally; it is crucial that long term environment and climate change impacted are assessed in IRW development initiatives at the planning stage. The IPCC indicates that a region's vulnerability to climate change depends largely on its adaptive capacity, sensitivity, and exposure to changing climatic patterns. So it is imperative to enhance our understanding of climate change process and also our capacity to assess its impacts.

#### Environmental Impact Assessment (EIA)

"Environmental Impact Assessment is a tool designed to identify and predict the impact of a project on the bio-geophysical environment and on peoples' health and well-being, to interpret and communicate information about the impact, to analyze site and process alternatives and provide solutions to sift out, or abate/mitigate the negative consequences on human beings and the environment." (FAO, 1996)

#### Typology of Environmental Impact (Source: IAIA, 2002)

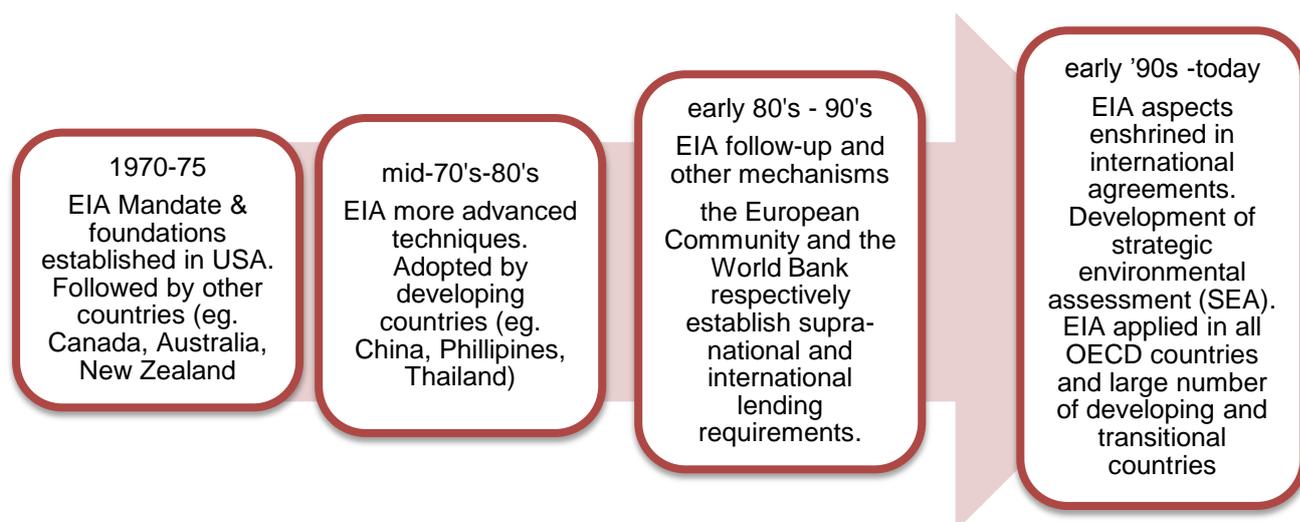
- Type: Biophysical, health or environmental
- Nature: Direct or indirect, cumulative
- Magnitude or severity: high, moderate, low
- Extent: local, regional, trans-boundary or global
- Timing: immediate, long-term
- Duration: temporary, permanent
- Uncertainty: low likelihood, high probability
- Reversibility: reversible/irreversible
- Significance: important/unimportant

#### Major Trends in EIA

EIA was first introduced in USA under the Environmental Policy Act (1969) (IIED). Today, many countries have adopted EIA as a result of both domestic and international requirements. But many of them have not incorporated EIA as a legal requirement.

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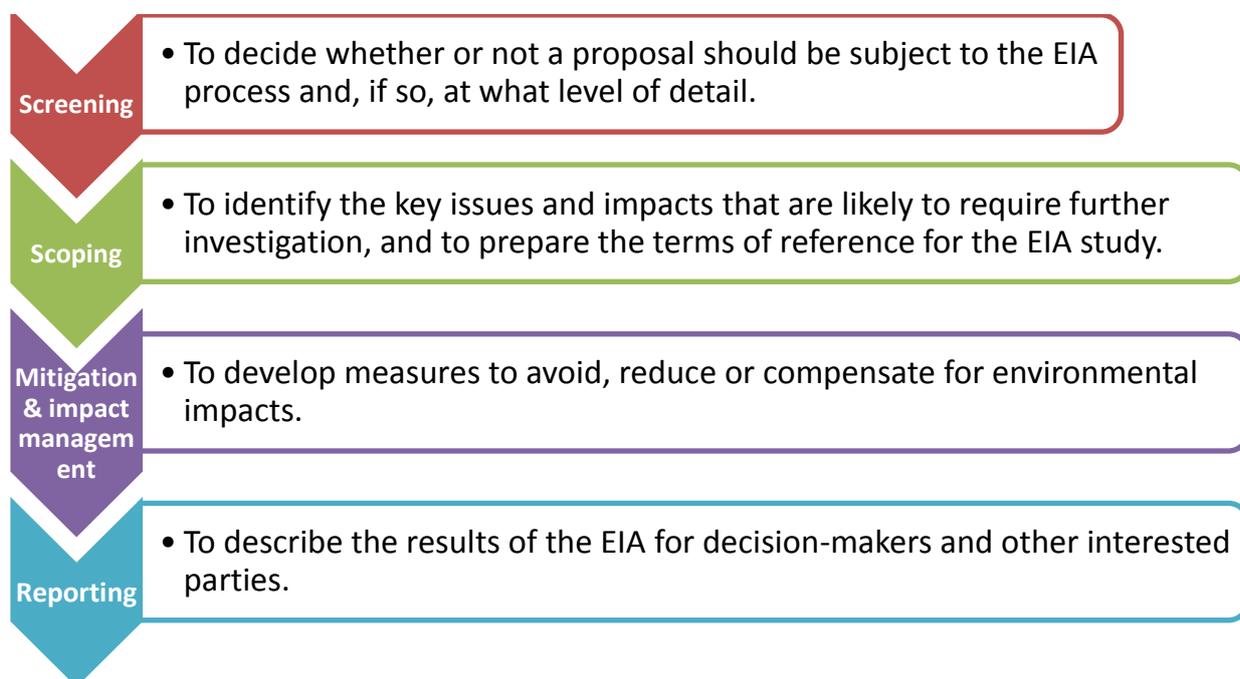
Figure 1: EIA Milestones (Adapted from UNEP 2002)



Today, EIA is as integral to a project, particularly large projects, as any economic, financial, institutional or technical analyses especially as it includes prediction and evaluation of social, economic and health impacts as well as environmental impacts.

### EIA Process

Figure 2: EIA Process

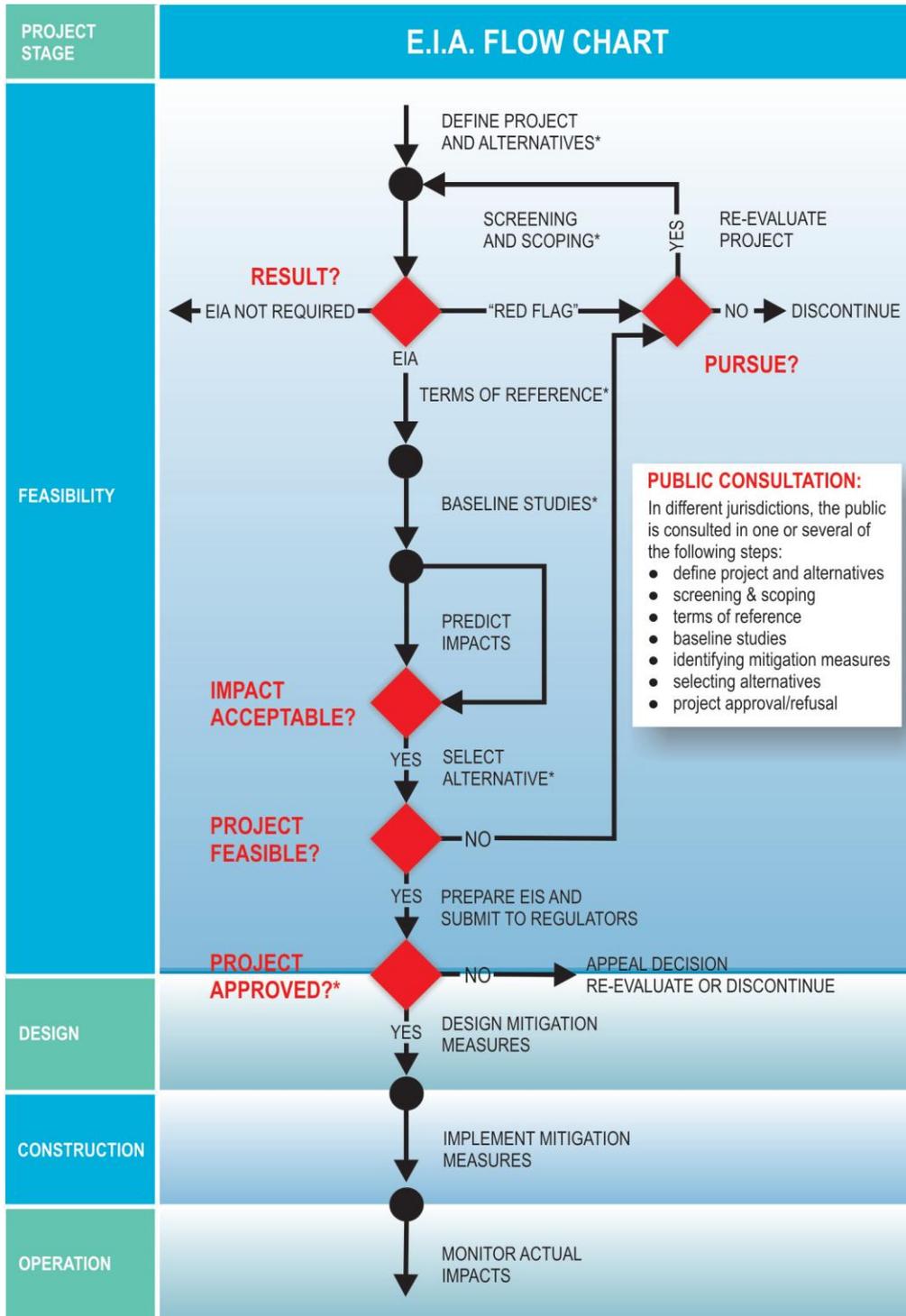


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## Generalised EIA Process Flowchart (UNEP, 2002)

Figure 3: Generalised EIA and Climate Change Process Flowchart

(Adapted from UNEP 2002)



## Climate Change in Environmental Impact Assessments

### EIA Scoping

Scoping forms an important part in the early stage within the EIA process. It defines the technical disciplines addresses potential issues and ensures that all likely to be potential or significant areas are identified.

### The Benefits of Scoping

Figure 4: The Benefits of Scoping (EC 2001)

- It helps ensure that the environmental information used for decision making provides a comprehensive picture of the important effects of the project, including issues of particular concern to affected groups and individuals.
- It helps focus resources on the important issues for decision-making and avoids wasted effort on issues of little relevance.
- It helps ensure that the environmental information provides a balanced view and is not burdened with irrelevant information.
- It stimulates early consultation between the developer and the competent authority, and with environmental authorities, other interested parties and the public, about the project and its environmental impacts.
- It helps effective planning, management and resourcing of the environmental studies.
- It should identify alternatives to the proposed project and mitigating measures which ought to be considered by the developer.
- It can identify other legislation or regulatory controls which may be relevant to the project and provide opportunities for the necessary assessment work for different control systems to be undertaken in parallel, thereby avoiding duplication of effort and costs for all concerned.
- It reduces the risk of delays caused by requests for further information after submission of the development consent application and the environmental information.
- It reduces the risk of disagreement about impact assessment methods (baseline surveys, predictive methods and evaluation criteria) after submission of the environmental information.

Figure 5: Some recent reviews of EIA/SEA effectiveness with particular reference to developing and transitional countries (UNEP 2004)

#### Some recent reviews of EIA/SEA effectiveness with particular reference to developing and transitional countries

- Dalal-Clayton, B. and Sadler, B. (1998) *The Application of Strategic Environmental Assessment in Developing Countries*. Environmental Planning Issues No.18. London: IIED.
- Dalal-Clayton, B. and Sadler, B. (2004 forthcoming) *Strategic Environmental Assessment: A Global Overview*. London: IIED and Earthscan.
- DEAT (Department of Environmental Affairs and Tourism) and CSIR (2000) *Guideline Document: Strategic Environmental Assessment in South Africa*. Pretoria, South Africa.
- Dusik, J. (ed.) (2001) *Proceedings of International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment*. Regional Environmental Centre for Central and Eastern Europe, Szentendre, Hungary.

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- Kjørven, O. and Lindhjem, H. (2002) *Strategic Environmental Assessment in World Bank Operations: Experience to Date – Future Potential*. Environment Strategy paper No. 4, Environment Department, Washington DC: World Bank.
- Lee, N. and George, C. (eds.) (2000) *Environmental Assessment in Developing and Transitional Countries*. Chichester: John Wiley & Sons, Ltd.
- OECD (1997) *Strategic Environmental Assessment (SEA) in Development Cooperation: State-of-the-art-Review*. Final Report. Paris: OECD/DAC Working Party on Development Assistance and Environment.
- World Bank (1991) *Environmental Assessment Sourcebook Vol. 1: Policies, Procedures and Cross-Sectoral Issues. Technical Paper Number 139*. Washington DC: World Bank.
- World Bank (1999) *Case Studies on Regional and Sectoral EA: An Analysis of Lessons Learned*. Washington DC: World Bank.
- An important compendium and source of information on EIA/SEA guidelines, handbooks etc., is Donnelly, A., Dalal-Clayton B., Hughes R. (1998) *A Directory of Impact Assessment Guidelines* (Second Edition). London: IIED.