

Glossary

abiotic

Non-living eg rocks or minerals.

ameliorative measures

See mitigation.

alternative

A possible course of action, in place of another that would meet the same purpose and need of the proposal.

audit

See environmental audit.

baseline studies

Work done to collect and interpret information on the condition/trends of the existing environment.

benefit-cost analysis

A method of comparing alternative actions according to the relative costs incurred (technical, environmental and economic) and the relative benefits gained. The analysis can incorporate discounting calculations to take into account the time value of money.

biodiversity

See biological diversity.

biological diversity

The variety of life forms, the different plants, animals and micro-organisms, the genes they contain and the eco-systems they form. It is usually considered at three levels: genetic diversity, species diversity and ecosystem diversity.

biophysical

That part of the environment that does not originate with human activities (eg biological, physical and chemical processes).

biota

All the organisms, including animals, plants, fungi and micro-organisms in a given area.

carrying capacity

The rate of resource consumption and waste discharge that can be sustained indefinitely in a defined impact region without progressively impairing bioproductivity and ecological integrity.

coherence in EIA

Aiming to achieve the co-ordination of EIA procedures, guidelines, standards and criteria by those involved in funding or approving proposals.

compensation

Trade-offs between different parties affected by proposals to the mutual satisfaction of all concerned.

cost-benefit analysis

See benefit-cost analysis.

cumulative effects assessment

The assessment of the impact on the environment which results from the incremental impact of an action when added to other past, present or reasonably foreseeable actions regardless of what agency or person undertakes such actions. Cumulative impact can result from individually minor but collectively significant actions taking place over a period of time.

decision-maker

The person(s) entrusted with the responsibility for allocating resources or granting approval to a proposal.

development proposals

Consists of a wide range of human activities which provide (a) favourable conditions for an increase in the transformation of the natural, biophysical environment to provide the goods and services available to society (eg. Structural adjustment programs, 'rolling' development plans) and (b) actions which directly produce the goods and services.

discretionary process/decision

A process or decision which the decision-maker is able to base on personal preference.

ecological processes

Processes which play an essential part in maintaining ecosystem integrity. Four fundamental ecological processes are the cycling of water, the cycling of nutrients, the flow of energy and biological diversity (as an expression of evolution).

ecosystem

A dynamic complex of plant, animal, fungal and microorganism communities and associated non-living environment interacting as an ecological unit.

endemic

Restricted to a specified region or locality.

environment

There is no generally agreed definition of environment in EIA. Increasingly, it means the complex web of inter-relationships between abiotic and biotic components which sustain all life on earth, including the social/health aspects of human group existence.

environmental audit

Process focusing on an existing installation, facility, or activity which involves a systematic, periodic evaluation of environmental management

to objectively review the performance of an organization, management and equipment with the aim of safeguarding the environment.

environmental assessment

See **environmental impact assessment**.

environmental impact assessment (EIA)

The systematic, reproducible and interdisciplinary identification, prediction and evaluation, mitigation and management of impacts from a proposed development and its reasonable alternatives. Sometimes known as environmental assessment.

environmental impact report/statement

Document in which the results of an EIA are presented to decision-makers and, usually, the public.

environmental management

Managing the productive use of natural resources without reducing their productivity and quality.

environmental management plan

See impact management plan.

environmental management system

A structured approach for determining, implementing and reviewing environmental policy through the use of a system which includes organizational structure, responsibilities, practices, procedures, processes and resources. Often formally carried out to meet the requirements of the ISO 14000 series.

fauna

All of the animals found in a given area.

flora

All of the plants found in a given area.

health impact assessment

Component of EIA which focuses on health impacts of development actions. Most attention is concentrated on morbidity and mortality, but increasingly, the World Health Organization (WHO) definition of health as being a state of 'social, physical and psychological well-being and not just the absence of disease' is being used to guide this type of assessment work.

impact management plan

A structured management plan that outlines the mitigation, monitoring and management requirements arising from an environmental impact assessment.

impact monitoring

Monitoring of environmental/social/health variables, which are expected to change after a project has been constructed and is operational, to test whether any observed changes are due to the project alone and not to any other external influences.

initial environmental evaluation/examination

A report containing a brief, preliminary evaluation of the types of impacts that would result from an action. Often used as a screening process to assess whether or not proposals should undergo full scale EIA.

interdisciplinary team

A group of people, from a range of disciplinary backgrounds, working together to ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man's environment.

level of assessment

See tiering.

memoranda of understanding

A written agreement between two or more levels or areas of government.

mitigation

The purposeful implementation of decisions or activities that are designed to reduce the undesirable impacts of a proposed action on the affected environment.

monitoring

Activity involving repeated observation, according to a pre-determined schedule, of one or more elements of the environment to detect their characteristics (status and trends).

'moving' baseline

Existing state of the environment projected into the future assuming no development proceeds. The projected baseline situation, rather than that existing at the time of EIA work, is theoretically the one to be compared with the state of the environment predicted in the event of a development action proceeding.

natural resources

Features that have ecological, economic, recreational, educational or aesthetic value.

natural resource accounting

Transformation of data, on environmental features (components and processes) and renewable/non-renewable resources, into a form that is comparable with data on the economy. Incorporation of the environmental data into the standard set of economic accounts (eg. gross national product) used in government policy-making.

NEPA

National Environmental Policy Act 1969 of the United States of America. This Act, which applied to Federal US agencies, was the first policy to require the preparation of a statement of the predicted environmental impact of a proposal. This statement has since become known as the Environmental Impact Statement (EIS).

precautionary principle

A principle of sustainability that where there are threats of serious or irreversible damage, the lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

proponent

Organization (private or public sector) or individual intending to implement a development proposal.

proposal

Any project, policy, program, plan or other activity.

public consultation

See public involvement.

public involvement

A range of techniques that can be used to inform, consult or interact with stakeholders affected by a proposal.

resource

Anything that is used directly by people. A renewable resource can renew itself or be renewed at a constant level. A non-renewable resource is one whose consumption necessarily involves its depletion.

risk analysis

Technique used to determine the likelihood or chance of hazardous events occurring (such as release of a certain quantity of a toxic gas) and the likely consequences. Originally developed for use in nuclear and chemical industry where certain possible events, of low probability, could have extremely serious results. Attempts are being made to use concepts from probabilistic risk analysis to characterize environmental impacts, whose occurrence and nature are not easy to predict with any degree of accuracy.

secondary impact

Indirect or induced changes in the environment, population, economic growth and land use and other environmental effects resulting from these changes in land use, population and economic growth. The potential effects of additional changes that are likely to occur later in time or at a different place as a result of the implementation of a particular action.

scoping

An early and open activity to identify the impacts that are most likely to be significant and require investigation during the EIA work. Can, also, be used to:

- identify alternative project designs/sites to be assessed;
- obtain local knowledge of site and surroundings; and
- prepare a plan for public involvement.

The results of scoping are frequently used to prepare a Terms of Reference for the EIA.

screening

Preliminary activity undertaken to classify proposals according to the level of assessment that should occur.

social impact assessment

The component of EIA concerned with changes in the structure and functioning of social orderings. In particular the changes that a development would create in: social relationships; community (population, structure, stability etc); people's quality and way of life; language; ritual; political/economic processes; attitudes/values. Can sometimes include health impacts.

stakeholders

Those who may be potentially affected by a proposal eg: local people, the proponent, government agencies, NGOs, donors and others.

State of the Environment reports

Reports that provide an assessment of the conditions of the environment, pressures on the environment and the responses of the environment to those pressures.

strategic environmental assessment

A formal process of systematic analysis of the environmental effects of development policies, plans, programmes and other proposed strategic actions. This process extends the aims and principles of EIA beyond the project level and when major alternatives are still open.

synergistic

By acting together, separate elements produce a greater effect than would be produced if they acted separately.

tiering

Addressing issues and impacts at the appropriate level of decision-making (eg from the policy to project levels).

Terms of Reference (ToR)

Written requirements governing EIA implementation, consultations to be held, data to be produced and form/contents of the EIA report. Often produced as an output from scoping.

transboundary impacts

Any impact, not exclusively of a global nature, within an area under the jurisdiction of a Party caused by a proposed activity the physical origin of which is situated wholly or in part within the area under the jurisdiction of another Party.

value judgment

The use of opinion or belief in analysis or decision-making.