WRI's Informative Memo for Access Law & Practice:

Environmental and Social Assessment

Robert Goodland

Environmental and Social Assessment

Table of Contents

1. Introduction

This memo outlines what the assessment of social and environmental impacts (ESA) entails, how to make it effective, what its limitations are, and where the frontiers of ESA lie today. The memo starts with a potted history of ESA, followed by a recap of standard practice of ESA as applied to a conventional development project. The deficiencies of "Analysis of Alternatives" are then noted together with suggestions to remedy such weaknesses. The success of any ESA is the extent to which precautions and mitigations are actually implemented as set out in the ESA's Implementation or Mitigation Plan, especially how to foster its effective implementation during construction and operation of the project. The memo ends with a discussion of three cutting edge ESA issues. First, how Impact-Compensation Agreements (ICA) foster implementation. Second, how the consent of affected people should be sought. Third, how Strategic EAs (SEA) are designed to improve the mix of projects to be tackled.

Potted History of Environmental Assessment

One origin of environmental concern was the nineteenth century public health movement to reduce epidemics and vermin by improving sanitation and protecting water supplies. This evolved into hygiene and pollution control of waters and air. After many cholera pandemics, Dr John Snow traced the London epidemic to a single public water street pump. Removing the pump's handle in 1854 helped end the outbreak although cholera's bacterial origins were unknown at the time. London's 'pea souper' smogs, especially the killer of 1952, were controlled by banning coal fires and mandating taller chimneys by the Clean Air Act of 1956.

After WWII, as soon as economic development projects began in developing countries, their unforeseen impacts often became severe. Cost-benefit analysis, which began at the same time in the 1950s, still does not capture major external costs[i]. The internalization of external costs is the central secular struggle of environmental and social prudence. [ii] As most environmental and social impacts are externalities, a new tool was necessary to supplement cost-benefit analysis, hence ESA arose. ESA was specifically mandated by the landmark US National Environmental Policy Act of 1969 (NEPA). Formal Environmental Impact Assessment (EIA / interchangeable with ESA) legislations were adopted in the 1970s by Australia, UK, Canada, China, France, Germany, Hong Kong, Italy, Japan, The Philippines, Taiwan and others. The environmental summits of 1972 (Stockholm) and 1982 (Nairobi) promoted acceptance of the practice of ESAs. The International Association for Impact Assessment was organized in 1980 to bring together ESA researchers, practitioners and users in order to promote and harmonize ESA standards and best practice. In the 1980s, formal national EIA laws were passed in Belgium, Greece, India, Indonesia, Ireland, Korea, Malaysia, The Netherlands, Poland, Spain, Sweden, Switzerland, Thailand and others. More detailed acceptance of the ESA as a necessary tool was fostered by the European Community's EIA Directive of 1985. Following the EU Directive, many European countries strengthened their ESA laws. ESA was reinforced by the Brundtland Commission of 1987 and the Rio Earth Summit of 1992. These summits and the Brundtland Commission fostered agreement that ESA is a

tool to foster the relatively new goal of "Sustainable Development". The defining Goals and Principles of Environmental Impact Assessment, issued by UNEP in 1987, were codified in the 1992 Rio Declaration on Environment and Development and ensuing conventions. The World Bank first mandated ESA as official policy in 1991, and published their three-volume EA Sourcebook as a guide to ESA in the same year. The Asian Development Bank (ADB), African Development Bank (AfDB), and Inter-American Development Bank (IDB) followed suit soon thereafter. More stringent ESA guidelines were adopted by the EU in 2001, and by the Organization for Economic Co-operation and Development (OECD) in 2006; these were tailored by the European Bank for Reconstruction and Development (EBRD) in 2008.

1.2 Definition of Environmental and Social Assessment

Traditional ESAs and this memo focus on capital-intensive infrastructure projects, such as a highway, irrigation scheme, hydro-project, and a new town, a new mine, or rehabilitation as in slum upgrading. National ministries of environment are still new and weak relative to ministries of agriculture or of energy or of transport. Environmental concerns usually addressed with inter-agency coordination. For example, if the energy ministry is building or permitting a dam, the health ministry needs to integrate anti-malarial measures. The ESA is basically similar to whoever is the proponent, whether governments, public/private partners, or the private sector.

The ESA first predicts the major potential impacts of a proposed project on people and their environment, and second devises ways to prevent or mitigate such impacts. For example, digging irrigation ditches often leads to mosquito breeding which spread malaria. Clearing a patch of forest for agriculture may reduce biodiversity. The most important part of the ESA is the Environmental Management Plan which designs measures to prevent or mitigate the most severe impacts. In the above two examples, mosquito larvae-eating fish are introduced into the ditches and people are protected by public health campaigns including screens, treated bed nets and chemotherapy. Loss of biodiversity can be compensated for by offsets, conservation of a similar tract of forest with financing in perpetuity. Through the years, ESA has increasingly managed to predict the more severe risks. Best practice ESA now has little problem in identifying the major risks. Designing preventive measures to reduce the risks identified by the ESA also is straightforward, but implementing such measures is often the weakest link in the ESA process. Thus, ESA minimizes negative impacts, ESA manages the negative, and seems ill-suited to promoting the positive.

Since the 1969 NEPA, ESA has a newer elements, especially participation () of affected people in the ESA process, winning their consent to the project, supported by systematic grievance procedures.

2. Standard ESA Practice

ESA is tightly linked to what is called the Project Cycle from project identification, through (pre-) feasibility or project preparation, to construction, operation and decommissioning.

Standard Phases of Project	**Standard Phases of ESA**
Sectoral Studies	Historically no environmental input, but see SEA below
Project selection and identification	ESA Screening
Project preparation, (pre-) feasibility	ESA Scoping; then ESA process begins
Appraisal, Approval to go ahead	ESA's Mitigation plan becomes part of project
Construction	ESA Mitigation Plan implemented
Operation	ESA Mitigation Plan continues
Decommissioning	ESA Decommissioning Plan implemented

Standard Contents of Environmental and Social Assessment Reports

Executive summary. Concisely discusses significant findings and recommended actions. The summary has to be a faithful summary of the main text.[iii] Often the only part of the ESA that many people will read. Often available as a separate document. Should be available in all appropriate languages.

Policy, legal, and administrative framework. Discusses the policy, legal, and administrative framework within which the ESA is carried out. Explains the environmental requirements of any co-financiers and governments. Identifies relevant international environmental agreements. Better as an Annex.

Project description. Usually summarized from the Feasibility Report. Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required (e.g., pipelines, access roads, power plants, power corridors, water supply, housing, and quarries, raw material and product storage facilities, resettlement sites). Indicates the need for any resettlement plan or indigenous peoples development plan. Normally includes watershed and air shed maps showing the project site and the project's area of influence. If the project description is readily available in the Feasibility Report, this section can be brief as it repeats the Feasibility report.

Baseline data. Normally a weak section of the ESA. Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigating measures. Too often, this section lists detailed climate data, geological info, and the species of plants and animals found in the project area allegedly as a base-line against which future project-induced changes can be detected. In fact, such lists are often of modest utility. Baseline data is in essence detailed description of the project area; better annexed.

Identification of Social and Environmental impacts. This is the first substantive element of the ESA. It builds on and extends the ESA Scoping study. Predicts and assesses the project's likely positive and negative impacts on the environment and on communities and settlements. Specifies which topics do not require further attention, together with the reasons. This section is usefully ranked in rough order of importance.

Analysis of alternatives: A weak section that often fails to add much value to the ESA. A of A is supposed to compare better or much lower impact alternatives to the proposed project. In fact, the A of A almost never puts forward a lower impact alternative in a different sector. For example, in a highway ESA, the A of A never recommends a rail. In a coal electricity project, the A of A never recommends renewable energy instead. Standard 'A of As' focus on relatively modest improvements to the proposed project. In that case, the improvements are better placed in the Mitigation Plan. Sometimes includes the "without project" situation. States the basis for selecting the particular project design proposed.

Environmental Management Plan *(EMP)*. Normally the most substantive section of the ESA. Identifies mitigation measures for the impacts identified in Section ** on social and environmental impacts. Any residual negative impacts that cannot be mitigated also are included together with compensatory measurers. Explores opportunities for environmental enhancement. Covers mitigation measures, monitoring, and institutional strengthening, budgets, schedules, responsibilities, and disclosure and grievance mechanisms.

2.1 ESA Screening

As soon as the project is identified, the ESA process begins with screening, which is a type of triage to tailor the level of ESA commensurate with the potential impacts. Screening depends on the likely significance of the impacts, and is done according to the severity of the potential impacts. The determination of significance of impacts is based on prior experience with a project of the proposed type. Many governments and other entities have issued lists of significance of impacts or illustrative examples of which projects should be assigned to which Environmental Assessment category[iv]. Significance depends partly on magnitude, severity, irreversibility, and the number of people who may be affected. The views of potentially impacted stakeholders are taken into account, as are the professional opinions of the environmental authorities. A total project cost of about US$10 million is the increasingly accepted international standard threshold for ESA Category A, now widespread, adopted by the more than 50 international private banks adhering to the Equator Principles for project finance. Brazil's Bank Itaú sets the threshold lower at $3 million (Goldzimer 2008).

Screening assigns a category to the EA, usually A, B or C. In general, A means potentially significant impacts; B means some impacts but nothing substantial; C means few, minor or no impacts. Some agencies add a fourth category "D" for program loans to financial intermediaries. Some governments simplify this down to two categories: positive needs an ESA; negative doesn't need an ESA. Screening ensures that progressively more rigorous levels of environmental scrutiny are accorded to projects with more severe impacts. As screening is the first step in the ESA process, it is based on prior experience of projects in the category of the proposed project. For example, experience shows that in big infrastructure projects causing displacement of human, and conversion of forests or habitat are normally Category A. A project to build a small rural schoolhouse would be Category C.

There are many guidelines on how best to screen such projects. Each agency or Ministry uses slightly different criteria to distinguish "A" Category from "B". The easiest to use are "Illustrative Lists" based on experience. There is much discussion distinguishing major projects or impacts from medium or minor impacts. Projects involving Indigenous Peoples (IPs), or those which may displace non-indigenous communities are Category A. All big dams, reservoirs, highways, deforestation, power plants, urban renewal, impacts on "No-Go Zones" are *a priori* Category A. If it is claimed that the current project being screened is too small or the numbers of people to be displaced is too small or the area of forest to be removed is too small, this should be justified in writing and circulated to stakeholders to foster agreement before screening is finalized.[v] This paper deals almost entirely with ESA Category 'A' projects.

If the project is screened as Category A, then a team of ESA practitioners, experienced in that sector and the area or ecosystem of the proposed project, is engaged. The ESA team is expected to be as independent as possible from the project proponent who is paying for their services. There are strong pressures for the ESA team not to highlight major impacts or to downplay them, and to not to be as through as professionally necessary in

order to keep the ESA process as short and low cost as possible. This is where "Greenwash" is most frequent. ESA consultants make their living by undertaking ESAs for proponents. ESA teams will get fewer consultancies from proponents by being hard-liners and thorough, than if they are malleable and are willing to gloss over some impact and cut some corners.

As it is not easy to muster an independent ESA team, there has to be a series of checks-and-balances in place to foster independence and reduce bias. The first is in the selection of the ESA team. This should be based on the track record for independence that they achieved in previous projects. Second are the views of the ministry's E&S Unit. Third are the views of the financier's E&S Unit. Fourth are the views of the Panel of Experts (PoE) on the independence of the potential ESA team. Fifth is the grievance mechanism that needs to be in place as soon as stakeholder identification and screening begin.

The ESA team's first job is to corroborate the screening category. Once the screening category is confirmed as an A, then ESA scoping begins.

2.2 ESA Scoping

Scoping is a process designed to promote consensus on which key issues should be tackled by the ESA. A rapid environmental reconnaissance is often done in order to find out what the key issues are likely to be. The reconnaissance may take a week or so of work by one or two experienced professional generalists. Scoping and the reconnaissance are often the first opportunities for public participation (q.v.) in the project itself. Reconnaissance should start obtaining the views of potentially impacted stakeholders in the vicinity of the project.

Best practice coping of the ESA culminates with a list of potential impacts, issues and concerns with which the potentially impacted stakeholders agree. Ranking the list of issues in an order of significance improves the ESA process by assigning most attention to significant topics and less attention to less important topics. Scoping ends with the Terms of Reference which designs the ESA process for the next couple of years or so. Scoping determines what disciplines will be needed for the ESA and agrees on what studies the ESA will undertake. For example, if public health may be risked by an influx of malaria or HIV/AIDS, then public health specialists will be needed for the ESA team and the Health Impact Assessment will become a key part of the ESA. If impacts on communities or even resettlement seem likely, then social scientists will be required on the ESA team. The ESA team is hired with adequate representation from the disciplines needed.

Scoping ends with agreement on the Terms of Reference (ToRs) between (a) the project sponsor (especially their in-house E&S Unit), (b) the national or provincial environmental authorities, (c) the project financiers, (d) the potentially impacted stakeholders, and (e) the ESA team. This means there is agreement on how the ESA will be conducted over the next 24 months or so. In many developing countries, this time period might be considered somewhat on the lengthy side. Many EIAs are completed

within 12-18 months and as a result they tend to be sloppy. It is impossible for an ESA to be adequately reliable without all seasons being represented. And as seasons fluctuate from year to year, as does biological behavior, one year of seasons could inject an element of risk into the ESA.[vi] It should tacitly be understood that agreement on the ToRs means that agreement will be expected on the outcome of the ESA process when it is concluded, assuming that the ToRs have been fulfilled.

2.3 The Environmental and Social Management Plan

A project's environmental management plan (EMP), sometimes known as an "action plan" is normally one of the last chapters of the ESA, is the most important element of the whole ESA. The EMP consists of the set of prevention, mitigation, compensation, monitoring, and institutional measures to be implemented during construction, operation and decommissioning to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. Remediation of existing environmental problems may be more important than mitigation of predicted future impacts; in such cases the EMP designs cost-effective measures to remedy such problems (e.g., restoration of abandoned mines or tailings dumps). The EMP includes the actions needed to implement the mitigating measures. EMPs are essential elements of Category A ESAs. ESAs for Category B projects may consist of an EMP only. The mitigation noted in the EMP must be included as binding conditions of loan covenants, and become the basis of the IBA.

To prepare the EMP, the proponent and its ESA team: (a) design the set of preventive or mitigating measures for the potentially adverse impacts; (b) determine requirements for ensuring that the mitigating measures are made effectively and in a timely manner; and (c) describe the means for meeting those requirements. The EMP includes mitigation, monitoring, capacity strengthening, implementation schedule and integration with the overall project as outlined below.

2.3.1 Implementation Schedule and Cost Estimates: For all three aspects (mitigation, monitoring, and capacity strengthening), the EMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the EMP. These figures are also integrated into the project cost tables.

2.3.2 Integration of the EMP with Project: When the project feasibility and ESA are ready, the proponent's decision to proceed with a project is predicated in part on the expectation that the EMP will be implemented effectively. Consequently, the EMP has to be specific in its description of the individual mitigation, monitoring and institutional measures, and it must be integrated into the project's overall planning, design, budget, and implementation. Such integration is achieved by establishing the EMP within the project so that the plan will receive funding and supervision along with the other components.

2.4 Mitigation

The EMP identifies and designs measures to reduce potentially significant adverse environmental impacts to acceptable levels. The plan includes compensatory measures if mitigation measures are not feasible, cost-effective, or sufficient. Specifically, the EMP:

(a) Identifies and summarizes all anticipated significant adverse environmental impacts (including those involving Indigenous Peoples or involuntary resettlement);

(b) Designs or describes the technical details of each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with equipment descriptions and operating procedures.

(c) Assesses any potential environmental impacts of these measures.

(d) Provides linkage with any other mitigation plans (e.g., for involuntary resettlement, Indigenous Peoples, or cultural property) required for the project.

2.5 Monitoring

Environmental monitoring during project implementation provides information about key environmental aspects of the project, particularly the environmental impacts of the project and the effectiveness of mitigation measures. Such information enables the proponent and other stakeholders to evaluate the success of mitigation as part of project management, and allows corrective action to be taken when needed. The EMP establishes the legal mandate for each task and this is codified in the IBC. Therefore, the EMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the ESA report and the mitigation measures described in the EMP.

Specifically, the monitoring section of the EMP provides:

(a) Specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions.

(b) Monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

2.6 Capacity Strengthening

To support timely and effective implementation of the mitigating measures, the EMP draws on the EA's assessment of the existence, role, and capability of environmental

units on site of the proponent and at the municipal and national levels. For ESA Category A projects, those with significant environmental impacts, the implementing ministry (e.g., the agriculture ministry) and the project sponsor (e.g., an irrigation company) need in-house environmental units with adequate budget and professional staffing strong in expertise relevant to the project. The in-house E&S Unit of corporations are financed in the same way as all other units of the corporation, by itself. The government's regulatory agency (e.g., the Ministry of Agriculture) has its own E&S capacity that should be kept up to strength as needs change through the years. The E&S Units of the financiers are paid as all other units, by the financiers. The performance of the corporations E&S Units is assessed periodically by the Panel of Social and Environmental Experts (PoE) (see Annex **) and strengthened as necessary.

Most of the in-house E&S professionals will be located at the project site. The EMP evaluates existing institutional capacity and provides strengthening including establishment, expansion or training of staff, to allow implementation of EMP. Specifically, the EMP provides a specific description of institutional arrangements—who is responsible for carrying out the monitoring measures (e.g., for construction, operation, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).

3. Public Participation and Disclosure

For World Bank supported projects with potentially significant adverse impacts, public consultation and disclosure must occur at least three times. First, during the scoping process, marking the beginning of the ESA process. Second, as soon as the draft ESA becomes available. Third, after release of the final EIA, which must be at least 120 days before Board approval (the Pelosi Amendment).[vii] These three points of consultation and disclosure were major advances for 1989, but would be inadequate nowadays. As outlined below, participation of potentially affected stakeholders is a process that starts as soon as the project is identified, extends through design, construction and operation, and ends when decommissioning and restoration are complete.

Public participation in project design and the ESA process differ greatly between sectors, type of project, and political practices in each country. Best practice is for the project sponsor's E&S Unit to see that all stakeholders are identified reliably as soon as the project has been identified.[viii] Stakeholders excluded can and should complain, which would suggest the proponent is not following Best Practice, in which case their social license[ix] would diminish.

It is not always obvious who all the stakeholders may be, so a systematic effort at stakeholder identification is necessary. This memo uses the term stakeholder to mean mainly potentially impacted people. The government entity regulating the project is an ex-officio stakeholder, as is the company or government agency building the project. Some stakeholders are clear, such as if a village has to be resettled to make way for a mining project. Other stakeholders, often advocates for impacted people or vulnerable groups, may be civil society organizations (CSOs) critical of the project. Other

stakeholders are frequently overlooked, such as the forest dwellers, vulnerable ethnic minorities or Indigenous Peoples, who may use the project site sporadically or seasonally and who are often reclusive.[x] Such societies in some countries have made it quite clear that they wish to be left totally alone and not contacted by the government, nor by project sponsors. Indigenous Peoples merit special care in such cases. They are often so vulnerable that some governments decline permission for a project to go ahead if they are involved. Best practice is that Indigenous Peoples are best left alone, and the project should be re-sited elsewhere. This approach prevents serious problems later on.

Public participation begins with screening and scoping and continues during the ESA process. Best practice is for the ESA team or the E&S Unit to brief the potentially impacted stakeholders periodically on the ESA or to invite them to accompany the ESA process as it unfolds. Often people living in or near a project site may be hired to work on the project itself, with the caveat that the promise of employment in the project must never be used as a way of silencing community concerns. The key point is that stakeholders must be familiar with the ESA process so that when the draft ESA report is ready, the impacted people already are familiar with how it was produced. Giving a draft ESA report to anyone unfamiliar with the ESA process and expecting them to comment on it - or even to approve it -- is a recipe for disaster and raises grave risks.

The next big event in public participation is that the draft ESA report is given to or made accessible to all stakeholders – potentially impacted people, government, financiers -- who are expected to approve it or not. A stakeholder may condition their approval on certain changes to the project, which need to be agreed to by project sponsors.

Assuming stakeholders or their representatives or leaders or advocates approve the ESA, Good Practice is to extract the Mitigation Plan from the ESA and convert it into an Impact-Benefit Agreement (IBA). This codifies into a single judicial contract all the mitigating measures, compensation, allocation of benefits, offsets, performance bonds, insurance, grievance mechanisms, redress and systems of penalties. Project sponsors and affected stakeholders then sign this legal document, which is then implemented.

In some countries, a government agency incorporates such agreements into the project approval decision. In others, the government agency merely takes public comments into account in formulating the project approval decisions and attaches conditions. The conditions flow either from the "contract" or from "legal statutory authority". Either way, what needs to be stressed is that stakeholder agreements and concerns are incorporated into a legally enforceable project approval.

If the potentially impacted stakeholders approve the ESA and sign the IBA that constitutes free prior and informed consent (FPIC) *[see below]*.

Public Participation Leading to IBA and FPIC

Stakeholder Identification

Invitation to Participate
ESA Screening
ESA Scoping
Accompanying the ESA process
Commenting on the draft ESA and especially the EMP
Integrating the EMP into the IBA
FPIC

4. Vulnerable Ethnic Minorities

Economic development is designed normally to benefit the dominant society of a country. However, when economic development occurs in or near territories occupied or used by vulnerable ethnic minorities, they are usually seriously harmed by the development. Soon after the realization by the dominant society and by designers of economic development that development damages ethnic minorities, special precautions were designed in the 1960s and 1970s to ensure that harm was prevented, and preferably that the ethnic minority benefited from the development. Such special precautions are sometimes similar to affirmative action. The struggle to achieve these goals is ongoing; development projects on or near ethnic minorities continues to damage their societies. This section briefly outlines what vulnerable ethnic minorities are and what special precautions are needed in order to prevent damage to them.

4.1 Indigenous Peoples

The main criterion for being "Indigenous Peoples" are ethnic groups who self-identify themselves as being indigenous, or who are recognized as IPs by other groups. IPs are defined by the UN, ILO, World Bank and others as cultural or ethnic groups possessing a continuity or association with a given region (often called ancestral domain), and who formerly or currently inhabit the region either before its subsequent colonization or annexation; or alongside other cultural groups during the formation of a nation-state; or independently or largely isolated from the influence of the claimed governance by a nation-state.[xi] IPs normally possess linguistic, cultural and social characteristics, different in some degree from the surrounding populations and dominant culture of the nation-state. Most IPs nowadays has already at least been contacted by the dominant ethnic majority who know here they live and what they call themselves. Worldwide, anthropologists estimate there may still be as many as 100 uncontacted ethnic minorities. In the Amazon forest region, possibly a couple of dozen distinct ethnic groups are thought to exist, but who have not yet been contacted. Some IPs have been contacted by

the dominant national ethnic majority, but do not want to continue such contacts, so have retreated further away and are called ethnic groups who do not want more contact with the dominant society.

Related terms overlapping the definition of Indigenous Peoples include aborigines (e.g., in Australia), aboriginal peoples, native peoples, first peoples, first nations (e.g., in Canada), tribal People, American Indian in the US, Amerindian in Central and South America, and autochthonous.

In India, most IPs are called *Adivasis*, from the Devanagari script meaning aboriginal, *Atavika* (forest dwellers in Sanskrit), *Vanvasi* or *Girijan* the hill IPs are often grouped together in the category "Scheduled Castes and Tribes in the Constitution of India.

Pygmy, the ethnic minority who live in equatorial rain forests and average less than 150 cm in height. Some distinguish between African Negrillos, and Negritos, who live in Southeast Asia, New Guinea, and the Philippines. The name Pygmy is derogatory to many who prefer being called by their specific ethnic group.

Similarly with the Inuit, a group of culturally similar indigenous peoples inhabiting the Arctic regions of Alaska, Greenland, and Canada speaking the Inuit language which is classified under Eskimo-Aleut languages.

While Indigenous peoples are the main vulnerable ethnic minority for whom special precautions are necessary to prevent harm to them from development projects, they are not the only group. The national legislation covering Indigenous Peoples in Colombia expresses this best because it includes Indigenous Peoples (Amerindians), Afro-Colombians, Rom and "Raizales" (from the San Andres and Providencia Islands).

Afro-Descendents are the most numerous vulnerable ethnic minorities (e.g., Brazil: Quilombos, Colombia Palenqueros, Central America: Garinagu/Garifuna, USA: Black Seminoles of Florida, Jamiaca: Maroons).

Romany or Gypsies, the ethnic minority who speak Romany and who traditionally live by seasonal work and fortune-telling, are believed to have originated in northern India. Romany now live on all continents, but mostly in Europe, North Africa, and North America.

Precautions for Vulnerable Ethnic Minorities: In the case of indigenous and tribal peoples, the most comprehensive standards are set forth in the *Akwé:Kon Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments Regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities*.[xii] These guidelines were adopted by consensus by the Conference of Parties to the Convention on Biological Diversity and were developed with considerable input by indigenous peoples.

4.2 Free Prior and Informed Consent

FPIC is Best Practice in major projects and is required in an increasing number of instances. Financiers, legal experts and development agencies have ruled that participation cannot be deemed meaningful unless the stakeholders have the right to reject the project. If the right of rejection is absent, public participation becomes a hoax.

As FPIC was formally adopted on 13 September 2007 by the UN General Assembly in the Declaration on the Rights of Indigenous Peoples, FPIC has now become best practice. The World Commission on Dams (2000) and the Extractive Industry Review (2003) both extend FPIC and advocate making it a requirement. ILO and the InterAmerican Court of Human Rights support FPIC. IFC's exclusion list bans supporting the production or activities that impinge on the lands owned, or claimed under adjudication, by Indigenous Peoples, without full documented consent of such peoples. The rest of the World Bank Group changes consent to consultation, although without distinguishing between them. The World Bank Group now mandates FPIConsultation rather than the UN's FPIConsent. Consultation means obtaining views and opinions, but with no indication of what should be done with such views. Consent is much stronger. Consent means the potentially impacted stakeholders approve the project. This is not consensus in which everyone approves the project. Equality of information between proponent and impacted people about the proposed project has to be ensured before FPIC can be sought.

Some governments (e.g., Australia, Philippines) have enshrined FPIC into national legislation. WWF's Mine Certification and Evaluation Project is analyzing Best Practice and FPIC. Does one interpret the UN Declaration as excluding non-indigenous peoples? Can a proponent claim that FPIC is needed only when Indigenous People are involved? Extension of FPIC to non-Indigenous Peoples is a substantive issue on which there is little agreement. Indigenous Peoples have a "corporate" existence, whereas non-indigenous communities or villages don't necessarily have a "corporate" existence that allows FPIC to work. At the moment, the UN Declaration and other authorities cited for FPIC are related to Indigenous Peoples. And yet it is difficult to disagree that "meaningful consultation" must include the right to say "no" by non-indigenous impacted peoples too.

FPIC is part of public participation, especially the participation of potentially affected stakeholders in decisions about the proposed project that are likely to impact on their livelihoods. FPIC also is a process, not a once-off threshold. FPIC promotes equitable relationships between impacted stakeholders, the project sponsor, the financiers and governments, partly by recognizing and respecting their rights to control their traditional territories or ancestral domains.

The "informed" part of FPIC means the stakeholders from whom FPIC is sought have to fully understand the implications of the project. It is not possible to understand a project by being presented with a huge technical draft of the ESA. Only by accompanying the gestation of the project and ESA can the stakeholders become familiar with the project. This means the stakeholders should be invited to periodic discussions on the project and

on the design and execution of the ESA throughout the (pre-) feasibility phase. Then, when the draft ESA is ready, the stakeholders already will be fairly familiar with most of its contents.

Caveat: FPIC is not yet as clearly established as it will become. There is a flurry of activity to examine the implications of FPIC.[xiii] For example, is consent by some or all stakeholders? Will FPIC suffice from the representative leaders of the community? Or must all members of the community consent? "Broad community support" (BCS) contains much of the gist of FPIC, but is less precise. BCS excludes the two keys or "prior" and "informed". "Broad" also is vague. BCS's 'Community' is fine for potentially impacted societies. Support is less clear than consent, but clearer than consultation as in FPIConsultation. In my view "broad community support" sounds good but is not as operational as FPIC is. Neither BDS nor FPIConsultation can replace FPIC for Indigenous peoples. Both are much weaker applied to non-indigenous communities. Rarely do projects claiming BCS document how they arrived at that conclusion. If BCS can be obtained by a couple of proponent officials briefly chatting with a few ill-informed villages off the record, with nothing in writing, then the concept should be dropped. The gray areas of FPIC are being actively addressed.

FPIC and Non-Indigenous Peoples: Shanta Martin (2007) puts it best: Non-indigenous community members also enjoy rights to which FPIC is central. Everyone has a right to development. Development entails the active, free and meaningful participation of all individuals in achieving and enjoying the benefits of development. The goal of human development is to establish an environment in which people's capabilities can be enhanced, their range of choices expanded and, their human rights fulfilled. The sustainability of development is integrally connected with the ability of people to control their development objectives. In order to be able to have effective control of their own development, communities must understand the full consequences of projects, be properly consulted and given the opportunity to give or withhold their consent to projects that will affect them. Thus, FPIC is inherent to a rights-based approach to development.

In addition, the draft ESA and all materials have to be written in languages and forms understandable by the stakeholders. Techno-scientific writing is not appropriate in such cases. Video, radio, TV, cartoons, posters, pamphlets, spoken presentations, maps, Primers all are preferable.

The conclusion is that FPIC should now be expected in all projects affecting Indigenous Peoples. FPIC is not yet agreed upon as being applicable to non-Indigenous Peoples. FPIC is a growing trend which should be supported with research, advocacy and concept development.

4.3 ICC (IBA)

Impact-Compensation Contracts (ICC)[xiv] are not yet as common and standardized as FPIC and SEA. ICCs are used more often in Canada and Australia. ICCs are a formalization and extension of what the proponent includes in standard ESAs, in the

sections called Management Plan, Mitigation Plan, Action Plan or Implementation Plan. These are a set of conditions set out in the ESA document agreed to by proponent and impacted people to prevent, reduce, mitigate or compensate for impacts, together with a budget and schedule. The specifics of who is responsible for implementing or fulfilling each condition (and when) also is an integral part. Grievance mechanisms are normally included. Best practice is to sign an ICC as the final step to achieving FPIC.

ICCs can split communities because different members or classes in the community may seek different goals. For example, Sosa and Keenan (2001) note: At times these divisions correspond to differences within the community in terms of economic activities (for example, farmers may be more opposed to mining than truck drivers), age (because elder people may seek to preserve traditional culture whereas young people may want jobs at the mine), gender (because work opportunities at mines have traditionally been more available to men, whereas women tend to carry the impacts of mining more heavily).

Contents of Standard ICCs

The ICC is a legal contract between proponents and impacted stakeholders. Normally the ICC has three main signatories: (a) the project proponent (and their financiers), (b) the potentially impacted stakeholders, and (c) the national regulatory agency. The national regulatory agency signs that it has examined the ICC and finds it meets all national requirements, and that it is fully recognized as a legal contract by government. The ICC should be vetted by government legal experts before signing, and formally notarized and lodged in the appropriate places. Government may want to guarantee the integrity of the ICC negotiations between the proponent and the impacted stakeholders, because international human rights norms are tantamount to a fiduciary responsibility of the governments in relation to development on Indigenous Peoples ancestral domains. Government may encourage the proponent to concede benefits to the community. Government may allocate a portion of its own statutory royalty stream also for the benefit of the community. The two principal parties to the contract remain the impacted stakeholders and the project proponent. The government is present essentially as an observer as a final check that national legislation and international treaties are respected. In addition, the government's ministry of environment, social and health ministries, and the agency responsible for Indigenous Peoples livelihoods also should attend relevant parts of ICC negotiations.

The ICC contains first the Environmental Management Plan *(EMP: see above)* extracted and augmented from the ESA. The EMP lists the main likely impacts together with actions to be implemented by the sponsor to prevent, mitigate, minimize or compensate for the impacts. The EMP is the action plan to guarantee that the surrounding people will not be harmed by the project, and if there are some uncontested minor harms, these are compensated for in manners acceptable to the stakeholders. The commercial aspects, such as protections, grievance mechanisms, environmental precautions both processes and substance, cultural/spiritual/religious/ historic site are also included. Performance bonds are included here as a means to foster conscientious implementation of the social and environmental precautions.

The second part of the ICC specifies the benefits that will flow from the project to the potentially impacted stakeholders (e.g., financial participation, royalties, profit sharing, rents, usage fees, interest) and employment, training and business arrangements. Health provisions and insurance, education, training, etc…

5. Independent Review

Independent Review of major projects is required by governments, MDBs and best practice. [xv] Independent review of a late draft ESA compiled by an ESA team working for the proponent is one of the mechanisms to foster adequate quality of the ESA and especially of its environmental management plan. Best practice engages independent Third Party consultants (e.g., Global Witness).

The reason independent reviews[xvi] are needed is to reduce any bias from conflict of interest between the ESA team and their paymasters. The pressures on even an independent ESA team are tremendous. It is practically impossible for an ESA team to say, we have assessed this project and advise you the proponent not to proceed, at least in its present design. The pressure on the ESA team is to say that there are a number of mitigating measures that need to be added to the design of the project before going ahead. Shoddy and unprofessional ESA teams may be very popular with proponents not concerned with social and environmental impacts. This is very short-sighted and usually leads to major delays and cost over-runs when major impacts glossed over in the ESA are subsequently revealed. The pressure to downplay problems is far greater than the pressures to be as frank as possible. To boost independence and to relieve the crushing asymmetry between the ESA team and their paymasters, a number of checks-and-balances are essential called for. These same pressures also act even more severely on the proponent's in-house E&S Unit. In addition, any differences between the in-house E&S Unit and the proponent can be clarified by the independent reviewers. That is the reason the PoE needs to care more for their professional reputations and less for their next consultancy.

Box: Checks-and-Balances to Promote Frank ESAs

Public participation
Government's Environmental Ministry
Financiers' Environment and Social Unit
Civil Society
Proponents E&S Unit
PoE
ESA Team's Professionalism
Independent ESA review before permitting
Inspection Panel
Grievance Mechanism
Ombudsman mechanism
Mediation/Arbitration

Local Courts National Courts

Duties of the Social and Environmental Advisory Panel:

Nowadays, most major projects,[xvii] especially infrastructure and certainly any contentious or risky projects, the proponent, or government agency approving the project or the borrower should engage an advisory panel of independent, internationally recognized, environmental and social specialists. . In many countries independent review is ensured via a government agency panel of experts. The Panel serves the agency and is paid for by taxpayers' money – or a fee paid to government by the proponent/sponsor. The purpose of such panels is to advise the project's in-house social and environmental unit and upper management on:

(a) The set of international corporate standards or best practice that the borrower or proponent adopts in this project
(b) Capacity strengthening for the project's in-house E&S Unit, training, dispute resolution, grievance mechanisms
(b) Screening: assigning an ESA category
(c) Selection of an independent ESA team
(d) ESA Scoping: Agreement on the ToRs for the whole ESA process. Agrees on key issues and methods for preparing the EA
(e) Recommendations and findings of the EA
(f) Integration of the EMP into the ICC
(g) Implementation of the ESAs recommendations
(h) Development of environmental management capacity in the implementing agency.

Terms of Reference for PoE

The ToR needs to provide acknowledged experts the opportunity, resources, and independence to examine anything they deem necessary. The ToR should be a facilitation document to legitimize what the experts deem is necessary.

The ToR should routinely include all the issues that should be dealt with in any S, such as: Risk Assessment, Social Assessments, Poverty Assessments, Climate Change Assessments, Human Rights Assessments, Indigenous Peoples Assessments, and Health Impact Assessments. ToRs can include the tables of contents of Social Assessments/EA/Health Assessments, or annex them.

While it is desirable that the responsible project agency craft ToR for the Panel before each mission, it must be clearly established that as an independent Panel of Experts, it not only must be able to look into any issues deemed important by themselves or the sponsor,

but need not justify such examination. Independence and capacity to look into any and all issues should be clearly stated in ToRs for such Panels.

6. Remedies

If a project proponent fails to fulfill its agreements or conditions as set out in the EMP and ICC, then the government permits to proceed with the project become null and void, and penalties may ensue. In certain cases, the government may renew the permits if the sponsor successfully implements actions that fully comply with the original agreement. In an internationally financed project, if the environmental or social agreements are violated, the financier may cancel or suspend project finance until agreements are fully met, and any damages caused by breaking agreements are restituted to the full satisfaction of the aggrieved parties. In addition, non-compliance with social and environmental undertakings may trigger performance bonds and industrial insurance. Failure to meet agreed standards in resettlement of humans is especially important in this regard. Normally, the proponents' in-house Environmental and Social Unit is the first to call the attention of the proponent to any likely non-compliance.

Complaints may originate from impacted stakeholders or their advocates. Community enforcement is the first line of defense in redressing grievance and promoting compliance. Government agency involvement in approvals, enforcement, monitoring and compliance is the second line of defense. The Government may decide to call for tribunals, arbitration or mediation in specific cases. The third line is resort to the local and national court system. In addition to these lines of defense, the PoE, Ombudsman, Grievance procedure, Community Liaison Officer, Corporate social responsibility office, Inspection Panel, or independent third party performance consultants also may point out impending non-compliance. This latter group often can act faster, as they are nearer the center of action. Practically all non-compliance can be resolved promptly by the latter group. If the latter group fails to resolve the issue, resort to official government procedures and the court system suggests that the non-compliance or grievance is systemic and grave. The rule-of-thumb in ESA work is to resolve issues as soon as possible and at the lowest possible level, bearing in mind that the more ponderous system remains available if resolution is not achieved.

Project proponents should provide prompt, effective and adequate reparation to those persons, entities and communities that have been adversely affected by failures to comply with UN norms (e.g., Global Compact), ESA, EMP and ICC contracts, approval conditions or permits, and other standards by means of reparations, restitution, compensation and rehabilitation for any damage done or property taken. In connection with determining damages, in regard to criminal sanctions, and in all other respects, these Norms shall be applied by national courts and/or international tribunals, pursuant to national and international law.

6.1 Grievance Mechanism

The goals of the grievance mechanism are first to obtain justice or seek redress and remedies for harms arising from the project; second, to foster accountability by the governments or companies who caused the harms; third to promote compliance with norms, standards, agreements and laws; fourth, to prevent similar harms in the future.

The grievance mechanism is set up by the proponent to be used by workers, their families, their advocates or other organizations, to raise concerns related to the project in the wide sense. The sponsor informs the workers of the grievance mechanism at the time of hiring, and ensures it is easily accessible to them. The mechanism involves an appropriate hierarchy of management such as the Community Liaison Officer, backed up by upper management as needed. Concerns are to be promptly addressed, using an understandable and transparent process that provides feedback to those concerned, without any retribution or retaliation. The mechanism should not impede access to other judicial or administrative remedies that might be available under law or through existing arbitration procedures, or substitute for grievance mechanisms provided through collective agreements (after EBRD 2008). Access to justice through legally established mechanisms, such as local and national courts, the Ministry of Justice, remain the important back-up to the in-house procedures. The proponent expects the grievance mechanism to resolve all complaints, but where this is not possible, then access to the courts or other means of seeking justice is available.

The grievance mechanism is normally managed by the proponents' in-house E&S unit, which compiles monthly and annual reports together with corrective actions to reduce similar harms in the future. The PoE scrutinizes the grievance mechanism in order that it functions effectively, and may take up any difficult cases with top management.

7. Human Rights

Human Rights [xviii]

Even in the social impact assessment arena, human rights is relatively new.[xix] International Best Practice is for project proponents to adopt publicly a specific set of Human Rights standards at the outset. The proponent will need adequate Human Rights professional expertise in-house to foster satisfactory following of the Human Rights standards. The fundamental dilemma is that the proponent seeks to reduce costs of community engagement and compensation as much as possible commensurate with preventing conflict. Although it is difficult to assess how much engagement and compensation is needed to prevent conflict, the rule of thumb should be that no force be used (e.g., no involuntary resettlement), that grievance mechanisms work effectively, that the ESA team is as independent as possible, and that the compensation be based on fully informed processes in which government and civil society have roles.

Human Rights Impact Assessment is a newer element of the ESA process, which ensures that potentially violating impacts are avoided in the design of an investment or development project, and ensuring that adequate and effective remedies are available,

both at the project and national levels, should such measures fail. Before a transnational corporation or other business enterprise pursues a major initiative or project, it shall, to the extent of its resources and capabilities, study the human rights impact of that project in the light of these Norms. The impact statement shall include a description of the action, its need, anticipated benefits, an analysis of any human rights impact related to the action, an analysis of reasonable alternatives to the action, and identification of ways to reduce any negative human rights consequences. A transnational corporation or other business enterprise shall make available the results of that study to relevant stakeholders and shall consider any reactions from stakeholders.

Many project supporters adhere to some or all ILO's labor standards. IFC follow two of ILOs labor standards, namely No. 29: Forced Labor Convention (1930), and No. 182: The Worst Forms of Child Labor Convention (1999). On the other hand, the rest of the World Bank cannot yet bring itself to ban slavery and child abuse in the projects they finance. The WBG does not promote ILO's Convention 87 on the Freedom of Association, nor Convention 98 on the Right to Collective Bargaining, Nor Convention 100 and 111 on Discrimination). The WBG has not been enthusiastic on collective action; in fact WBG-financed revisions of national mining codes have explicitly been anti-labor and industry-friendly in this regard.

ILO has useful standards on mine safety (No. 176: Safety and Health in Mines Convention, 1995), and on Indigenous Peoples (No. 107 Indigenous and Tribal Populations Convention, 1957 & No. 169 Indigenous and Tribal Peoples Convention, 1989). These have recently (September 2007) been updated by the adoption by the UN General Assembly of the Declaration on the Rights of Indigenous Peoples (amplified in the section on Indigenous Peoples).

7.1 Involuntary Resettlement

Involuntary resettlement is the unacceptable underbelly of economic development. More than any other issue, IR severely tarnishes the reputation of development. Without exaggeration, IR is the least satisfactory issue in economic development.

• Ten Reasons Why IR Undermines Economic Development

- First. IR is numerically gigantic, possibly 300 million people have been forcibly displaced in the name of economic development since it began in the 1950s. More than 10 million humans are displaced in the name of economic development every year by public sector projects alone.

- Second, displacement impoverishes practically all oustees. That means development -- or one element of it namely IR – actually increases poverty, rather than helping to reduce it as the most important goal of development.

- Third, the systematic use of violence as a routine tool of economic development is unacceptable in terms of justice, equity, economics, and human rights.

- Fourth, where force is used, economics does not apply. Development is supposed to be run on economic principles, especially willing seller and willing buyer.

- Fifth, any development agency relying on force or coercion violates basic human rights by any definition.

- Sixth, the reasons development resorts to violence are ignoble; it is cheaper to kick people out than to resettle them humanely. Development costs are reduced by sacrificing the poor.

- Seventh, the humans displaced by development are inevitably the poorest; were they not poor, they would have more voice and more likely to be left in peace.

- Eighth, violence is inequitable; it benefits the rich and harms the poor. The beneficiaries of the use of force are mainly the non-poor in distant cities who receive cheaper electricity from the reservoir from which the poor have been deracinated. Or shareholders in a mine which destroyed forests, rice terraces, and fish farms down slope.

- Ninth, IR is not yet systematically prevented by designing the development project to avoid have to displace anybody. IR must be reduced to a rock-bottom minimum becoming rare and numerically minor.

- Tenth, despite the well-known fact that practically all resettlement schemes are failures, the consistent policy is to continue or increase the use of force. No project should be permitted if it proposes to use force.

The current policy is that oustees shall be no worse off after their move. That aim for stagnation (no worse off) is not yet achieved. Even if the 'no worse off' policy were to be achieved, it has no time limit, so incomes may be restored a decade or so after the oustees have sacrificed themselves. Clearly the policy must be to ensure oustees are modestly better off (otherwise it cannot be called 'development') immediately after the moment their move is agreed on. A policy of being 'no worse off' immediately after their move also is unacceptable because people commonly have to wait for several years before their actual move. During that pre-move wait, as humans, they disinvest, defer maintenance, phase down their agriculture, and may even suspend education and health measures.

Economic development practitioners must be given incentives to guarantee that oustees shall immediately be better off by means of insurance, performance bonds, stiff penalties for impoverishing anyone, or a combination of such measures. Compensation shall be at such a level to ensure that any inevitable resettlement becomes voluntary.

The ESA must ensure that the project has been designed to avoid the need for IR. If a numerically small IR cannot, despite best efforts, be totally avoided, the ESA must ensure

that the incentives and penalties on the proponent will guarantee that the oustees will be promptly and unambiguously better off. The specific and detailed resettlement arrangements, timing, compensation, systems of incentives and disincentives must all be highlighted in the EMP and fully agreed on in the Impact Benefit Contract. This will promote FPIC and will end the use of violence in economic development.

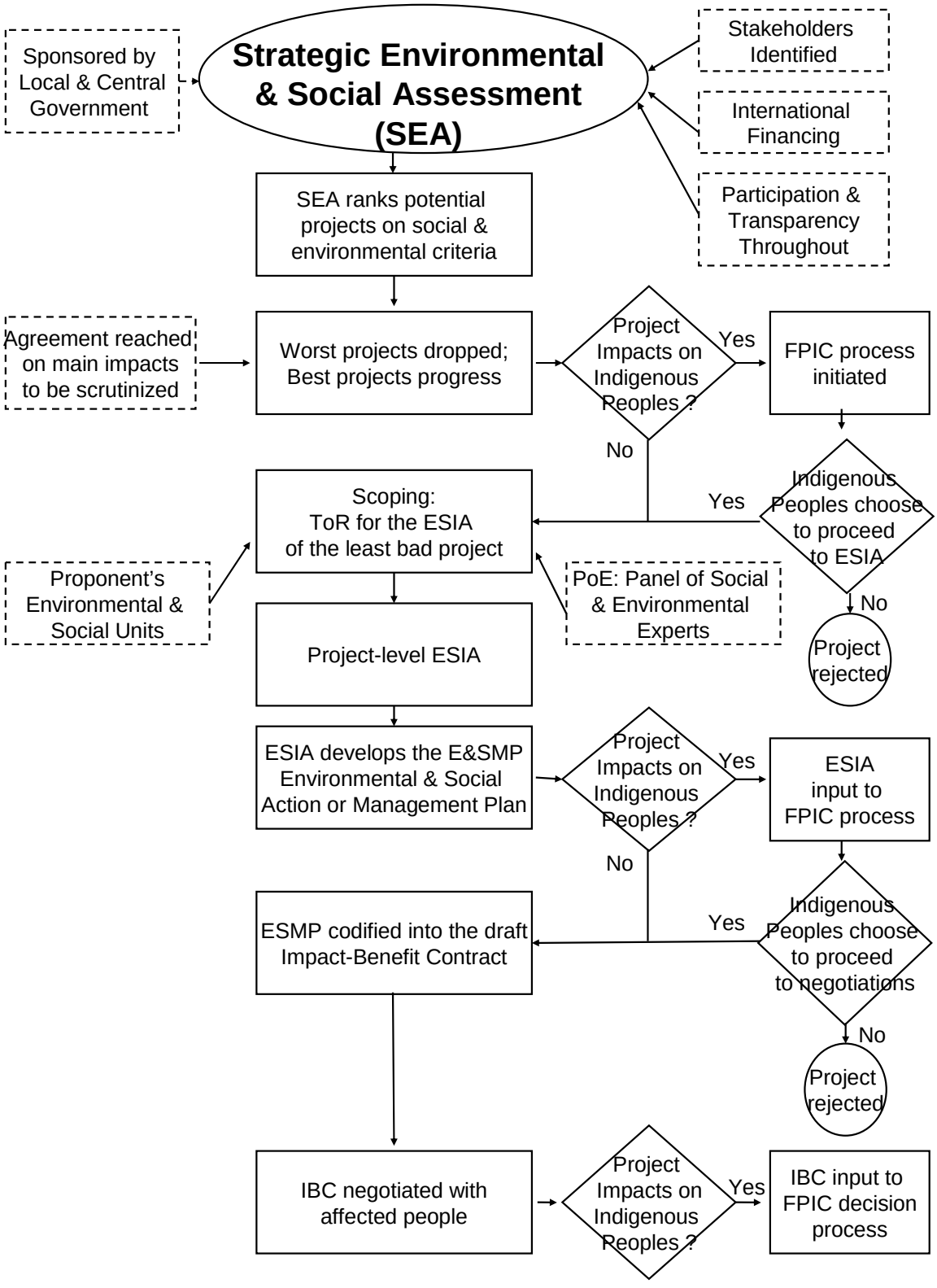
8. New Directions for ESA

8.1 Strategic ESA

The Strategic Environmental Assessment (SEA) is the most important improvement for the EA process in general. Because it is relatively new, SEA is not yet applied in all cases where it is needed. Project-level ESA is not influential in fundamental changes in the proposed project. ESA can improve a proposed highway or a coal-fired electricity plant, but it cannot promote a rail and a hydro-project instead. This deficiency led to the adoption of Strategic EA, first codified by the EU in 2001. SEA is ESA applied to project selection, policies, plans, budgets and programs -- before a specific project is selected. SEA can promote the selection of lower impact projects, such as a rail instead of a road. SEA predicts the impacts from a proposed policy in time to design out the more severe impacts. SEA applied to a sector ranks all proposals in that sector on the basis of their environmental and social acceptability, thus in the energy sector conservation and renewable energies would be promoted, while coal-fired and nuclear plants would be demoted. In a sub-sector such as hydro, SEA would promote run-of-river hydro-projects in rocky canyons with no storage, no resettlement and the least GHG emissions. By the same token, SEA would demote large reservoirs displacing many people, flooding many farms and much habitat and those generating much GHG by rotting vegetation.

The Kiev Protocol on Strategic Environmental Assessment, adopted in 2003 will require its Parties to evaluate the environmental consequences of their official draft plans and programs. The SEA is undertaken much earlier in the decision-making process than project environmental impact assessment (EIA), and it is therefore seen as a key tool for sustainable development. The Protocol also provides for extensive public participation in government decision-making in numerous development sectors.

As SEA was formally adopted by the UN Conference of Contracting Parties to the Abidjan and Nairobi Conventions, held in Johannesburg, South Africa, 5-8 November 2007 in the Joint Ministerial Declaration, we need to foster implementation. The EU Directive on SEA is being increasingly used outside the EU. Can one claim that if a Regional or Cumulative EAs are needed, then it would be best to start with an SEA instead? Ideally, SEA would become more frequent precursors of today's standard project-level EAs.


Strategic Environmental & Social Assessment (SEA)
Sponsored by Local & Central Government
Stakeholders Identified
International Financing
Participation & Transparency Throughout
SEA ranks potential projects on social & environmental criteria
Agreement reached on main impacts to be scrutinized
Worst projects dropped; Best projects progress
Project Impacts on Indigenous Peoples ?
Yes
FPIC process initiated
No
Indigenous Peoples choose to proceed to ESIA
Yes
Scoping: ToR for the ESIA of the least bad project
Proponent's Environmental & Social Units
PoE: Panel of Social & Environmental Experts
No
Project rejected
Project-level ESIA
ESIA develops the E&SMP Environmental & Social Action or Management Plan
Project Impacts on Indigenous Peoples ?
Yes
ESIA input to FPIC process
No
Indigenous Peoples choose to proceed to negotiations
Yes
ESMP codified into the draft Impact-Benefit Contract
No
Project rejected
IBC negotiated with affected people
Project Impacts on Indigenous Peoples ?
Yes
IBC input to FPIC decision process

8.2 Health Impact Assessment

8.2.1 Definition of Health Impact Assessment

Public health impacts of projects have long been a part of standard ESA, but they were rarely adequately assessed. Best practice for the last decades ahs been to separate out Health Impact Assessment (HIA) from standard ESA and to a more professional job. HIA has become the main tool to integrate health into all projects and policies. HIA is a combination of procedures, methods and tools by which a policy, program or project may be assessed as to its potential impacts on the health of a population, often the communities in the vicinity of a proposed mining project. HIA addresses all determinants of health, tackling inequities, and fostering participation and empowerment in health. HIA is a public health preventive foundation for improved health and wellbeing of people likely to be affected by mining proposals.

Health and Violence: The institutionalized use of violence by governments and mining corporations against humans "in the way" of minerals and mining projects is increasing and must be stopped as soon as possible. Violence means either humans are kicked out of their villages or their environments (e.g., forests, water bodies) are destroyed. One way is for stakeholders to adopt and follow a set of human rights norms and procedures as outlined elsewhere in this report. Another way is to include Health Impact Assessment (HIA) as part of the standard Social and Environmental Impact Assessment (ESIA).

HIA is important in the Philippines and elsewhere because when people are subjected to violence, their health is damaged. Health damage includes physical wounds (beatings, mutilation) and restriction of freedom (e.g., imprisonment, death). The HIA should assess the potential for the use of violence and force on communities one or near a proposed mining site. Involuntary resettlement is one of the most frequent instances of the use of force. In addition, such resettlement usually entails several or many years between displacement and restoration of previous levels of livelihoods. That means several or many years of enforced poverty for victims of displacement. Displacement-induced poverty promotes disease and dependency. Poverty ends as soon as the displaced people have as much money and goods (housing, home-gardens) in their new sites as they had before being displaced. Non-IPs are often traumatized by displacement but they may, at great cost and suffering, eventually get over it -- as livelihoods are restored, farms begin to yield, jobs are found, and social cohesion returns

The Special Case of Indigenous Peoples

For Indigenous Peoples, displacement is totally different and far worse. IPs are more attached to the environment than are non-IPs. IPs look upon their specific environment (e.g., forest, mountain, river) as part of themselves; "Mother Earth" is no exaggeration. For many, at least until recently, money was unknown or had little meaning. All IPs needs were satisfied by the environment. Shifting cultivation, combined with fishing and gathering forest products, was a sustainable way of life. IPs did not feel poor. Their

environments provided for every need. Shifting cultivation became easier as metal tools were acquired, but the link to their environment was absolute. Their knowledge made the environment sacred.

Sacred means entitled to veneration and respect because of dedication to purpose, namely to their livelihoods and total survival. Environment is sacred because it is their livelihood, hence must be protected against violation by reverence and a sense of right. That is why IPs often pine and die when displaced from their environments. International institutions (e.g., ILO, World Bank, ADB) have realized this fact so their policies accept that the project should be re-sited and the IPs living there left in peace.

Deracination of IPs is not just increase in poverty; it often means death of individuals and of their society. That is why ancestral domains should not be open for mining projects. Deforestation is akin to loss of livelihoods, hence is a profanity against their sacred respect for and dependence on the environment. Deforestation of a relatively small tract of forest does not harm the IPs greatly. They are resilient and will adapt in material terms to the loss. But their anguish is seeing the death and wounding of their sacred life-supports by such deforestation impoverishes and wounds their community. Deforestation means their rights have been violated, so the society will suffer. This may be translated into non-indigenous terms such as 'angering the spirits', and is extremely real to IPs. So real in fact that it damages their health.

The Asian Development Bank affirms that indigenous peoples' indeed have distinctive perspectives on poverty and development. The indigenous resource persons claim that powerlessness, deprivation from access to their land and resources, lack of knowledge (due to lack of education), insufficient income, and alienation from kin/clan and their culture form the key indicators of poverty. The most frequently mentioned causes of poverty among them are dislocation from ancestral domains and limited or no access to resources in their territories. Displacement is in turn caused by the intrusion of mainstream "development" projects and programs, militarization, and land-grabbing by settlers/migrants. Official information on ethnicity and development is extremely limited. However, available data reveal that indigenous peoples are not necessarily the "poorest of the poor" in the Philippines. Their regions are relatively wealthy, but extreme inequality, poor infrastructure, and massive exploitation contribute to the worsening poverty situation of these communities. (Rovillas & Morales 2002).

The HIA should assess the potential impacts on Indigenous Peoples of displacement before the decision about the mining project goes ahead. Based on the HIA, NCIP must advise the Department of Environment and Natural Resources (DENR) against such deracination. This is the over-riding health impact of mining on IPs.

Conventional Health Assessment

The other health impacts of mining on IPs are better known, and most are outlined in the preceding text. Mining means a large influx of workers carrying communicable disease, especially sexually-transmitted disease and HIV/AIDS. Miners cause violence,

prostitution, alcoholism and familial breakdown. Erosion and silt damages crop production, which reduces nutrition. Pollution such as acid mine drainage and cyanide, as well as leakage of heavy metals (e.g., mercury, lead, cadmium, arsenic, chromium, nickel, and copper) damages health and food production. Many such metals are cumulative poisons that accumulate up the food chain. The toxins are absorbed by plants that are eaten by herbivorous fish. These in turn are eaten by carnivorous fish. Carnivorous fish may accumulate mercury to levels poisonous to humans. Pregnant mothers and infants are especially susceptible to harm.

Public Health by Mining Corporations

Because it is in the interest of the project proponent to control infectious diseases in the region of the industry (e.g., malarial mosquitoes do not respect barbed wire security fences), permitting the outside community access to public health care will improve the health of employees. The standard package is inexpensive: immunizations, control of infectious diseases, treated bed nets, maternal and child health, TB, pneumonia etc. These programs can be enormous successes. Mine closure programs would ensure the sustainable devolution of the health services to the government or others.

While they can be progressive public health forces, mining projects can also cause serious health problems in the communities in which they operate. The government (e.g., DENR) needs to ensure that the mining does not impair public health – through, for example, prevention of air and water pollution, toxic effluents, acid mine drainage, tailings disposal risks, dam and other failures and leakages, and infectious diseases brought in by the corporation or increased by vector breeding sites created by the project. Sustainable development improves public health. If the mining harms health, it worsens poverty and prevents sustainable development. Therefore, by prudent design and education, health risks must be prevented to the fullest extent possible.

Where the health impact stems directly from the industry, (e.g., mercury or cyanide poisoning) health insurance for everyone affected by the project should be mandatory. The challenge of proving that the health impact stems from the project needs to be agreed upon, but with more presumption than hitherto on the side of the poor and vulnerable. The affected poor people themselves cannot be expected to legally 'prove' they have mercury poisoning, for example, as was denied in Minamata Bay for decades.[xx] Mining corporations naturally wants to avoid open-ended commitments. In 2002, U.S. coal corporations won their case against the United Mine Workers in the Supreme Court stating that they do not have to pay lifetime health costs of coal-related disease in coal workers who retired from other coal firms that were absorbed by modern-day corporations.

Trust is essential and much goodwill can be garnered by inexpensive measures. Health insurance needs to be securely vested because it has to continue long after mine closure in view of the long lag time between cause and effect. For example, asbestosis occurs years after exposure; coal's pneumoconiosis and silicosis may occur a decade or more after exposure. Compensation for project-related health damage may include disability

pensions, performance bonds, or trust funds, as appropriate. For example, the Anglo American Corporation is being asked to contribute to the $21 million STG Trust Fund for the 7500 victims of asbestosis in South Africa. Asbestos corporations are considering de-listing themselves from international stock exchanges possibly to distance themselves from regulatory scrutiny. China, which has developed the world's largest mining industry, announced in April 2002 that the sector had more than one million cases of silicosis. Obviously, therefore, prevention is always preferable to cleaning up a public health disaster after the fact.

8.3 Climate Change Assessment

Rich country polluters have been fully aware of their culpability for many years. The global impacts of climate change meant that nations had to be held accountable for the consequences of their actions. Climate change was first seen as a scientific problem, then an economic one. Now it is becoming a matter of international justice. Failure to take urgent action to curb climate change is effectively violating the human rights of people in the poorest nations. Emissions, primarily from developed countries, are exacerbating flooding, droughts and extreme weather events. As a result, harvests are failing and people are losing their homes and access to water. Human rights need to be at the heart of global climate policies. "Climate Wrongs and Human Rights" Oxfam International. September 2008.

As climate change is the most serious and pervasive environmental risk[xxi] in the world today, it must be internalized in economic development. Climate change is a typical environmental issue in that it is an externality, the world's greatest market failure. It is the responsibility of all ESAs to highlight major risks such as climate change. The magnificent IPCC Reports of 2007-8, in essence, are a strategic ESA of climate change, and the most detailed and comprehensive SEAs ever produced.

There is near-total consensus that preventing climate change risks is urgent and that the time is short. The world has to stabilize atmospheric CO_2 concentrations at 350ppmv in order to stay within the 2˚C temperature rise that is widely agreed as the limit if massive disruptions are to be prevented. The G8 agreement on 26 May '08 to halve GHG emissions by 2050, while a step in the right direction, must be strengthened ASAP. The IPCC finds that emissions cuts between 25 percent to 40 percent by 2020 are needed to stop global temperatures from rising so high they trigger widespread environmental damage. Exceeding 350ppm presages severe risks to civilization. The atmosphere in 2008 already contains 385 ppm of CO_2 and is increasing at 2% p.a.

How should climate change risks be assessed under the ESA?

- The first is to adopt meaningful and consensual GHG accounting. All relevant ESAs need to include from now on statements and data on how much GHG will be emitted or sequestered. Guidance on the amounts of GHG emissions likely to be associated with projects in different sectors is given in EBRD (European Bank for Reconstruction and Development) Methodology for Assessment of

Greenhouse Gas Emissions – Guidance for consultants working on EBRD–financed projects.[xxii] Each project should calculate its lifetime GHG emissions or GHG sequestered (e.g., by tree plantations).Calculations of shadow prices have been prepared for decades; they should be routine for GHGs by now. If much GHG is predicted to be emitted, the ESA should decline the invitation to finance the project, and should vigorously propose alternate designs of renewable energy.

- Any GHG emissions that cannot be prevented should first be minimized. That means no more financing coal from now on.[xxiii] Second, residual GHG emissions need to be fully compensated for by such means as sequestration, compensatory offsets and carbon trading. These must be integral parts of the projects, specifically in the EMP.

- Those nations choosing to ignore global efforts at reducing climate risks should be publicized by the WTO. The ESA should assess the risks of doing business with such nations.

Prevention is first. Stop emitting GHG into the atmosphere. Therefore, ESA should recommend against any new coal mine and coal-fired thermal generating plant which does not now capture and sequester its GHG. ESA should discourage the exploration of any more fossil fuels and the prompt phase-out of oil. Natural gas may be used as an interim bridging fuel if the science permits. As the science is evolving fast, natural gas projects should seek IPCC or similar guidance before committing themselves.

Reduce deforestation and forest fires.

Reduce industrial livestock production and its associated deforestation, methane emissions, as well as emissions of ammonia and nitrous oxide. Dr Rajendra Pachauri, Director General of IPCC urged us to consume less meat in order to reduce GHG emissions and to improve health.

Add Nitrogen trifluoride to the six Kyoto gases that need to be reduced as it is 17,000 times more potent than carbon dioxide. Much originates from nitrogen-based fertilizer.

Ban incandescent light bulbs, promote CF and especially LEDs

Accelerate mass-transit, bicycles and pedestrianism; incentives to reduce internal combustion, ban gas guzzlers; promote plug-in electrics. Prefer rail and canal transport over road and air transport.

Pay special attention in the ESA to cement manufacture.

Annexes

Panel of Experts

Selection of Experts

POE members should be senior professionals and undisputed leaders in their fields, with several decades of relevant experience. Specific experience is critical. It has to be fairly recent and it has to be appropriate to the sector or type of project being examined. A world class dam expert may not have kept up with the latest technology in pipeline technology, for example. POE's are too expensive to permit steep learning curves. Panelists should have more experience than project experts or consultants employed by the project. If the POE does not provide clear value added, it was not appropriately selected. Based on this leadership and experience, panelists should have individual scientific reputations built up over the years.

The reputation aspect is important in order to resolve judgmental and qualitative disagreements with project proponents, government, international finance institutions, and civil society. Panelists differ from Government staff and consultants in that the latter are more beholden to their employers and may be more biased. The names, addresses and affiliations of panelists should be appended to their reports, although they work in an individual capacity. Panelists have to be frank and will protect their scientific reputations as they know critics will argue with them. Panelists put their reputations for scientific integrity and independence on the line in drafting and signing their reports. Panelists need to be able to stand up to the project proponent in the face of negative findings. Regular consultants may tend to sanitize their findings in order to keep on being hired. Panelists should prefer to be frank and straightforward and should not depend so much on re-hiring.

Timing and Frequency

Ideally, the PoE should be appointed well before the project is identified following sectoral studies which normally rank potential projects in an order of quality. If the PoE can participate in the sectoral rankings leading to project selection, so much the better although this still is an exception. Certainly the PoE should be up and running before or at the latest as soon as the first project is identified.

The PoE works in the project area commensurate with need. If the in-house unit functions well and the project is not controversial, annual visits might be appropriate of say one week in the field. If the in-house unit is weak, or if there are problems with the ESA, the PoE may have to visit a few times a year. Once the ESA is going smoothly and there are no major problems, PoE should check on progress once a year during operation, through decommissioning and restoration. Any problem with which the in-house unit needs support, the PoE should be called in.

Annex **: Sustainability Assessment

Sustainability Assessment

Sustainability assessment is the newest element to be added to standard ESA. As it has not yet been adequately clarified, it is placed in an Annex apart from the more accepted and operational elements of ESA. Sustainability assessment has not yet become the norm.[xxiv] Sustainability assessment may be defined as the assessment of the sustainability of a proposed project. A more complete definition of sustainability assessment is assessment of proposed initiatives (projects, policies and plans) in terms of sustainability to determine whether or not approval should be given and under what conditions. The definition of sustainability is stabilizing in academia, but not yet in economics.

Brundtland Commission's report, Our Common Future, defines sustainable development as "economic development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs." Only by being so vague did the commission manage to garner international consensus that sustainability should be one of the topmost goals of development. However, since 1987, there has been inadequate agreement on an operational definition of environmental sustainability.

National Sustainable Development Strategies (NSDS) are called for in Agenda 21 and by the Implementation Plan of the 2000 World Summit on Sustainable Development. National sustainable development plans for OECD (2006) are "co-ordinated sets of participatory and continuously improving processes of analysis, debate, capacity-strengthening, planning and investment which integrates the economic, social and environmental objectives of society, seeking trade-offs where this is not possible". Implementing an NSDS would most likely consist of using promising, existing processes (e.g. PRSP) as entry points, and strengthening them in terms of key NSDS principles in the DAC policy guidance. See OECD/UNDP (2002).

The World Bank requires that all projects proposed for Bank financing are sustainable, but does not define sustainable. The WB's flagship publication of 2003 was on the priority of sustainability; that publication also failed to define what they mean by sustainable.

Sustainability auditing and Triple Bottom Line (TBL) reporting are different to sustainability assessment. Sustainability auditing and TBL are used to assess a company or organization's performance in terms of sustainability; sustainability assessment differs because it aims to integrate social, economic and environmental factors at appraisal, decision-making and management levels, rather than simply listing social, economic and environmental impacts and considering them separately. Furthermore, sustainability-based indicators, such as the Sustainability Indicators Project in Texas, have sought to increase regional awareness and commitment to sustainable community development, but such projects tend to focus on social factors and regional planning and often fail to

integrate social, economic and environmental elements within indicators. Indicators have been used as a reporting mechanism and differ from sustainability assessment, which provides appraisal of initiatives before approval as well as during the life of the initiative.

The four main types of sustainability are human, social, economic and environmental. These are defined and contrasted in Table**. It is important to specify which type of sustainability one is dealing with as they are all so different and should not be fused together, although some overlap to a certain extent. Specialists in each field best deal with these four types of sustainability. For example, social scientists have a lot to say about social sustainability; economists deal with economic sustainability and biophysical specialists deal with environmental sustainability.

Table 1.
Comparison of human, social, economic and environmental sustainability

Human Sustainability	Social Sustainability	Economic Sustainability	Environmental Sustainability
Human sustainability means maintaining human capital. Human capital is a private good of individuals, rather than between individuals or societies. The health, education, skills, knowledge, leadership and access to services constitute human capital. Investments in education, health, and nutrition of individuals have become accepted as part of economic development. As human lifespan is relatively short and finite (unlike institutions) human sustainability needs continual maintenance by investments throughout the lifetime. The start of human sustainability is fostered by promoting maternal health and nutrition, safe birthing and infant and early childhood care. Human sustainability needs 2-3 decades of investment in education and apprenticeship to realize some of the potential that each individual contains. Adult education and skills acquisition, preventive and curative health care may equal or exceed formal education costs.	Social sustainability means maintaining social capital. It lowers the cost of working together and facilitates cooperation. Trust lowers transaction costs, for example. This can be achieved only by systematic community participation and strong civil society, including government. Cohesion of community, connectedness between groups of people, reciprocity, tolerance, compassion, patience, forbearance, fellowship, love, commonly accepted standards of honesty and ethics. Commonly shared rules, laws, discipline, etc., constitute the part of social capital least subject to rigorous measurement, but essential for social sustainability. Social (sometimes called "moral") capital requires maintenance and replenishment by shared values and equal rights, and by community, religious and cultural interactions. Without such care it depreciates as surely as does physical capital. The creation and maintenance of social capital, as needed for social sustainability, is not yet adequately recognized Violence is a massive social cost incurred in some societies because of inadequate investment in social capital. Violence and social breakdown can be the most severe constraint to sustainability.	Economic capital should be stable. The widely accepted definition of economic sustainability is "maintenance of capital," or keeping capital intact. Thus Hicks' definition of income -- "the amount one can consume during a period and still be as well off at the end of the period"-- can define economic sustainability, as it devolves on consuming interest, rather than capital. Historically, economics has rarely been concerned with natural capital (e.g. intact forests, healthy air). To the traditional economic criteria of allocation and efficiency must now be added a third, that of scale (Daly, 1992). The scale criterion would constrain throughput growth -- the flow of material and energy (natural capital) from environmental sources to sinks. Economics values things in money terms, and is having major problems valuing natural capital, intangible, intergenerational, and especially common access resources, such as air. Because people and irreversibles are at stake, economics needs to use anticipation and the precautionary principle routinely, and should err on the side of caution in the face of uncertainty and risk.	Although ES is needed by humans and originated because of social concerns, ES itself seeks to improve human welfare by protecting the **sources** of raw materials used for human needs, and ensuring that the **sinks** for human wastes are not exceeded, in order to prevent harm to humans. Humanity must learn to live within the limitations of the biophysical environment. ES means natural capital must be maintained, both as a provider of inputs (sources), and as a sink for wastes. This means holding the scale of the human economic subsystem to within the biophysical limits of the overall ecosystem on which it depends. ES needs sustainable consumption by a stable population. On the sink side, this translates into holding waste emissions within the assimilative capacity of the environment without impairing it. On the source side, harvest rates of renewables must be kept within regeneration rates. Non-renewables cannot be made sustainable, but quasi-ES can be approached for non-renewables by holding their depletion rates equal to the rate at which renewable substitutes are created.

The Definition of Environmental Sustainability

1. Output rule:

Waste emissions from a project or action being considered should be kept within the assimilative capacity of the local environment, without unacceptable degradation of its future waste absorptive capacity or other important services.

2. Input rule:

- **Renewable resources**: (e.g., forest, fish) harvest rates of renewable resource inputs must be kept within regenerative capacities of the natural system that generates them.

- **Non-renewables**: depletion rates of non-renewable resource inputs should be set below the historical rate at which renewable substitutes were developed by human invention and investment according to the Serafian quasi-sustainability rule (see below). An easily calculable portion of the proceeds from liquidating non-renewables should be allocated to the attainment of sustainable substitutes.[xxv]

Annex **: The UN Århus Convention

The 1988 Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters is a new environmental agreement, linking environmental rights and human rights. The Århus (Aarhus) Convention establishes that sustainable development can be achieved only through the involvement of all stakeholders. It therefore links government accountability and environmental protection, by focusing on interactions between the public and public authorities in a democratic context to promote public participation in the negotiation and implementation of international agreements. The Aarhus Convention goes to the heart of the relationship between people and governments. The Convention is not only an environmental agreement; it is also a Convention about government accountability, transparency and responsiveness. The Convention grants the public rights and imposes on Parties and public authorities' obligations regarding access to information and public participation and access to justice.[xxvi]

Annex **: The UN Espoo Convention

The UN Convention on Environmental Impact Assessment in a Transboundary Context, also called the Espoo EIA Convention. Environmental threats do not respect national borders. Governments have realized that to avert this danger they must notify and consult each other on all major projects under consideration that might have adverse environmental impact across borders. The Espoo Convention is a key step to bringing together all stakeholders to prevent environmental damage before it occurs. The

Convention entered into force in 1997 sets out the obligations of Parties to assess the environmental impact of certain activities at an early stage of planning. It also lays down the general obligation of States to notify and consult each other on all major projects under consideration that are likely to have a significant adverse environmental impact across boundaries (From: www.unece.org/env/eia/eia_text.htm).

Annex **: The UN Global Compact

The Global Compact is a framework for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, the environment and anti-corruption. As the world's largest, global corporate citizenship initiative, the Global Compact is first and foremost concerned with exhibiting and building the social legitimacy of business and markets.

Business, trade and investment are essential pillars for prosperity and peace. But in many areas, business is too often linked with serious dilemmas - for example, exploitative practices, corruption, income equality, and barriers that discourage innovation and entrepreneurship. Responsible business practices can in many ways build trust and social capital, contributing to broad-based development and sustainable markets.

The UN Global Compact is a purely voluntary initiative with two objectives: The Global Compact is not a regulatory instrument – it does not "police", enforce or measure the behavior or actions of companies. Rather, the Global Compact relies on public accountability, transparency and the enlightened self-interest of companies, labor and civil society to pursue the principles upon which the Global Compact is based.

The UN Global Compact: Ten Principles

Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights

Principle 2: Make sure that they are not complicit in human rights abuses.

Labor Standards

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

Principle 4: The elimination of all forms of forced and compulsory labor;

Principle 5: The effective abolition of child labor

Principle 6: The elimination of discrimination in respect of employment and occupation.

Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges

Principle 8: Undertake initiatives to promote greater environmental responsibility

Principle 9:	Encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	
Principle 10:	Businesses should work against corruption in all its forms, including extortion and bribery.

Annex **: 'No Go' Zones

Sensitive Areas or No-Go Zones

As defined by "World Heritage and Mining"; IUCN/ICME 9/2000; See also Bishop et al. 2006, Dudley & Stolton 2001. These are called by the Forest Stewardship Council, the World Bank and others as "sensitive areas," "high conservation value" areas, and "No-Go" areas.

The five main types of sensitive area, valuable when intact, as they are, without extractive industries and whose value would be jeopardized by extractive industries are listed below. If the potentially affected communities reject the project on their lands, they would be off-limits. FPIC is a pre-condition. The important proviso is that offsets can be more valuable for local communities and for conservation, so the possibility of trade-offs is available in certain cases. Biodiversity offsets are conservation activities intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects (ten Kate et al. 2006).

The five main types of "Sensitive Areas" are:

1. Indigenous Peoples Ancestral Domains: or areas on which they depend (coalmines on Navajo lands show a sad exception).

2. Conflict Areas: No mining should be permitted in conflict areas or disputed areas because such permitting intensifies the conflicts. The EIR noted that 'The large economic rents generated by extractive industries may help provoke or prolong civil conflict. Indigenous peoples are particularly vulnerable' (p6). The review recommended that one of the 'core macro-governance' criteria in relation to mining should be 'the absence of conflict or of a high risk of conflict' and that in no circumstance should mining be permitted in areas involved in armed conflict.

3. Cultural property: Religious sites, archeological and historic sites, burial grounds, cemeteries, sacred groves, sacred mountains, sacred lakes, rivers and springs, spirit abodes or spirit dwelling places.

4. Fragile watersheds: such as those protecting a dependent project downstream (e.g., a tailings retention dam above irrigated rice). Riparian ecosystems important for conserving riparian services, especially water supply, irrigation and fisheries; Ramsar sites.

5. Biodiversity and endemism areas: or endangered species ambits, rare habitats, and intactness (e.g., coral reefs, tropical rain forest, remaining old growth, and wilderness). Specifically, mining should not occur in World Heritage Sites, World Biosphere Reserves, and IUCN I–IV protected areas or in any marine protected areas (categories I–VI). I-Strict Nature Reserves and Wilderness Areas; II-Natural Monument; III-National Park; IV-Wildlife Refuge; V-Protected Landscape/Seascape; VI-Managed Resource Protected Area. The Extractive Industries Review (EIR, 2003) recommended that mining not be permitted that "affect critical natural habitat, as defined in the World Bank's policy on Wildlands.

These categories are mainly suggestive of where especial scrutiny and agreement is needed before going ahead with a mine in such sites. The actual definition of and agreement on project-specific "no go" zones requires

stakeholder participation to assess the degree of risk or losses that potentially impacted stakeholders might be willing to accept. This process will be strongly influenced if an unambiguously compensatory offset is proposed and financed in perpetuity. The decision therefore is tightly linked to FPIC and the Impact-Benefit Agreement. The better understood physical risks to mining also apply, such as seismically active areas & cyclone-prone areas.

Annex **: Environmental and Social Exclusion Lists or Negative Lists

The quality and effectiveness of development can be improved and sustainability can be approached by not financing items and processes that undermine sustainable development. Such items and processes are compiled into "Negative Lists" which specify certain harmful activities, substances, materials and projects that the listing agency will not support. Most lists start with the obvious, namely, any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans will not be financed. This means that trade in goods without required export or import licenses from the relevant countries is not supported.

Then the lists become more specific:

- **Sinning unlikely to reduce poverty:**
  Gambling, casinos,
  Jewelry,
  The gem trade,
  Tobacco,
  Spirituous alcohol (excluding beer and wine).

- **Harmful or Risky Substances and Processes:**
  Certain biocides and chemicals (e.g., PCBs) including all hazardous substances subject to international phase-outs or bans"[xxvii];
  Narcotic and dangerous drugs;
  Nuclear energy & radioactive materials (excluding medical uses);
  Asbestos in any form, including its mining, transport (except removal and safe disposal), manufacture, sale, purchase and use;
  Weaponry & munitions.

- **Climate Change Risks:**
  Ozone depleting substances and all substances listed by the Montreal Protocol;
  The six Kyoto Protocol gases, plus nitrogen trifluoride;
  Incandescent light bulbs
  Gas guzzler vehicles (i.e.: vehicles not meeting EU & Japan emissions standards, or other prudent gas-mileage standards);
  Hydro-turbines for big dams as defined by WCD;
  Industrial livestock;
  Equipment or chemicals for deforestation;

Trade in timber from old-growth forests without certifiable compensatory offsets;
Plastic bags (Most nations have already banned or plan to do so shortly);
Excessive wrapping (difficult to ascertain cut-off threshold here).

- **Biodiversity:**
  Wildlife or products regulated under CITES or other relevant international conventions.[xxviii]
  Commercial logging in Tropical Rain or Moist Forests or any "Old Growth" forests, or trade in timber from such forests.

- **Sustainability of Marine Resources:**
  Shipment or storage of oil or other hazardous substances in tankers which do not comply with IMO or IMCO requirements;
  Flags-of-convenience;
  Single hulled tankers over 15 years old;
  Drift nets.
  Long fishing lines
  All marine-related procurement shall fully meet IMO and IMCO standards.

Literature Cited and Guide to Further Information

Abaza, H., Bisset, R. & Sadler, B. 2004. *Environmental impact assessment and strategic environmental assessment: Toward an integrated approach*. UNEP Geneva.

Aravossis, K., Brebbia, C. & Gomez, N. 2008. *Environmental economics and investment assessment II*. WIT transactions on ecology and the environment. Southampton: WIT.

Bhatia, Arvind Lal. 2007. *Sustainable environment and impact assessment*. Jaipur: Aavishkar Publishers.

Bastmeijer, C. J. & Koivurova, T. 2008. *Theory and practice of transboundary environmental impact assessment*. Legal aspects of sustainable development, v. 1. Leiden: Martinus Nijhoff Publishers.

Bass, S., Parikh, P. S., Czebiniak, R. & Filbey, M. 2004. *Prior Informed Consent and Mining: Promoting the Sustainable Development of Local Communities*. Washington, DC: Environmental Law Institute.

Calow, P. 1998, *Handbook of Environmental Risk Assessment and Management*, Oxford, UK, Blackwell Science.

CEAA 1999, *Cumulative Effects Assessment Practitioners Guide,* prepared for the Canadian Environmental Assessment Agency by The Cumulative Effects Assessment Working Group, Ottawa.

CIDA (2003), Strategic Environmental Assessment (SEA) Handbook (Draft), Canadian International Development Agency, Hull, Quebec.

Canadian Institute, 2003. *Successfully creating win-win aboriginal-energy industry joint ventures: bridging cultural gaps, negotiating impact benefit agreements and securing long-term success*. Toronto, Canadian Institute Publications.

Carino, Joji. 2005. Indigenous Peoples' Right to Free Prior Informed Consent: Reflections on Concepts and Practice. *Arizona Journal of International and Comparative Law.* 22:19-39.

CSIR, 1996. *Strategic Environmental Assessment (SEA): A Primer. Stellenbosch, Council for Scientific and Industrial Research*; CSIR Report ENV/S-RR 96001.

Dalal-Clayton, D. B., and Barry Sadler. 2009. *Sustainability appraisal: a sourcebook and reference guide to international experience*. London: Earthscan.

Dalal-Clayton B and Sadler B. in press. *SEA – A Global Overview*. London: International Institute for Environment and Development.

Dalal-Clayton B and Sadler B. 1998. *The application of Strategic Environmental Assessment in Developing Countries*. London: International Institute for Environment and Development (IIED), Environmental Issues Paper No.18.

Dalal-Clayton D.B. and Sadler B. 2008. *Sustainability Appraisal: A Sourcebook and Reference Guide to International Experience.* International Institute for Environment and Development, London: in association with Earthscan Publications.

Dalal-Clayton D.B. 2008. *Improving National Sustainable Development Strategies: The Experience of Peer Review*. Environmental Planning Issues No.28, London: IIED.

Dalal-Clayton D.B.& Wilson E. 2008. *A Sustainable Future for the Polar Regions:. Briefing Paper,* London: IIED.

Dalal-Clayton D.B. 2007. *Sustainable Development Strategies: International Experiences and Polar Challenges.* Conference on "Polar Regions: Opportunities and Challenges", UK Foreign & Commonwealth Office, Wilton Park, England.

Dalal-Clayton D.B. and Krikhaar, F. 2007. *A New Sustainable Development Strategy: An Opportunity Not to be Missed. Report of a Peer Review of The Netherlands Sustainable Development Strategy*. Council for Research on Spatial Planning, Nature and the Environment (RMNO), The Hague. www.rmno.nl.

Dalal-Clayton D.B. and Bass S. 2006. *A Review of Monitoring Mechanisms for National Sustainable Development Strategies*. Environmental Planning Issues No.27, IIED. Background Paper for OECD Workshop on National Strategies for Sustainable Development, Stockholm 31 Sept – 1st October, 2006. [also published as pp 95-135 in OECD (2007) *Institutionalising Sustainable Development*, OECD Sustainable Development Studies, OECD, Paris].

Dalal-Clayton D.B. (ed.) 2006. *Good Practice Guidance on Applying Strategic Environmental Assessment in Development Cooperation*. OECD DAC Policy Guidance Document. Development Cooperation Committee, Organisation for Economic Cooperation and Development, Paris.

Dalal-Clayton D.B. 2006. *Sustainability Appraisal: Challenges, International Experience and Future Directions*. Theme Forum Key Note Presentation, Annual Meeting of the International Association for Impact Assessment, Stavanger, Norway, 23-26 May 2006.

Dalal-Clayton D.B. 2005. *The French National Strategy for Sustainable Development: Report on a Peer Review and Shared Learning Process*. Ministry of Ecology and Sustainable Development, Paris. 24 March 2005. www.nssd.net.

Dalal-Clayton, D.B. 2005. *The French National Strategy for Sustainable Development: A Background Report (revised).* Ministry of Ecology and Sustainable Development, Paris. 20 March 2005. www.nssd.net.

Dalal-Clayton, D.B. 2005. *A Proposed Options-Based Methodology for Shared Learning and Peer Review of National Strategies for Sustainable Development (NSDS).* International Institute for Environment and Development. 19 March 2005. www.nssd.net.

Dalal-Clayton, D.B. & Sadler, B. 2005. *Strategic Environmental Assessment: A Sourcebook and Reference Guide to International Experience.* International Institute for Environment and Development, London: IIED, OECD, UNEP & Earthscan Publications.

Dalal-Clayton, D.B. & Sadler, B. 2004. *Sustainability Appraisal: A Review of Experience and Practice. Draft.* London: IIED. www.iied.org/spa.

Dalal-Clayton, D.B. 2003. *The MDGs and Sustainable Development: the Need for a Strategic Approach*, pp 73-92 in Satterthwaite D (ed) "The Millennium Goals and Local Processes: Hitting the Target or Missing the Point." London: IIED.

Dalal-Clayton D.B. 2003. *The EU Strategy for Sustainable Development: Process and Prospects.* Draft, IIED.

Dalal-Clayton, D.B. 2003. *Frameworks and Strategies for Sustainable Development*: UNDP Practice Note.

Dalal-Clayton, D. B. 2003. *National Strategies for Sustainable Development and the Opportunities for SEA.* EA Yearbook 2003. Institute of Environmental Management and Assessment, Lincoln and EIA Centre, University of Manchester.

Dalal-Clayton D.B. and Sadler B. 2003. *The Status and Potential of Strategic Environmental Assessment: An overview of SEA with a special focus on developing countries and countries in transition and its potential role as a key tool for strategies for sustainable development and poverty reduction*. Draft. London: IIED.

Dalal-Clayton, B. & Sadler, B. 1998. Strategic environmental assessment: A rapidly evolving approach (pp. 31-42). In: Donnelly A., Dalal-Clayton B., Hughes R. (eds.) A Directory of Impact Assessment Guidelines (Second Edition), London: IIED.

de Boer, J. J. & Sadler, B (eds.) 1996. *Environmental Assessment of Policies: Briefing Papers on Experience in Selected Countries*. Den Haag, Ministry of Housing, Spatial Planning and the Environment Publication No. 54.

Dijk, Judith M. van. 2008. *Water and environment in decision-making: water assessment, environmental impact assessment, and strategic environmental assessment in Dutch planning: a comparison*. Delft: Eburon Academic.

Dusik, J. (ed.) 2001. Proceedings of International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment. Szentendre, Hungary, Regional Environmental Centre for Central and Eastern Europe.

Dusik, J., Sadler, B. and Mikulic, N. 2001. Developments in strategic environmental assessment in Central and Eastern Europe in: Dusik, J. (ed.) Proceedings of International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment. Szentendre, Hungary.

Dusik, J., Fisher, T. & Sadler, B. 2003. Benefits of SEA: Briefing paper for UNDP and the Regional Environment Centre for Central and Eastern Europe. Szentendre, Hungary.

Ebbesson, J. 2002. *Information, participation and access to justice: the model of the Aarhus convention.* UNEP-OHCHR Expert seminar on human rights and the environment.

Environmental Law Institute, Oxfam America & Sociedad Peruana de Derecho Ambiental 2004. *Prior Informed Consent and Mining: Promoting the Sustainable Development of Local Communities*. Washington.

Elling, Bo. 2008. *Rationality and the environment: decision-making in environmental* politics and assessment. London: Earthscan.

European Commission, 1999. Guidelines for the assessment of indirect and cumulative impacts as well as impact interactions. Report prepared by Hyder for the European Commission DG XI, Brussels.

European Union, 2001. On the assessment of the effects of certain plans and programmes on the environment. Luxembourg, EU Parliament and EU Council, Directive 2001/42/EU. www.environ.ie/en/Publications/Environment/Miscellaneous/FileDownLoad ,1805,en.pdf.

Finnveden, G., Nilsson, M., Johansson, J., Persson, A., Moberg, A. & Carlsson, T. 2005. Strategic environmental assessment methodologies: Applications within the energy sector. *Environmental Impact Assessment Review* 23(1): 91-123.

Fischer, Thomas B. 2007. *The theory and practice of strategic environmental assessment: towards a more systematic approach*. London: Earthscan.

Gibson, Robert B., Selma Hassan, Susan Holtz, James Tansey & Graham Whitelaw. 2005. *Sustainability Assessment: criteria, processes and applications.* London: Earthscan.

Goldzimer, Aaron M. 2005. Parting shot: Counting the Costs: *Why projects should take environmental and social factors into consideration*. *LatinFinance.* (171): 47.

Goldzimer, Aaron M. 2008. Good Practice in Environmental Policy: a Civil Society Perspective. (28-32) in: *The new financiers and the environment: ten perspectives on how financial institutions can protect the environment.* Berkeley, CA: International Rivers.

Goodland, R. & H.E. Daly. 1996. Environmental sustainability: Universal and non-negotiable. *Ecological Applications*. 6: 1002-1017.

Goodland, R. 1995. The concept of environmental sustainability. *Annual Review of Ecology and Systematics.* 26:1-24.

Goodland, R. & Daly, H.E. 1996. Environmental sustainability: universal and non-negotiable. R. Goodland and H. Daly. *Ecological Applications.* 6(4): 1002-1017.

Goodland, R. & Daly, H.E. 2004. Environmental sustainability. in Thomas Seiler (ed.): Natur und Kultur 29-48. in German as "*Die Notwendigkeit und Dringlicheit Ökologischer Nachhaltigkeit."*

Goodland, R. 2004. Free, prior and informed consent and the World Bank Group. *Sustainable Development Law and Policy* IV (2): 66-75.

Goodland, R. 2005. Strategic environmental assessment in the World Bank. *International Journal of Sustainable Development* (September) 12(3): 245-255.

Goodland. R. 2007. The institutionalized use of force in economic development. (Chapter 23: 339-354) in: Soskolne, C. L, Westra, L., Kotze, L. J., Mackey, B., Rees, W. E. & Westra, R. (Eds.) *Sustaining life on earth: Environmental and human health through global governance*. Lanham, MD: Lexington Books (Rowman & Littlefield Publishers).

Goodland, R. 2008. *How the World Bank could lead the world in alleviating climate change*. With Simon Counsell. In: Westra, Laura, Bosselmann, K. & Westra, R. (eds.) Reconciling Human Existence with Ecological Integrity: Science, Ethics, Economics and Law. London, Earthscan.

Gouzée, N., de Dixmude A.J., Benabdallah B., Bernheim T., Brodhag C., Dalal-Clayton D.B. and Verbrugge G. (2007): *Stratégie Nationale de Développement Durable: Orientations pour la mise en oevre d'une revue par les pairs*. Organisation International de la Francophonie, Quebec, Canada.

Graves, Philip. 2007. *A critique of benefit-cost analysis*. London: Earthscan.

Green, Thomas L. 1998. *Lasting benefits from beneath the earth: Mining nickel from Voisey's Bay in a manner compatible with the requirements of sustainable development.* Prepared for the Innu Nation. www.innu.ca/tgreen1.html.

GTZ, 2007. *Strategic environmental assessments: Strategic frameworks*. GTZ, InWEnt SEA Training.

Hamilton, K and M. Mani. 2004, *Toolkit for Analyzing Environmental and Natural Resource Aspects of Development Policy Lending,* Preliminary Draft, 29 September 2004, Environment Department, World Bank, Washington DC.

Hoffman, M. (undated). Peace and conflict assessment methodology. Berghof Research Centre for Constructive Management, Berlin. www.berghof-handbook.net/articles/hoffman_handbook.pdf.

IAIA (2002), Strategic Environmental Assessment: Performance Criteria, Special Publication Series No. 1, *International Association for Impact Assessment.* www.iaia.org.

Hitch, Michael William. 2007. *Impact and benefit agreements and the political ecology of mineral development in Nunavut*. Ottawa: Library and Archives Canada.

ICMM, 2003. ICMM Principles. http://www.icmm.com/icmm_principles.php.

Insigne, Eugenio. 2007. The important role of free and prior informed consent (FPIC) in responsible mining. *6th Mining Industry Lecture Series*, Manila Golf & Country Club, Forbes Park, Makati City.

ISS (Indigenous Support Services) and ACIL Consulting. 2001. *Agreements between Mining Companies and Indigenous Communities*: A Report to the Australian Minerals and Energy Environment Foundation. http://www.ausimm.com.au/whatsnew/indigo1009.pdf#search='ISS%20%20ACIL%20%202001.

Keeping, J. 1998. *Thinking about Benefit Agreements: an Analytical Framework.* Northern Minerals Program, Working paper # 4. Yellowknife: Canadian Arctic Resource Committee.

Keeping, J. 1999. *Local benefits from mineral development: the law applicable in the Northwest Territories*. Calgary: Canadian Institute of Resources Law.

Kennett, S. [A]. 1999a. *A Guide to Impact and Benefits Agreements*. Calgary: Canadian Institute of Resources Law.

Kennett, S.[A] 1999b. *Issues and options for a policy on impact and benefits agreements for the Northern Territories.* Mineral Directorate, Department of Indian Affairs and Northern Development. Calgary: Canadian Institute for Resources Law.

Kerr, A. 2000. *Impact and Benefits Agreements as Instruments for Aboriginal Participation in Non-Renewable Resource Development. A Report on Selected Case Studies.* National Roundtable on the Environment and the Economy.

Lawrence, Shannon. 2005. Retreat from the safeguard policies: Recent Trends undermining social and environmental accountability at the World Bank. Washington, D.C.: Environmental Defense. www.edf.org/documents/4279_RetreatSafeguardPolicies_0105.pdf.

Leipprand, Tobias & Rusch, P. 2007. *Advancing the Extractive Industries Transparency Initiative (EITI).* Cambridge, MA: Harvard University, Kennedy School of Government.

MacKay, F. 2004. Indigenous Peoples' right to free, prior and informed consent and the World Bank's Extractive Industries Review. *Sustainable Development Law and Policy.* 4(2): 43–66.

Marchettini N, Niccolucci, V., Pulselli, F. & Tiezzi, E. 2007. Environmental sustainability and the integration of different methods for its assessment. *Environmental Science and Pollution Research International.* 14 (4): 227-228.

Marsden, S. 2008. *Strategic Environmental Assessment in International and European Law: A Practitioner's Guide*. London: Earthscan.

Mehta, Lyla & Stankovitch, Maria. 2000. Operationalisation of Free Prior Informed Consent. University of Sussex, Institute of Development Studies. Prepared for World Commission on Dams – Thematic Review I.2: Dams, Indigenous People and vulnerable ethnic minorities. www.dams.org/docs/kbase/contrib/soc209.pdf.

Morrison-Saunders, A. & Arts, J. 2006. *Assessing Impact: Handbook of EIA and SEA Follow-up*. London: Earthscan.

Mining Certification Evaluation Project (MCEP) 2005. Workshop on Free, Prior and Informed Consent. http://www.minerals.csiro.au/sd/SD_MCEP.htm.

Mŭrortberg, U. M., Balfors, B. & Knol, W. 2007. Landscape ecological assessment: a tool for integrating biodiversity issues in strategic environmental assessment and planning. *Journal of Environmental Management.* 82 (4): 457-470.

Muhi, Ana R. T. 2007. A critique of the Philippine free prior and informed consent guidelines of 2006. Quezon City, *The Legal Rights and Natural Resources Center, Issues Paper*.

Nakagawa, M. 2004. Overview of prior informed consent from an international perspective. *Sustainable Development Law and Policy.* http://www.wcl.american.edu/org/sustainabledevelopment/pdf/spring04sdlp_issue2.pdf?rd=1

Ní Bhroin, Niamh. 2008. *Ecological impact assessment (EcIA) of the effects of statutory arterial drainage maintenance activities on turloughs (EU code 3180)*. Series of ecological assessments on arterial drainage maintenance, no. 8. Dublin: OPW Environment Section.

OECD, 2006. Applying strategic environmental assessment: Good practice guidance for development cooperation. Paris, OECD, DAC Guidelines and Reference Series. www.oecd.org/dataoecd/4/21/37353858.pdf

O'Faircheallaigh, Ciaran. 1999. An Australian perspective on impact and benefit agreements. Northern Perspectives 25/26(4). www.carc.org/pubs/v25no4/4.htm.

O'Faircheallaigh, Ciaran. 1998. Resource development and inequality in Indigenous Societies. *World Development* 26 (3): 381-394.

O'Faircheallaigh, Ciaran. 1996. Negotiating with resource companies: Issues and constraints for Aboriginal communities in Australia. In: Howitt, R., J. Connell and P. Hirsch (eds.) *Resources, Nations, and Indigenous Peoples: Case Studies from Australasia, Melanesia, and Southeast Asia.* Melbourne and New York: Oxford University Press.

O'Reilly, Kevin. 1999–2000. Impact and benefit agreements: Tools for sustainable development? *Northern Perspectives.* 25(4). www.carc.org/pubs/v25no4/1.htm.

O'Reilly, Kevin, & Eacott, Erin. 1999. Aboriginal peoples and impact/benefit agreements: Report of a National Workshop. Yellowknife, Northwest Territories, Northern Minerals Program, Working paper # 7, Canadian Arctic Resource Committee (CARC). www.carc.org/pubs/v25no4/2.htm.

Parent, M. M., & Deephouse, D. L. 2007. A case study of stakeholder identification and prioritization by managers. *Journal of Business Ethics.* 75 (1): 1-23.

Partidário, Maria do Rosário & Clark, R. 2000. *Perspectives on strategic environmental assessment*. Boca Raton, Fla: Lewis Publishers.

Peloza, J., and L. Papania. 2008. The missing link between corporate social responsibility and financial performance: Stakeholder salience and identification. *Corporate Reputation Review*. 11 (2): 169-181.

Petts, Judith. (ed.) 1999. *Handbook of Environmental Impact Assessment.* Oxford, UK Blackwell Scientific. 2 vols.

Rauschmayer, F. & Risse, N. 2005. A framework for the selection of participatory approaches for SEA. *Environmental Impact Assessment Review*. 25(6): 650-666.

Retief, Francois. 2007. A performance evaluation of strategic environmental assessment (SEA) processes within the South African context. *Environmental Impact Assessment Review*. 27 (1): 84-100.

Runhaar, H. & Driessen, P. 2007. What makes strategic environmental assessment successful environmental assessment? The role of context in the contribution of SEA to decision-making. *Impact Assessment and Project Appraisal.* 25 (1): 2-14.

Sadeleer, Nicolas de. 2007. *Implementing the precautionary principle: approaches from the Nordic countries, EU and USA*. London: Earthscan.

Sadler, B., Aschemann, R., Dusik, J., Fischer, T., Partidário, M. & Verheem, R. (eds.) 2008. Handbook of strategic environmental assessment. London: Earthscan.

Sadler, B. 1999. A framework for environmental sustainability assessment and assurance (pp.12-32). in Petts, J. (ed.) *Handbook of Environmental Impact Assessment.* Oxford, Blackwell Scientific 2 vols.

Sadler, B. 2001a. A framework approach to strategic environmental assessment: Aims, principles and elements of good practice (pp.11-24). in Dusik, J. (ed.) *Proceedings of International Workshop on Public Participation and Health Aspects in Strategic Environmental Assessment*. Regional Environmental Centre for Central and Eastern Europe, Szentendre, Hungary.

Sadler, B. 2001b. EIA Reconsidered. (pp. 8-12) in: *Environmental Assessment Yearbook.* Institute of Environmental Assessment and Management, Lincoln and EIA Centre, Manchester.

Sadler, B. 2002. From environmental assessment to sustainability appraisal? (pp. 145-152). *Environmental Assessment Yearbook 2002.* Institute of Environmental Management and Assessment, Lincoln and EIA Centre, University of Manchester.

Sadler, B. and Verheem, R. 1996. *Strategic Environmental Assessment: Status, Challenges and Future Directions*, Ministry of Housing, Spatial Planning and the Environment, Publication No. 53, The Hague.

Stec, S. & Casey-Lefkowitz, S. 2000. *The Aarhus Convention: An Implementation Guide.* New York, United Nations.

Tapley, Brendan, Settles, P. & Brooke, R. 2008. *Sustainability assessment of global financial centre.* London: City of London. http://213.86.34.248/NR/rdonlyres/02CD4C6D-58CC-4F28-B5C1-0751DEDD6DD7/0/BCRS_OnlineSustainability Assessment of Global Financial Centres.pdf.

Therivel, Riki. 2004. *Strategic environmental assessment in action*. London: Earthscan.

UN FCCC 2008. Workshop on investment and financial flows to address climate change. http://unfccc.int/meetings/ad_hoc_working_groups/lca/items/4427.php.

Verheem, R. A. A., and J. A. M. N. Tonk. 2000. Strategic environmental assessment: one concept, multiple forms. *Impact Assessments and Project Appraisal* 18: 177-182.

Wolfson, C. and Beck, M. 2005. *Corporate social responsibility failures in the oil industry*. Amityville, New York: Baywood Publ.Co.

World Bank, 2006. Report No. 36946-PK, Pakistan Strategic Country Environmental Assessment (In Two Volumes) Volume I: Main Report South Asia Environment and Social Development Unit, South Asia Region.

Glossary

Impacts: An environmental or social impact normally applies to the effect of a human-induced action or a project related activity on the environment or on humans. Sometimes impact includes the effect of the environment or ecosystem on humans or on the project. direct, indirect, cumulative, regional, short-term and long-term effects; The EU (2001) includes: "these effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects".

Cumulative Impacts: 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.

Stakeholder: The term "stakeholder" includes stockholders, other owners, workers and their representatives, as well as any other individual or group that is affected by the activities of transnational corporations or other business enterprises. The term "stakeholder" shall be interpreted functionally in the light of the objectives of these Norms and include indirect stakeholders when their interests are or will be substantially affected by the activities of the transnational corporation or business enterprise. In addition to parties directly affected by the activities of business enterprises, stakeholders can include parties which are indirectly affected by the activities of transnational corporations and other business enterprises such as consumer groups, customers, Governments, neighboring communities, indigenous peoples and communities, nongovernmental organizations, public and private lending institutions, suppliers, trade associations and others.

Stakeholders includes anyone or any group interested in, potentially affected by, or which influence or might be influenced by the implementation of a project, policy or program. Normally, project-related stakeholders include: potentially impacted people, shareholders, internal staff (environment and non-environment) in financial agencies, development agencies, government, academia, labor syndicates, the private sector especially the proponent, NGOs, and civil society.

Human Rights: The phrases "human rights" and "international human rights" include civil, cultural, economic, political and social rights, as set forth in the International Bill of Human Rights and other human rights treaties, as well as the right to development and rights recognized by international humanitarian law, international refugee law, international labor law, and other relevant instruments adopted within the United Nations system.

[i] Cost-Benefit analysis still fails to address external costs. For example, climate change was called to world's biggest market failure as recently as 2007.

[ii] Economics still today largely fails to adequately accommodate scarcities in environmental services (e.g., reducing the environment's capacity to assimilate GHGs) and natural resources (e.g., loss of fish, forests and biodiversity) because external costs need monetary valuation in order for resources to be allocated. Internalization of externalities is possible only if scarcities are valuated monetarily. Then environmental scarcities could be tackled by cost-benefit analysis. The valuation of the externality called climate change by Lord Stern in 2007(?) has been roundly criticized by his profession.

[iii] In the case of the ESA for IFC's Bertin cattle ranching project in the Brazilian Amazon (2006?), the summary omitted some of the clearly most important (but controversial) points of the main text. As the summary was in English and the main text in Portuguese, the summary was misleading.

[iv] The main product of the ESA screening phase is the ESA Categorization. This a form of triage to ensure most attention is allocated to projects with major impacts, while less attention is paid to projects with no or minor impacts. Screening should be transparent and participatory. It is best done by a seasoned environmental professional generalist or small team, often the first-hired member of the proponent's E&SUnit, the PoE, and the first hired member of the future independent ESA team. Potentially affected people and their advocates and CSOs are best involved in this stage because it is exceptionally important to get the ESA process off to a consensual start. The governments and the potential financier's environmental unit staff also are usefully invited to participate in the screening. The most frequent mistake is classifying a project as a "B" when is should have been classified as an "A". Project proponents less interested in social and environmental impacts often sty to get B rating in order to prevent social and environmental scrutiny. That usually turns out to be a very expensive mistake. Many months of work can be lost and the affected people can become polarized against the project if it is mis-categorized at the outset of the ESA. In such cases, if the categorization is not rectified, the affected people may not support or agree with the draft ESA when it becomes available for discussion.

[v] It is important to get the ESA Screening correct because if a project is classified as a B when it should have been an A, there will be major public resistance and opposition when this becomes known, and much social and environmental damage may accrue as a result of the miscategorization. IFC frequently mis-categorizes the projects they want to finance. For example, conversion of mangroves to shrimp farming, conversion of forest for agrifuel palm plantations, conversion of forest to soy, cattle ranching and sugar agrifuels, and gigantic coal-fired electricity plants have all been erroneously screened by IFC recently as less than category A, which they clearly should have been.

[vi] The two Rules-of-thumb are first: certainly to include all four or so seasons in one year; second, that the ESA should take no less a time than the feasibility study into which the ESA must feed. Those should be the rock-bottom minima. If records show that there is great seasonal and biological variation on the project area, then another year of ESA, possibly at a reduced level of scrutiny reduces risk to manageable precautions. The *reductio ad absurdum* of agreeing on ESA duration is to ask if the ESA of a project in Washington DC has to be prolonged for 17 years in order to be sure to accommodate the extreme variation of the 13- and 17- year periodical cicadas (e.g., *Magicicada septendecim*) of eastern North America. Most biological changes relevant to the ESA are annual, at least in temperate and septentrional zones, such as annual Caribou migrations.

[vii] The Pelosi amendment (section 1307, 22 U.S.C. 262m-7) requires that the United States not vote in favor of any MDB action which would have a significant effect on the human environment, unless for at least 120 days before the date of the vote an ESA has been completed and has been made widely available (e.g., to the board of directors of the institution, to affected groups, and to local nongovernmental organizations. This requirement that the ESA be widely available to all concerned four months before the project can be voted on has become widely accepted internationally. It usefully provides time for comments on the adequacy of the ESA.

[viii] "Stakeholder Identification" is a tried-and-true procedure in social science designed to ascertain who precisely are stakeholders in the proposed project (Peloza & Pepania 2008; Parent & Deephouse 2007).

Stakeholders are heterogeneous. The government is often a powerful stakeholder, as are all shareholders. Stakeholders here is usually used to mean those people, or communities who may in future be affected or impacted by the proposed project in any way, directly or indirectly. People to be displaced by the project or those losing some of their holdings are clear stakeholders. Downstream riparians are an important group of stakeholders in a water project. Technically, a corporation is the relationship between the shareholders, management, and board of directors. The power relationship is asymmetrical, led by management, supported by the board of directors, with shareholders in last place. But shareholders have a voice in the corporation proposing the project and can foster accountability by means of resolutions at the AGM. Shareholders rights are increasingly exercised. Shareholders are more concerned with the overall reputation of the corporation, but that is made up from the projects it promotes. Shareholders resolutions at the Annual General meeting are becoming increasingly influential in improving the performance of the corporation. Annual meetings of shoddy corporations do the minimum required by law, try to prevent activist and trade union shareholders from presenting resolutions, and if they are presented drag their feet on implementation to the fullest extent possible. Best Practice corporations welcome resolutions from shareholders and are responsive to shareholders suggestions. BP corporations team up with activist shareholders as an effective hedge against uncertainty.

[ix] The standard term "social license to operate" means that the project proponent is operating with the general approval, or at least no objection of impacted people. A social license is tacit, rather than a formal process or certificate such as a government permit or an ICC (see below). Social licenses must be won by engaging with affected communities. Social licenses can be won and lost. This implies that affected communities can withdraw the social license by opposing the project. Throughout the life of the project, maintenance of a social license is by meaningful participation between proponent and stakeholders, an effective grievance mechanism and acknowledgement that redressal of wrongs or harms is successful. The social license is an improvement over the proponent not caring what the impacted people think, but its voluntary and tacit nature means it is not adequately powerful in all cases. A more effective process is winning FPIC and ICC (see below).

[x] In the case of Suriname's Bakhuys bauxite project, the ESA team working for BHP Billiton and Alcoa denied that the Amerindians using the forest covering the mining concession would be impacted because most of them lived on the edge or slightly outside the concession. In the case of India's Utkal bauxite project, the *adivasis* were systematically intimidated, beaten, maimed, falsely imprisoned and on several specific one occasions shot by state police in order to clear them out of the way of the mining (Goodland 2007).

[xi] UN Permanent Forum on Indigenous Issues (UN PFII), Working Group on Indigenous Populations/Communities in Africa, African Commission on Human and Peoples' Rights (ACHPR), UNEP Indigenous People's Website, International Fund for Agricultural Development (IFAD), Working Group on Indigenous Populations (WGIP), International Work Group for Indigenous Affairs (IWGIA), IPS Inter Press Service (News on indigenous peoples from around the world), Indigenous Peoples Center for Documentation, Research and Information (doCip)

[xii] *See* http://www.cbd.int/doc/publications/akwe-brochure-en.pdf.

[xiii] For example, the International Forum on Globalization and the Tebtebba Foundation hold a 2-day strategy session in Washington DC in late October 2008 to "actualize" the principles of UNDRIP.

[xiv]The terminology has not yet settled. In Canada, Impact-Benefit Contracts are also called Impact-Benefit Agreements, Human Resources Development Agreements, Socioeconomic Agreements, Participation Agreements, Cooperation Agreements, etc. Sometimes the name reflects the content of the agreement. The term here preferred is Impact-Compensation Contracts (ICC). Such payments used to be called *ex gratia* payments: a favor or benefit rather than a matter of right or the correction of a wrong. In the neutral sense, benefit means an improvement, an advantage or a good. But the wider meaning of benefit includes benefaction, a gift, an act of kindness, even charity. and that is not at all what is meant in the context of

ESA and ICC. Compensation means correction for a loss, indemnity, making up for a defect, with an element of equivalency, that the loss is balanced out by the corrective action. Specifically in ESA work, compensation recompenses the impacted person or community for residual impacts, those which have not been prevented by the ESA, even if they have been minimized. Compensation is commensurate with and makes up for such impacts. The term 'contract' seems preferable to 'agreement' in that a contract is more likely to be written, revised, discussed, debated and approved or at least acknowledged by parties apart from the proponent and the affected peoples.

[xv] The distinction between PoEs and IAGs is unclear and has much overlap. IAGs were establishes in about the year 2000. They were designed to reassure governments, and the international community that the project passes muster. So far they have been less technical than PoEs, more political and broader. Details in: International Advisory Group website, http://www.gic-iag.org. A Panel of Experts is required for all major projects. An IAG may be appointed for very controversial or politically sensitive projects.

[xvi] The Bank's "Inspection Panel" (IP), created in 1994, the aftermath of India's Narmada dam controversy, and is not at all related to the Panels of Social and Environmental Experts. The IP, housed inside the Bank and responsible to the Board, responds only to external project-level complaints. The Dam Safety panel is similar to the Panel of Experts (POE) in that it is mandated by Bank policy, works for the project sponsor, and is paid by the sponsor (see below). IFC's CAO Ombudsman compliance office was created in the aftermath of the BioBio dam controversy.

[xvii] For example the major Swiss mining corporation Xstrata convened a well-designed PoE for its Tintaya copper project in Peru eight years ago, and is convening another one for its Tampakan copper/gold mine in the Philippines before the ESA begins.

[xviii] On December 10, 1948 the General Assembly of the United Nations adopted the Universal Declaration of Human Rights (www.un.org/Overview/rights.html). The UN Human Rights Council is mandated to: "undertake a universal periodic review, based on objective and reliable information, of the fulfillment by each State of its human rights obligations and commitments in a manner which ensures universality of coverage and equal treatment with respect to all States; the review shall be a cooperative mechanism, based on an interactive dialogue, with the full involvement of the country concerned…." There are seven human rights treaty bodies that monitor implementation of the core international human rights treaties, such as: Economic rights (CESCR), Racial discrimination (CERD), Discrimination Against Women (CEDAW), Against Torture (CAT) & the Rights of the Child (CRC). The excellent 36-page booklet "The UN Human Rights Norms For Business: Towards Legal Accountability" (2004) outlines the UN's Human Rights Norms, and is the source for most of this section (www.business-humanrights.org). See also: Kothari, Miloon 2006. Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context United Nations Commission on Human Rights, Sixty-second session on economic social and cultural rights, CN.4/2006/41: 26 pp.

[xix] Human Rights is excluded, for example, from the World Bank's latest publication on environmental assessment (2008).

[xx] http://www.american.edu/TED/MINAMATA.HTM

[xxi] E.g., Nuclear proliferation, risks of famine, unstoppable environmental refugees, wars over scarce water and other resources.

[xxii] See also: http://unfccc.int/meetings/ad_hoc_working_groups/lca/items/4427.php

[xxiii] If coal-fired thermals eventually can capture GHG and sequester them prudently, this could change. However, capture and sequestration of GHG is unproven, seems to be a decade or so away, and will result in sharply more expensive costs of electricity, so should not be relied upon to any great extent.

[xxiv] There are good reasons that Sustainability Assessment has not yet become the norm, partly because governments, the UN, development agencies and economists cannot agree on a definition of environmental sustainability. For example, WDR 2003, the flagship publication of the World Bank Group focused entirely on development's priority of environmental sustainability could not provide a meaningful definition. If one does not define ones goal, it is difficult to meet the goal. What happened is that environmental sustainability became the dumping ground for all manner of desiderata, some important, some less so, but including many elements that have nothing to do with sustainability. Environmental sustainability in the literature sometimes includes such disparate elements as economic viability, social acceptability, or socially just or ethical (unclear to whom), "environmentally sound" (postpones definition to 'sound'), culturally appropriate, holistic, wise use, gender balance, stewardship, sufficiency. In fact, environmental sustainability is a rigorous and universal concept (Goodland 1995, Goodland & Daly 1996, Goodland & Daly 2004).

[xxv] www.wiley.co.uk/egec/pdf/GA811-W.PDF

[xxvi] www.unece.org/env/pp

[xxvii] Reference documents are EU Regulation (EEC) No 2455/92 Concerning the Export and Import of Certain Dangerous Chemicals, as amended; UN Consolidated List of Products whose Consumption and/or Sale have been Banned, Withdrawn, Severely Restricted or not Approved by Governments; Convention on the Prior Informed Consent Procedures for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention); Stockholm Convention on Persistent Organic Pollutants; WHO Classification of Pesticides by Hazard.

[xxviii] For example: Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention); Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar Convention); Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention); World Heritage Convention; Convention on Biological Diversity and Protocols.