

When and Where is Social Impact Assessment Required?¹

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Purpose of the Paper

The purpose of this paper is to identify those parts of the world where social impact assessment is required and what organizations, institutions and laws there are in place to carry out and enforce SIA practice. Some conclusions are drawn about expanding SIA practice.

To accomplish this purpose we contacted practitioners in countries where large mineral, water, petroleum and construction related projects were likely to take place or countries with private sector companies doing the exploration and development. We asked the following questions:

1. Does your country, state, province or other governmental unit have legislation that requires Environmental Impact Assessments—e.g., NEPA style legislation?
2. If they answered yes to the first question...” is there wording in the legislation to include the **social impacts on the human environment or human communities?**”
3. Are there specific agencies or governmental organizations that have a **specific requirement to do social impact assessment?** If yes, which ones?

If there are specific requirements to do social impact assessment, **how are the regulations or requirements enforced**, e.g., terms of references, to obtain a permit or by legally enforceable legislation? Many countries³ now have some type of environmental policy **legislation modeled after the original National Environmental Policy Act (NEPA)** legislation. We also received responses from the World Bank, the Asian Development Bank, the European Community (EU), the Canadian International Development Administration (CIDA) and the European Bank for Reconstruction and Development (EBRD).

There are other reasons beyond a legal or institutional mandate to undertake SIA. These include emerging approaches (a business case) aligning SIA with corporate social responsibility to minimize social risks and increase project social benefits, including the social license to operate and Free and Informed Consent based in human rights frameworks (Vanclay and Esteves, 2011).

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³ This paper documents mandates for a number of countries and organisations. It is not intended as an encyclopaedic listing. The authors would appreciate any suggestions for additions to the paper content.

The Prevalence of U.S. National Environmental Policy Act Type of Legislation

The U.S. President, Richard Nixon, signed the National Environmental Policy Act of 1969 (NEPA) on January 1, 1970. Under that law, proponents of development projects and policies that involved U.S. federal land, federal tax dollars or federal jurisdictions were required to file an environmental impact statement (EIS) detailing the impacts of the proposal, as well as project alternatives, on the physical, cultural and human environments. The NEPA legislation also required mitigation measures for impacts and a monitoring program to ensure that mitigation was actually working (NEPA, 1969). Very few members of Congress, the industrial development community, environmentalists, or indeed Nixon himself, foresaw how the new law would change the way the world community looked at environmental and social impacts of development.

A social scientist reading the U.S. National Environmental Policy Act (NEPA) of 1969 would pick out Section 2, calling for ... *a national policy which will encourage productive and enjoyable harmony between man and his environment ... and stimulate the health and welfare of man*,... as an implicit welcome to the social scientist in policy making. Further, in Section 102 (A), the NEPA legislation calls for the utilization of... *a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment*, in preparing an Environmental Impact Statement (EIS).

NEPA Legislation and the Trans-Alaska Pipeline Permit

In February, 1970, the Bureau of Land Management in the U.S. Department of the Interior submitted a six-page EIS statement to accompany the application for the Trans-Alaska pipeline permit. Two days later the Wilderness Society, the Friends of the Earth and the Environmental Defense Fund filed suit contending that the EIS statement was inadequate because it did not consider, for example, the consequences to permafrost of pumping hot oil through a pipe laying on the ground. In addition, no provision was made for disruption to the annual migration of several caribou herds due to the pipeline and the road that was to be built beside it. Although not specifically mentioned in the litigation, some observers wondered where all those construction workers and their families would be housed who came to work on the pipeline (Dixon, 1978:3). Three years later the permit to build the pipeline was issued. In the meantime, the EIS had grown from six pages to six feet. More importantly, most of the potential environmental problems had been addressed to the satisfaction of the courts, the plaintiffs and the Alyeska Pipeline Company (a collection of U.S. and Canadian oil companies that owned leases on Prudhoe Bay). Anticipatory planning had worked and all sides agreed that the NEPA (National Environmental Policy Act) process had allowed project proponents to deal with issues that might otherwise have been overlooked. Until the Exxon Valdez set sail on Prince William Sound in March of 1989, no unforeseen environmental damage could be traced to pipeline activity.

When is Social Impact Assessment Required in the United States and Canada?

The utilization and implementation of SIA has moved forward in an uneven manner among U.S. federal and state agencies. The numbers of environmental impact statements completed by agencies beyond the initial environmental assessment have greatly diminished since the 1990s, thereby limiting the opportunity to do SIA. Furthermore, the practice of SIA at the federal level has been hindered by the unfortunate equating of *social impact assessment* with *public participation* (PP) and *public involvement* (PI). Public involvement techniques are now well developed and are utilized by the land management agencies that prepare EIS statements. Unfortunately, administrators think that doing PI also meets the requirements for SIA. However, the biggest problem is the absence of legal mandates specifically requiring a standalone SIA or an integrated EIA-SIA assessment. While the original NEPA legislation required that social (human) impacts be considered, the 1986 U.S. Council on Environmental Quality (CEQ) guidelines did

not specifically mandate it. Fortunately, in developing their implementation procedures many U.S. Federal Land Management Agencies recognized the need for SIA and have included these requirements in manuals and handbooks. (Burdge, 2004, Chapters 6, 7, 14 and 17)

Both, the 1973 and the 1978 CEQ guidelines required the discussion of all potential impacts in EISs, and the courts specifically mandated that selected social components had to be included. However, the integration of social impacts in EISs only began in earnest during the mid-1980s. Prior to this time, economic benefits were expected to outweigh any negative effects of a proposed development (Freudenburg, 1986).

Since the passing of NEPA, the legal definition of the human environment in the U.S. has undergone substantial modification as a result of court decisions. The 1986 CEQ regulations required human environment to be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment (*U.S. Federal Register*, 40 CFR 1508.14). Thus, agencies needed to assess not only direct biophysical effects, but also aesthetic, historic, cultural, economic, social, or health impacts, whether direct, indirect, or cumulative (*U.S. Federal Register*, 40 CFR 1508.8).

While the CEQ guidelines, confirmed the requirements for an SIA component in EISs, it ruled that economic and social effects are not intended by themselves to require preparation of an EIS. However, when the preparation is required, that is when the project is deemed to likely result in significant adverse biophysical effects and economic or social and natural or physical environmental effects are interrelated, then the EIS will discuss all of these effects on the human environment (*U.S. Federal Register*, 40 CFR 1508.14).

A major development in 1994 and again in 2003 was the agreement upon and publication of the *Principles and Guidelines for Social Impact Assessment* (Inter Organizational Committee on Guidelines and Principles for Social Impact Assessment, 1994 and 2003). These guidelines provided direction for the implementation of SIA within U.S. federal agencies. These *Principles and Guidelines* also introduced affected parties to the SIA process, and allowed them to understand and contest SIA analyses and conduct their own investigations.

Although NEPA has the widest applicability, several other statutes and regulations directly or indirectly mandate SIA in the United States. These include *the Magnuson Fishery Conservation Act 1976* (as amended), *the Outer Continental Shelf Lands Act 1978* (as amended), *the Comprehensive Environmental Response, Compensation and Liability Act 1980*, *the Nuclear Waste Policy Act 1982*, and *the Superfund Amendments and Reauthorization Act 1986*.

Canada: Environmental Assessment and Review Process (EARP)

In 1973, a Canadian Federal Cabinet Directive established a process for environmental assessment involving federal activity. The policy initiative was updated and amended in 1977. In 1984 the Environmental Assessment and Review Process (EARP) Guidelines Order were issued. A 1989 Federal Court decision stated that the EARP Guidelines Order was a regulation binding on the Crown and, therefore, enforceable by the Courts. Following the Court decision Parliament began to develop a federal Environmental assessment Act. The outcome was the passage, in 1992, of the Canadian Environmental Assessment Act (CEAA). CEAA is now the basis for Canadian Federal EA and, since 1995, has replaced the EARP Guidelines Order.⁴

The term "environment" in the CEAA legislation is defined in biophysical terms with no reference to socio-economic components. However, the Act requires a consideration of a project's environmental effects and includes reference to an effect of a change to the environment (as defined in bio-physical terms) on "health and socio-economic conditions". In practice what this means is that there is only a legal requirement to examine impacts on health and socio-economic conditions if these impacts are a consequence of an impact in the natural environment.

⁴ Paul Scott, Director, Pacific and Northern Region, Canadian Environmental Assessment Agency provided historical details for this section in 2004. For more information on CEAA go to <http://www.ceaa-acee.gc.ca/>

Canada--The Canadian Environmental Assessment Agency

The CEEA oversees EIA but does not actually conduct it--Federal departments do. In the Northwest Territory, the Mackenzie Valley Environmental Impact Review Board has a specific legal requirement, stemming from the definition of "impact on the environment" that explicitly includes any social effects (MVRMA s111). Throughout most of the Northwest Territories CEED legislation has been superseded by federal EIA legislation called the Mackenzie Valley Resource Management Act (MVRMA). Different provinces and territories have other pieces of EIA legislation applicable to the lands they control within their regions.

Some Canadian Provincial EA processes require a direct assessment of socio-economic impacts. It is partly because socio-economic impacts tend to be more of an area of provincial responsibility, in that CEAA only has an oblique reference to the consideration of socio-economic impacts.

In the early 70s there was a proposal to build the Mackenzie Valley pipeline, to bring oil and natural gas from the Beaufort Sea in the Yukon Territory to Edmonton, Alberta. Between 1974 and 1978, Chief Justice Thomas R. Berger of the British Columbia Supreme Court conducted an extensive investigation into the environmental and social impacts of the proposed pipeline based on the 1973 process provided by the Canadian Federal Cabinet. The case represents the first time that the social effects of a development on indigenous populations were considered in depth. An extensive public consultation was implemented, in which native populations were provided funding to hold public hearings and present their views in their local dialect. As a result of this inquiry, the permit for construction was denied. The Mackenzie Valley pipeline is the first case where the decision not to proceed was based on social impacts (Gamble, 1978; Berger, 1983).

Although there are no overall guidelines for Social-Economic Impact Assessment (SEIA) in general in Canada, the provinces of British Columbia and Alberta set out the requirements for SEIA in the terms of reference for specific projects. However, British Columbia has recently developed a more generic approach (described in the Application Information Requirements (AIR) Template (2010)) located at <http://www.eao.gov.bc.ca/Guidance%20Documents.html>

Canada and Aboriginal Traditional Knowledge (ATK)

There is recognition that Aboriginal peoples have a unique knowledge about the local environment, how it functions, and its characteristic ecological relationships. This Aboriginal traditional knowledge (ATK) is now recognized as an important part of project planning, resource management, and environmental assessment (EA). Section 16.1 of the amended *Canadian Environmental Assessment Act* (CEAA), gives responsible authorities conducting an EA the discretion to consider Aboriginal traditional knowledge in any EA: "Community knowledge and **Aboriginal traditional knowledge** may be considered in conducting an environmental assessment." These principles are voluntary and intended to provide general guidance on the consideration of ATK <http://www.ceaa.gc.ca/default.asp?lang=En&n=4A795E76-1>

The Spread of Social Impact Assessment

By the 1990s most developed and some less developed countries, the European Union as well as international and regional donor and lending organizations had adopted or were considering SIA as part of their EIA requirements in national legislation or agency policy. Developers in both the private and public sector recognized the benefits of SIA and EIA. Even in the more development oriented ministries and agencies, there was recognition that SIA actually improved project implementation. Such recognition was due in large part to project failures resulting from inadequate appraisal based on narrow economic and technical criteria. The following pages review SIA requirements in some of these countries.

Mexico

The Mexican environmental regulations require an environmental impact assessment, but it does not include an SIA. The main reasons are as follows: 1). There are two Mexican public entities which are in charge of developing social and environmental issues . One is SEMARNAT (Ministry of Environment and Natural Resources) which is in charge of all kind of environmental problems. It is not related to social issues. 2). The other is SEDESOL (Ministry of Social Development) which is in charge of working on social problems such as poverty, public services and economic support among others. SEMARNAT does not have social experts and SEDESOL does not have environmental specialists. When SEMARNAT analyzes an EIA (done by the proponent) it emphasizes the environmental aspects and not social conflicts. While an EIA occasionally deals with social issues; the emphasis is almost always on environmental issues in the narrower sense.

Brazil

The EIA legislation is based on NEPA's requirements, but does not distinguish between government and private activities. All activities that are listed in the legislation with the potential to cause significant impacts must request an environmental license supported by EIA. A Resolution, (number 01/1986) of the National Council on Environment says that the "environment" must be addressed in terms of physical, biological and social aspects, and that the baseline for social environment must include land use, occupation, archeological, historical and cultural patrimony, socio-economic, and relations between communities and environmental resources. Brazil does not have specific requirements to do SIA, except for the general terms outlined within the resolution. However, Brazil uses social impacts to guide the mitigation and compensation for impacts that are linked to and caused by a proposed action. It has federal and state agencies and departments, each one with their specific mandates and competences. Brazil does have a scoping procedure, that sets the baseline and the range of impacts to be assessed. However, it does not have specific guidelines for SIA as social impacts are considered by the general legislation of the National Council on Environment. For details in Portuguese go to the website below. Article 6 does mention the socio-economic environment. <http://www.mma.gov.br/port/conama/res/res86/res0186.html>

New Zealand

SIA is mandated through national legislation requiring the assessment of environmental effects under a broad mandate of sustainability, with the term environment defined broadly to include the social dimension (Memon and Perkins, 2000). EIA was first introduced into New Zealand's formal planning system in 1974 with the Environmental Protection and Enhancement Procedures (EP&EP) and these were applied to a number of large-scale projects including energy developments in the late 1970s and early 1980s. During the mid 1980s, a major administrative restructuring of the public sector included a complete revision of environmental statutes—known as the *Resource Management Law Reform*—which culminated in the enactment of the *Resource Management Act of 1991* (RMA). Today most Impact Assessment (IA) activity in New Zealand is administered under the RMA (Fookes, 2000; Goodrich et al., 2000). Other legislation requiring SIA includes the Casino Control Act (2000) and the Gambling Act 2003). Further support is provided by the Local Government Act (2002). Under the RMA, proponents of almost all projects—unless the type of project is permitted as an activity by the relevant regional or district plan—have to submit an application for resource consent that includes an *Assessment of the Effects on the Environment* (AEE). In addition, the Act requires the assessment of environmental effects of regional and district plans and policies related to resource management. Under the Act, *sustainable management* means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well being and health and safety.

In addition, a “Fourth Schedule” of the RMA lists “Matters” that should be included in an assessment as, for example, any effect on those in the neighbourhood and, where relevant, the

wider community including any socio-economic and cultural effects and any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, cultural, or other special value for present or future generations.

The Act also mandates public involvement in decisions around policy, plans and resource consents. It requires consultation with interested and affected parties in the AEE and also policy and plan making processes, and provides for the rights of interested and affected parties to contest decisions on plans and consents through a submission and hearing process. Special requirements are made for the involvement of *Maori*, the indigenous population of New Zealand.

In practice, SIA has been applied to a wide range of projects and strategic (policy and plan) cases including mining, oil and gas developments, hydro projects, wind farms, irrigation, retail developments, tourism and casinos, housing, business parks, harbour developments, highways and waste management facilities.

Australia

At the Federal level the Environment Protection and Biodiversity Conservation Act requires an Environmental Assessment process which does not deal directly with social issues. However, The Department of Sustainability, Environment, Water, Population and Communities deals with environmental sustainability to include social and economic matters. Social impact assessment, when required, is left to the individual states.

<http://www.environment.gov.au/epbc/assessments/process.html>

Western Australia The Environmental Protection Act of 1986 establishes the Environmental Protection Authority for the State of Western Australia whose role is to protect the environment and abate pollution. A key EPA function is an EIA – under section 123 of the EPAct the EPA is empowered to prepare regulations for an EIA. Any proposal ‘likely to have a significant effect on the environment’ must be referred to the EPA—at screening step; they next decide if an EIA is needed or not. The decision outcomes of EIA are legally binding on proponent, and it is an offence to implement a proposal without EIA consent (once it has been referred to the EPA).

Reference to social impact assessment is somewhat limited. The definition of ‘environment’ (in section 3 of EPAct) means living things, their physical, biological and social surroundings, and interactions between all of these. For the purposes of the definition of "environment", the social surroundings of “man” are his aesthetic, cultural, economic and social surroundings to the extent that those surroundings directly affect or are affected by his physical or biological surroundings. This definition means that social impacts can only be considered which arise from some change (i.e. impact) to the biophysical environment (e.g. air or noise pollution, amenity, visual impact – but typically not well-being, lifestyle, broad community health, etc).

However, s4A of the EPAct which outlines the ‘sustainability principles’ arguably also could mean that a wider range of social issues are considered in EIA. Principle 2 on intergenerational equity and Principle 4 on improved valuation could be used to increase coverage of social impacts...4A. The object of this Act is to protect the environment of the State, having regard to the following principles: 1. *The precautionary principle*; Where there are threats of serious or irreversible damage, decisions should be guided by—(a) careful evaluation to avoid, where practicable, serious or irreversible damage to the environment; and (b) an assessment of the risk-weighted consequences of various options. 2. *The principle of intergenerational equity*. The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations. 3. *The principle of the conservation of biological diversity and ecological integrity*. Conservation of biological diversity and ecological integrity should be a fundamental consideration. 4. *Principles relating to improved valuation, pricing and incentive mechanisms* (1) Environmental factors should be included in the valuation of assets and services. (2) *The polluter pays principle*—those who generate pollution and waste should bear the cost of containment, avoidance or abatement. (3) The users of goods and services should pay prices based on the full life cycle costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any wastes. (4) Environmental

goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, which enable those best placed to maximize benefits and/or minimize costs to develop their own solutions and responses to environmental problems. 5. *The principle of waste minimization.* All reasonable and practicable measures should be taken to minimize the generation of waste and its discharge into the environment.

New South Wales In NSW the Protection of the Environment Administration Act (s12A) delegates environmental assessment to the NSW Environmental Planning and Assessment Act and S79C of that Act requires EIA's be done when a development application is being assessed.

http://www.austlii.edu.au/au/legis/nsw/consol_act/epaaa1979389/s79c.html

s4 of the Act (Definitions) says the term "*environment includes all aspects of the surroundings of humans, whether affecting any human as an individual or in his or her social groupings*". Thus, EA falls under the jurisdiction of the planners and the occasion of a development.

The State of Queensland The Queensland government through the Department of Infrastructure and Planning, is required to use Environmental Impact Assessments 'to assess development projects that have been declared significant'. The process may fall under the *Sustainable Planning Act 2009*, the *Environmental Protection Act 1994*, or the *State Development and Public Works Organisation Act 1971*, depending on the 'triggers' for assessment.

<http://www.dip.qld.gov.au/infrastructure/environmental-impact-assessment.html>

The environment is defined under Section 8 of the *Environmental Protection Act 1994* as:

- ecosystems and their constituent parts including people and communities, and
- all natural and physical resources, and
- the qualities and characteristics of locations places and areas, however, large or small that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community, and
- the social, economic, aesthetic and cultural conditions that affect or are affected by items mentioned above.

A social impact assessment is required for all projects declared significant under the *State Development and Public Works Organisation Act 1971* and for projects requiring an EIS under the *Environment Protection Act 1994*.

<http://www.dip.qld.gov.au/coordinator-general-projects/social-impact-assessment.html>

The department's Social Impact Assessment Unit is involved in all resource development projects requiring an EIS under either Act. Proponents must consult with the department's EIS project manager when conducting a social impact assessment.

The social impact assessment process, for all projects requiring an EIS, involves:

- understanding local and regional settings which may be affected by the project
- developing a stakeholder engagement plan
- scoping key elements of the social environment
- developing a robust methodology
- forecasting social changes that could result from the project
- assessing and estimating the significance of predicted changes
- identifying and managing potential impacts
- developing a monitoring plan to track implementation.

At the end of a social impact assessment, a thorough and well-researched *social impact management plan* should be prepared by the proponent. The plan should:

1. be a plain-English standalone document

2. summarise for all stakeholders the potential positive and negative impacts of the project, proposed mitigation and management strategies, and implementation actions
3. reflect the findings and recommendations of the project's social impact assessment, including results of community engagement
4. present a concise summary of the findings of the social impact assessment
5. be developed for the life of the project
6. promote an active and ongoing role for communities, local authorities and all levels of government through construction, operation and decommissioning.

A *Guideline to Preparing a Social Impact Management Plan* has been developed by the Queensland Government with the Queensland Resources Council and the Local Government Association of Queensland.

<http://www.dip.qld.gov.au/coordinator-general-projects/social-impact-assessment.html>)

European Union

The European Union EIA legislation is currently being revised (EU EIA Directive <http://ec.europa.eu/environment/eia/full-legal-text/85337.htm>) <http://climate-l.iisd.org/news/eu-launches-consultation-on-eia-directive/> .The existing wording does mention impacts to human beings and the environment. All European Union member States have a requirement in EIA legislation to implement the wording of the Directive 85/337/EEC as amended:

A description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

Impacts on populations tends *not to be* interpreted as requiring SIA. Instead, there is some socio-economic impact assessment (jobs) and some indication of which part of a population might be affected by project activities (e.g. noise, air pollution). In the Strategic Environmental Assessment (SEA) Directive, the wording is different “the likely significant effects (1) on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors;” Still the same requirement to examine implications for populations, but the term “*human beings*” is also used. The interpretation here is that SIA is not supported by legislation. However, health impact assessment (HIA) practice is significantly increasing and Environmental Assessment consultancies are gearing up to undertake HIA in the European Union. The same is not true for SIA.

United Kingdom

As with all European Union member States, the United Kingdom has a requirement in EIA legislation to implement the wording of the Directive 85/337/EEC as amended: “A description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.” However, at the moment, the UK is part-devolved. There is separate legislation for EIA in the devolved regions, Northern Ireland, Scotland, England and Wales. Some legislation is currently shared between England and Wales.

Spain

Follows the European directives regarding environmental impact assessment. There is little mention of social impacts included within country legislation.

Austria

Has implemented the legislation of the EU - for EIA (Directives 85/337/EEC and 97/11/EC) for SEA (Directive 2001/42/EC) into national legislation. The legislation includes impacts on the environmental issue "population and human health" - in practice and guidance these issues comprise health topics and aspects of recreation. The consideration/assessment does not include social effects to and extend as an SIA does (working places, cultural aspects etc.) SIA is not in the legislation and thus is not practiced in Austria

Sweden

Sweden has requirements on EIA and SEA that are relatively close to the wordings in the EIA and SEA directives for the European Union. EIA and SEA are regulated in the Environmental Code chapter 6.

§1-10 follows the EIA Directive § 11-18 and 22 follows the SEA Directive

Health is an aspect that will be included in EIA and SEA. While only SEA has a requirement in § 12 to assess "population" as one aspect among others. However, the interpretation of what should be included in the notion of "population" varies and generally "population" is not handled as well as other aspects such as water and landscape.

There is no specific requirements to do SIA. However, the mining industry and the wind power industry are doing SIA on a voluntary basis. One of the driving forces have been the Sami parliament and the Sami people in the Northern parts of Sweden.

Finland

In Finland there is legislation to include the **social impacts on the human environment or human communities?** EIA-law is at:

<http://www.finlex.fi/en/laki/kaannokset/1994/en19940468.pdf>

Land-use and building law has separate impact assessment requirements which include social and cultural impacts: <http://www.finlex.fi/en/laki/kaannokset/1999/en19990132.pdf> In Finland there is no agency with specific requirements to do SIA.

Estonia

In Estonia there is a Law of Environmental Impact Assessment and Environmental Management Systems. The details in an official bulletin in the Estonian language are at:

<https://www.riigiteataja.ee/akt/116112010013?leiaKehtiv> The legislation does mention the social environment but there are no specific requirements to do SIA and as a result no regulations or enforcement requirements.

South Africa

The National Environmental Management Act (No. 107 of 1998 - NEMA) mentions social impacts and points out that the State must respect, protect, promote and fulfil the social, economic and environmental rights of everyone and strive to meet the needs of previously disadvantaged communities. It states further that sustainable development requires the integration of social, economic and environmental factors in the planning, evaluation and implementation of decisions to ensure that development serves present and future generations.

The principles of NEMA in chapter 2 of the Act clearly states that environmental management must place people and their needs at the forefront of its concern and serve their physical, psychological, developmental, cultural and social interests. It states further that negative impacts on the environment and on people's environmental rights must be anticipated and prevented, and if this cannot be prevented, it should be minimised and remedied. It elaborates further on the equity of impacts, and the fact that vulnerable communities should be protected from negative environmental impacts. It refers to the principle that everyone should have equal access to environmental resources, benefits and services to meet their basic human needs.

The Mineral and Petroleum Resources Development Act (No. 28 of 2002- MPRDA) is the only environmental act that explicitly requires a social development output, in addition to a public participation process, in the form of a Social and Labour Plan.
http://www.saflii.org/za/legis/num_act/maprda2002452.pdf

Nigeria

Nigeria EIA legislation was enacted in 1992. The legislation contains the wording “impacts on human environment/communities and is administered by the Federal Ministry of Environment and National Environmental Standards and Regulatory. If an SIA is done, it is part of an EIA and does not receive much attention compared with biophysical issues. Approval or rejection is based totality on the EIA report as assessed by the EIA Review Panel.

Malaysia

The mandate for SIA in Malaysia is longstanding and comes through the EIA procedures under the Environmental Quality Act (1974) and the Town and Country Planning Act (1976). The EQA was endorsed by the National Policy on the Environment (2002), with objectives that support social, economic and cultural progress while enhancing quality of life and promoting environmental sound and sustainable development (Hassan, 2009). Non statutory procedures and standards of corporate responsibility also have played a part in developing SIA practice, given sometimes narrow interpretations of the legislation to limit the scope and application of SIA under the Act. Another avenue for practice is land use planning, which has seen the application of SIA in development of local plans, including preliminary development proposals and strategies. The Act was amended in 2001 to strengthen public involvement requirements (Rosly, 2009).

People’s Republic of China (China)

After many years of development strategies focused largely on economic outcomes, China shifted focus towards a broader perspective, with the China National Development and Reform Commission (Guideline of 2002) requiring social assessment in feasibility studies and development investments. This shift was complemented by the policies and procedures of multilateral lending and development agencies. Development of the practice of SIA in China, however, goes back to the 1980s The 2002 Guideline specifies the application of SIA as part of project assessment, particularly those characterized by “complex social factors, long-term social impact, notable social benefits, prominent social conflicts or major social risks” (Gransow and Price, no date). Since the Guidelines were developed practice of SIA has expanded considerably through the project cycle, including monitoring and evaluation, although, like most countries, this stage could be strengthened further. Sector specific guidelines are now used for water resource, oil and natural gas, civil airport and railway projects.

SIA in Bi-Lateral Lending and Aid Agencies

Multilateral lending and development institutions have been incorporating SIA into their policies and operations since the 1980s, done primarily in response to the recognition that lack of environmental and social considerations in the planning process could significantly jeopardize project success (Burdge and Vanclay, 1995).

The World Bank⁵

The major areas of social impacts of projects involving the Bank are the displacement of populations by major infrastructure projects and effects on indigenous groups⁶. In 1980, the Bank adopted a policy statement on involuntary resettlement. A directive on vulnerable ethnic minorities followed in 1982. Both of these social policies mandated mitigation of adverse effects. In addition, the consideration of gender was promoted in the early 80s, and became embodied in a policy statement in 1984. Policies promoting participation were also adopted.

In 1984, the Bank adopted a directive for project appraisal that included guidance on the social appraisal. This was defined as the investigation of the socio-cultural and demographic characteristics of populations likely to be adversely affected by a proposed project, the social organization of productive activities in the project area, the cultural acceptability of project design, its compatibility with intended beneficiaries, and the social strategy for project implementation (Goodland, 1999). Previous versions of these guidelines had only included economic, financial, commercial and technical appraisal. In 1987, regional environmental units were established incorporating groups working specifically on social issues and in 1992, a central unit devoted entirely to social development—the Social Policy and Resettlement Division was created.

The only binding requirements for SIA and planning exist for projects involving involuntary resettlement of indigenous peoples. Environmental Assessments (EA) and Social Assessments (SA) have developed as independent tools within the World Bank, with both a division of labour and independent departments. As a result of this administrative division, recommendations made by social scientists are not backed by an institutional authority like the recommendations of environmental assessments. Making the situation more complicated, the responsibility for the preparation of World Bank projects, including the conduct of SA and EA lies with the borrowing countries, which show varying levels of enthusiasm for public participation and Social Assessment in general, and rarely afford them high priority.

The World Bank does not prescribe standard procedures, techniques or reporting formats, but does provide guidance and training. In addition to “Dissemination Note 36”, containing brief guidelines for SA (World Bank, 1995), the 1991 official *Environmental Assessment Sourcebook* (World Bank, 1991) includes a section on Social and Cultural Issues in Environmental Review.

During the fiscal year of 1998, 141 SAs were reported to be underway. In addition to SA at the project level, social analysis has been applied at sectoral and national levels. As a result, stakeholder participation and, to a lesser degree, social analysis now plays a routine part in the formulation of the World Bank’s Country Assistance Strategies and economic sector work.

However, as Francis and Jacobs (1999 and 2001) point out, the quality of SAs and the influence they have on project design are often lacking. The Banks Quality Assurance Group reviewed a sample of 100 projects approved during 1997, in order to assess the impact of SA on project design. The group found that only in about half the cases, social aspects were treated adequately.

World Bank projects are categorized based on their impact on different categories and except for analytic and advisory projects, almost all other projects require some kind of SIA. It is an absolute requirement for reconstruction and infrastructure projects. The link below provides more detailed information on the subject.

<http://www.housingreconstruction.org/housing/Chapter21#Safeguard Policy Objectives>

For World Bank procedures on poverty and social impact analysis may be found at <http://go.worldbank.org/8PU2AC1710> The site also includes learning modules that are heavy in economic orientation and presentation with very little social science. The focus is on the

⁵ This section draws heavily on the materials from Goodland, 1999 and Francis and Jacobs, 1999 and 2001. The later was reprinted in Dale et al., 2001.

⁶ EIA and SIA in World Bank rhetoric are understood to refer solely to the identification of adverse effects at the project level. In Bank language, Environmental assessment (EA) and Social assessment (SA), in contrast, are seen as assessment in a more proactive and broader way. They include the assessment of policies and the analysis of all environmental/social change processes and impacts. Thus, from the early 1990s onwards, the terms EA and SA were generally used (Goodland, 1999).

distributional impacts of public policies, with particular emphasis on the poor and vulnerable groups and requires ex ante analysis of impacts (predicting impacts before the policy actually takes effect). This approach, is known as Poverty and Social Impact Analysis (PSIA) and is one among several World Bank tools to generate evidence that can inform the dialogue, debate and decisions on policy choices. The Poverty and Social Impact Analysis work program is jointly managed by the Poverty Reduction and Equity Group in the [Poverty Reduction and Economic Management Network](#) and the Social Analysis and Policy Team in the [Social Development Department](#).

South Asia and the World Bank

Most of the countries in South Asia have some kind of NEPA type organization. If a country does not have environmental legislation, the Bank requirement is still intact and some kind of SIA or EIA or SEA takes place before a project is started. If a country does have environmental assessment type organizations, the Bank usually hires an international consultant to work with these agencies on safeguard issues (e.g., income distribution) related to the project and conduct of an SIA or SEA or EA.

Afghanistan is the youngest of all, which passed its first environmental legislation in 2005.

http://www.afghan-web.com/environment/afghan_environment_law.html

The Asian Development Bank (ADB)

Has been incorporating social considerations in its decision making processes since the 1980s through a number of policies and guidelines (Asian Development Bank, 2001) including those on:

- The Role of Women in Development (since 1985);
- Cooperation with NGOs (since 1988);
- Human Resource Development (since 1989);
- Health and Population (since 1991);
- Involuntary Resettlement (since 1995);
- Poverty Alleviation (since 1998); and
- Indigenous Peoples (since 1998)

In 1992, the ADB adopted a *Medium-Term Strategy* that broadened the Bank's concept of project quality by placing equal emphasis on poverty reduction, human resource development, women's status in development and environmental objectives as on the importance of economic growth. Considerations of social issues were to be incorporated in decision making alongside fiscal and technical criteria (hitherto the main factors). A Social Dimensions Unit was established to support this new strategic focus, and to coordinate and promote the addressing of social issues and public involvement in project preparation and implementation (Asian Development Bank, 1994b).

An Initial Social Assessment (ISA) is required for all projects. The ISA identifies the affected populations; assesses the stages of development, needs, demands, and absorption capacities of various subgroups; and identifies the issues related to key social dimension aspects such as involuntary resettlement, indigenous peoples, poverty reduction, and women. If the ISA concludes that social issues are likely to be important, a social analysis is conducted. It examines all potentially significant socio-economic issues that may be important for determining the scope and content of a project and for determining the appropriate implementation arrangements, gender analysis and assessment of impacts on indigenous people are to be an integral part of this analysis. The ISA will also identify resources needed for an Indigenous Peoples Development Plan, should this be required.

General guidance on the incorporation of social issues is provided for Bank staff, officials, consultants and others involved in project and programming operations in the *Guidelines for Incorporation of Social Dimensions in Bank Operations* (October 1993). A *Handbook for*

Incorporation of Social Dimensions in Projects (Asian Development Bank, 1994a) supplements the *Guidelines*, and provides further guidance and detailed suggestions for the incorporation of social considerations at the project level.

Access to Asian Development Bank materials on SIA, rural appraisal and gender analysis is: <http://www.adb.org/Documents/Handbooks/Social-Analysis/default.asp> Search for relevant publications as there are many on gender issues in impact assessment. The above website will take you to the 2007 version of the Handbook for Social Analysis.

Although one of the early guide books and still one of the best on poverty and gender analysis in SIA. They include a selection of SIA measures as well as a rationale for each. Like the World Bank they use the term social analysis, which they point out is the same as SIA. ADB publications: <http://www.adb.org/Publications/default.asp> Checklists are at: www.adb.org/gender/checklists.asp For topics such as Education, Agriculture, Water supply and sanitation, Urban development and housing. Bank policy and examples of terms of reference for a gender specialist are located here. ADB supports equitable and sustainable social development outcomes by giving attention to the social dimensions of its operations. *The Handbook on Social Analysis, A Working Document* contributes to this endeavor by providing practical guidance to ADB staff, government officers, and consultants involved in programming, preparing, and implementing activities to effectively integrate social dimensions into ADB-financed operations.

CIDA—Canadian International Development Agency

CIDA follows the procedures outlined by CEAA, the Canadian Environmental Assessment Agency (CEAA). If SIA is required, it is done more for indigenous populations for an extractive sector EIA.

CDB--Caribbean Development Bank

The CDB does not have a formal requirement for SIA (SA), but has developed an SIA Manual to provide guidance for project appraisal. The inclusion of poverty reduction, enhanced status for women and job retention has prompted a need for social assessment during project appraisal. In two recent cases, projects have failed because social issues were not considered (Harrison and McDonald, 2003)

(EBRD) European Bank for Reconstruction and Development

Works in 29 countries of Central and Eastern Europe, the former Soviet Union, Mongolia, and Turkey. All countries have EIA legislation; however, in some countries' requirements are not as extensive as the U.S. NEPA legislation. EBRD does gap analysis against the European Union requirements to identify gaps in environmental assessment.

Summary of Where and Under what Circumstances SIA is Required

We were fortunate to receive responses to our questions from colleagues in many parts of the world. Our concluding comments are organized around the following areas:

1. Background information on Requiring Social Impact Assessment.
2. When do social impact assessments tend to get done?
3. What if any have been the key factors in the adoption and continued use of social impact assessment in the assessment process?
4. Failures and problems still limiting the use of SIA?
5. What can be done to expand the use of social impact assessment?

Background to Social Impact Assessment Requirements

- In 1979, a series of minor accidents led to a shutdown of the Three Mile Island nuclear power plant in the U.S. State of Pennsylvania. Area residents demanded an SIA be done before a restart. The courts ruled, however, that social impacts alone could not trigger an EIA, but an SIA could be done if environmental change led to alteration in the human environment (e.g., perception of risk) (Llewellyn and Freudenburg, 1989).
- In a review of sociological-psychological effects in the siting of solid waste facilities a similar conclusion was reached. Environmental alteration appears to trigger the requirement for SIA in developed countries (Edelstein, 2003).
- A strong legal basis is a key factor in successful institutionalization and use of SIA in the planning/decision process. To merely imply that social effects will occur is not sufficient. Legislation and regulations must clearly mandate SIA with provisions for rigorous enforcement. Most legislative requirements for SIA exist through resource management legislation that require an EIA.
- Indigenous people have played a crucial role in requiring SIA (e.g., Australia and Canada). Their interest in land and resources issues have tended to be subject to, and consistently expressed as being intensely human, historical, traditional, economic, spiritual, cultural, ritualized and social.
- Strategic Environmental Assessment (SEA) has become popular as an alternative to project specific EIAs, unfortunately, the approach has included only limited social impact assessment. Although, as noted above, there are examples of strategic applications in countries including New Zealand, Australia, Malaysia and China.

When do Social Impact Assessments Get Done?

- When social and economic impacts are defined as part of sustainability legislation.
- Required or not, local and regional community demand often calls for the SIA process. They want social impacts for their community to be considered in the planning and decision process along with biophysical impacts.
- In scattered cases, government ministers (or agency heads) will not make a decision on project consents and land use planning unless there is minimal evidence of social impacts.
- Government and proponents are finding that SIA, like public involvement, is prudent.
- When SIA has a well established legal and regulatory base and specific guidelines within agencies and departments dealing with extractive industries and large infrastructure projects , it tends to get done.
- When International Multilateral Aid, Lending and Donor agencies and organizations require an SIA.

- When project proponents and administrators of EIA see SIA as providing information on project benefits as well as negative impacts.

What Have Been the Key Factors in the Adoption and Continued Use of SIA?

- The creation of stand-alone agencies, or dedicated SIA sections within ministries and agencies, in selected countries, usually at the central or regional government level.
- Active processes and projects aimed at training and capacity building for SIA.
- Progress with the institutionalization of a social perspective in organizations such as the World Bank and the Asian Development Bank, where organizational and policy changes reflect a growing awareness of the importance of social factors in project success.
- The failure of projects based only on narrow Cost-Benefit analysis.
- The recruitment of non-economic social scientists in agencies and organizations and the allocation of resources to SIA and social development.
- The increasing acknowledgment of the social dimension of the environment in resource management and planning legislation in a number of countries; as well as increasing requirements for SIA and public involvement.
- Private sector interest in getting along with their business communities.

Despite such achievements, a number of institutional constraints still limit the effective application of SIA in planning and decision making. Rickson and others (Burdge, 2004) point out that, although IA was required by law and policy in many countries and organizations, limitations with the application of SIA by government decision-makers and responsible agencies existed with regard to 1) the range of projects that were made subject to SIA and 2) the influence SIA had within the planning and decision-making processes.

Failures and Problems Still Inherent in Limiting the Use of Social Impact Assessment

- Continuous poor representation of social scientists in planning, policy and research positions in resource management agencies as well as the absence of EIA-SIA classes in University planning departments.
- The subordinate position awarded to SIA within EIA legislation.
- Uneven application of SIA at different levels of government (central, state or provincial, municipal, council, shire, local). Proponents want and need consistency from jurisdiction to jurisdiction.
- The common attitude of treating SIA (and to some extent EIA) as an administrative hurdle rather than a beneficial planning tool.
- Lack of integration of SIA findings and recommendations within the decision making process (SIA not seen as integral to the planning/decision process).
- Limitations to the gains achieved in the World Bank, as the SIA or SA perspective was not institutionalizing in policy and procedure.
- A shortage of comparative and ex-post facto studies (sometimes called social follow-ups).
- Overemphasis of the biophysical dimension of environment within IA, and the domination of *analytical*, product-oriented approaches (Burdge, 2004 & Taylor, et. al, 2004., pp 12-21).
- The European Countries are now focused on strategic environmental assessment (SEA) in planning in an attempt to move away from project specific EIAs. Social impacts are not included in the SEA process.
- Disillusionment with SIA-EIA. Different stakeholders have different ideas on what is expected. For example, proponents want the opposition to go away while opponents expect Impact Assessment to prevent change from happening in their back yard.

What Can Be Done To Expand the Use of Social Impact Assessment ?

- Establish an agreed upon SIA methodology to include empirical indicators that can be measured in advance of and subsequent to the final decision.
- Hire more social scientist trained in analyzing empirical data as part of the assessment process.
- Seek funding to conduct ex-post facto studies of existing development projects to expand the base of comparative cases and documented evidence of actual cause and effect chains (social follow-ups).
- Require courses on both social and environmental impact assessment in university planning departments.
- Include aboriginal and Indigenous populations in the planning process.
- Change existing laws and regulations to include SIA in all assessment processes.
- Lobby IAIA to include social impacts in their Strategic Environmental Assessment process.
- Integrate the social and health impact assessment processes to overcome reductionism (Rattle and Kwiatowski, 2003) and unnecessary duplication of assessment processes.
- Insist that the international bilateral aid and donor organizations require both social and health impact assessment in addition to biophysical impacts.
- Provide support for local and regional professional networks and capacity building.

The existence of well functioning professional networks is an invaluable factor in the professional development and capacity building in, and providing support for SIA. As an example, New Zealand's SIA professional community has enjoyed the benefit of a network of impact assessment professionals for over three decades. An informal Social Impacts Working Group started in the early 1980s and began publishing SIAN the *Social Impact Assessment Newsletter*. The group evolved to form the Association for Social Assessment (ASA) in 1990, and later expanded to include all fields related to IA, and became the New Zealand Association for Impact Assessment (NZAIA) in 1998. For a time the Association published a quarterly newsletter *Impact Assessment New Zealand* (IANZ). Another example is the Malaysian Association of Social Impact Assessment, which arose out of a UNDB funded capacity building project and recently published a book on SIA in Malaysia (Ahmad et al., 2009). Professional networks, such as the International Association for Impact Assessment (IAIA) on the international level, have made invaluable contributions to capacity building for IA practice. The publishing of the *U.S. Principles and Guidelines for SIA* (Burdge, 2004) and the *International Principles for SIA* (Vanclay, 2003; Burdge, 2004) endorsed by IAIA, further legitimized the practice of SIA.

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Web sites for International Professional Associations on Environmental and Social Impact Assessment

-The International Association for Impact Assessment was organized in 1981 to bring together researchers, government employees, practitioners, and users of all types of impact assessment. www.iaia.org for purchasing *Impact Assessment and Project Appraisal* and joining IAIA.

-International Association for Society and Resource Management <http://www.iasnr.org/>

-International Association for Public Participation (IAP2) was established in 1990 to serve as a focal point for networking about public involvement. The journal is *Interact: the Journal of Public Participation*—www.iap2.org

-National Association of Environmental Professionals work on a variety of environmental planning issues. They publish *The Environmental Professional*. www.naep.org

-Home page of the New Zealand Association for Impact Assessment (NZAIA). <http://www.nzaiia.org.nz/>

-The website of the Western and Northern Canada Affiliate Office of the IAIA. Details on their activities, conferences, publications and membership. <http://www.iaia-wnc.ca/>

-The website of AQEI—Quebec Association for Environmental Evaluation. Includes references in French, English and Spanish. <http://www.aqei.qc.ca/>

United States Regulations, Content and Administrative Procedures

US Council on Environmental Quality may be found at <http://tis.eh.doe.gov/nepa/> The site has NEPA guidance, regulations, scoping procedures, and links to other US Federal agencies environmental programs. Also see Legal Requirements for Assessing Socioeconomic Impacts Under NEPA.

California DOT (CalTrans) Community Impact Assessment, part of their Environmental Handbook. 1997. Key topics: social, economic and public services impacts, land use, and growth. Available as a [PDF download](http://www.dot.ca.gov/ser/envhand.htm) at <http://www.dot.ca.gov/ser/envhand.htm>.

States with NEPA-like Environmental Planning requirements: <http://ceq.eh.doe.gov/nepa/regs/states/states.cfm>

National Environmental Policy Act of 1969 go to: <http://www.fhwa.dot.gov/environment/nepatxt.htm>

Canadian Regulations, Content and Administrative Procedures

Yukon Government. 1997 Department of Economic Development. *An Introduction to Socio-Economic Impact Assessment*. Contact: Librarian: Yukon Department of Economic Development, Box 2703, Whitehorse YK Y1A 2C6. Copies should be in the library of the Yukon Environmental Assessment Review board (YESAB) office in Whitehorse, Yukon Territory. (This monograph was designed as an introduction to the principles and practices of SEIA for decision makers and the general public in the Yukon. It does include a selection of Yukon project and policy studies containing SIA components. Very little on economic impacts, other than how employment data are analyzed by sociologists.

The website for statistics of the Northern Territory of Canada is: <http://www.stats.gov.nt.ca/> Detailed demographic and a lot of other stuff by community. The community profiles are excellent and provide much of the detail necessary for the baseline study/the Community profile.

Website of the Yukon Environmental Assessment Board is <http://www.yesab.ca/publications/guides.html> Includes electronic copies of their many publications and recent guidelines. Also details on how to do EIA.

Useful website in Canada for obtaining on hard to get socio-economic information is Socio-Economic Assessment and Monitoring: A Guide to Collecting and Using information for communities in Nunavut (also other Aboriginal communities) go to:

http://www.nunavuteda.com/english/publications/files/SocioEconomicMonitoring_FINAL.pdf

Other Countries, International Bilateral Aid and Donor Agencies and Environmental Ministries Social Assessment Procedures

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Donnelly, A., Dalal-Clayton, B. & Hughes, R. eds. (1998) *A Directory of Impact Assessment Guidelines* (2nd edn). London: International Institute for Environment and Development.

The New Zealand Ministry of the Environment has a range of information on recent publications and can be ordered on line through this link. <http://www.mfe.govt.nz>

SIA Procedures for International Bi-lateral Aid and Donor Organizations and Institutions

Access to Asian Development Bank materials on SIA, rural appraisal and gender analysis go to.

<http://www.adb.org/Documents/Handbooks/Social-Analysis/default.asp> Search for relevant publications as there are many on gender issues in impact assessment. The above website will take you to the 2007 version of the Handbook for Social Analysis—in draft form.

(One of the early guide books and still one of the best on poverty and gender analysis in SIA. They include a selection of SIA measures as well as a bit of rationale for each. Great on the linkage between environmental change and social impacts. Like the World Bank they use the term social analysis, which they point out is the same as SIA.) Go directly to ADB publications at <http://www.adb.org/Publications/default.asp> Checklists are at: www.adb.org/gender/checklists.asp For topics such as Education, Agriculture, Water supply and sanitation, Urban development and housing. Download Bank policy and also examples of terms of reference for a gender specialist.

-CIESIN. The Information Cooperative provides easy access to major data archives and resource centers that electronically share their catalog information (metadata) and actual data. It links well-established information centers and agencies from around the world, including the United Nations and many non-governmental organizations. Includes census data. GIS data and metadata sources. <http://www.ciesin.org/IC/info-home.html>

World Bank Social Analysis Source book (no date) provides a conceptual framework for social analysis and describes how task teams can incorporate its principles into project design, implementation, and monitoring and evaluation. The website below summarizes their social analysis activity.
<http://www.worldbank.org/socialanalysisourcebook/>

World Bank 1991. *Environmental Assessment Sourcebook :Policies, Procedures and Cross Sectoral Issues*. Volume 1. Environment Department. World Bank Technical Paper Number 139. World Bank, Washington, DC.

For World Bank publications go to <http://www.worldbank.org/reference/> Included are access to publications on SIA, EIA and gender analysis. There are many and the data base is searchable by country. Punch in “Social Analysis” to get to SIA related publications.

For World Bank procedures on poverty and social impact analysis go to <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPSIA/0,,menuPK:490139~pagePK:149018~piPK:149093~theSitePK:490130,00.html> The site also includes learning modules that are heavy in economic orientation and presentation. Not much social science.

Wikipedia on line may be found at http://en.wikipedia.org/wiki/Social_impact_assessment There is a limited amount of information about the field of social impact assessment. Lots of links including, strangely, the one to the Rabel Burdges former website.