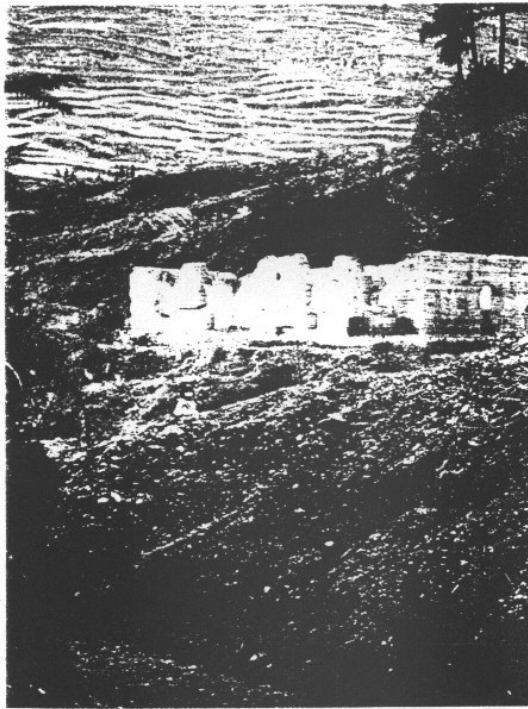


Coordinated by
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Strategic Management of Environmental and Socio- economic Issues

A Handbook



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Part II. Social impact assessment and sustainable development

2. Social impact assessments for sustainable regional development: techniques, uses and relevance

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Abstract

The paper is a brief review of the importance of social impact assessment (SIA) in environmental assessment (EA) procedures and discusses the relevance of SIA to the promoter, decision-makers and territorial communities; the stages and functions of SIA within an EA procedure and the tools available to measure social impacts. It is apparent that the integration of SIA to planning and sustainable development policies not only benefits the affected stakeholders and populations but also enhances the steering capacities of territorial development.

Introduction: Environmental assessment: a tool for sustainable development

Environmental assessment (EA) is considered an integral part of sustainable development (SD) objectives and strategies in both *Our Common Future* (1987) and *Agenda 21* (1992), among other references. Moreover, EA is an instrument of choice of many international organizations, such as the World Bank, and of governments, such as those of Canada and Québec, to reach SD objectives.

Establishing EA* mechanisms at national and international levels, however, does not insure that sustainable development of regions, cities and towns will follow. The idea is that there can be no real SD policy in the regional and local levels to satisfy basic needs of socio-spatial equity and environmental protection objectives. EA, integrated to the planning, development and management of both territory and environment, may then realize its

* Environmental assessment comprises environmental assessment of development projects, strategic assessment of programs and policies, and more recently follow-up assessment.

social learning* and dialogue potential between all the stakeholders** found on a territory. In this perspective, social impact assessment (SIA) becomes a fertile ground for social learning, provided it is integrated to a follow-up procedure. Thus, SIA is not just limited to ratifying social acceptability of changes, or to document its impacts on the quality of life of individuals and communities. Rather, it helps individuals and communities to better control these impacts (Gagnon et al. ,1993).

EA has been used for the last 30 years, on all continents, and its impact assessments have been applied to a variety of domains: technology, economics, culture, society, etc. What is discussed here, is the social impact assessment (SIA) aspect of EIA, evaluating effective and potential impacts on the life-style of individuals and communities as a result of planned changes. Social impacts are the main considerations as to whether proposals for development or change are to be accepted or not. In the SD context, SIA is a form of empowerment or learning process on the part of communities (Gagnon et al. ,1993).

Historically, EA was initially tried in the United States, at the beginning of the 70's, in the framework provided by the national environmental policy act (NEPA). From that time onward, many industrialized countries have included in their procedures and terms of reference the requirement to assess environmental impacts, beginning with projects and then progressively extending this requirement to programs and policies. As for SIA, it has always been the neglected part of assessment process (Burdge, 2001; Finsterbusch et Gagnon, 1996; Sadler, 1996; Kottak, 1985), even though social dimension is at the root of the legal definition of environment, at least in Canada and Quebec. Today, however, all EA stakeholders and experts agree of the importance of taking the social dimension into full account at all stages (before, during and after) of proposed change cycles. This has become a major issue and changes the very nature of EA.

Three questions will be raised in this paper: 1) the relevance of SIA to the promoter, decision-makers and local population; 2) the stages and functions of SIA; 3) tools available to measure social impacts.

The relevance of SIA to the promoter , decision-makers and local population

For promoters, public or private, and decision makers, what is the pertinence of making or requiring social impact assessments while, in theory, any development project is, according to them, an opportunity to improve life standards of a concerned population? For

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- By social learning, we mean a process by which all stakeholder's knowledge — technical, traditional, scientific or other — is shared, and where they agree to learn and negotiate.
 - They may be representatives from the public, private or community sectors, as well as individuals.

individuals, social groups or communities, whether or not they are affected by a project/change, what could be of interest to them in getting involved in an ongoing social impact assessment (preliminary consultation, scientific investigation, consultation, follow up)? And this, whether these impacts are expected or apprehended, direct or indirect, short or long term, in order to help identify/mitigate/control these as they impact their lives, values and culture. For them, what are the issues at stake in terms of social costs and benefits?

In answer to the above, the economic factor is important from the promoters point of view because SIA, as well as EA could lower the project costs. According to a U. S. study involving some sixty companies, "the average economic rates of return of projects that were socio-culturally compatible and that were based on an adequate understanding and analysis of social conditions were more than twice as high as those of socially incompatible and poorly analysed projects" (Kottak, 1985:328). In other words, for promoters who made use of preliminary consultation of the involved stakeholders of a territory, many collected comments and suggestions allowed either improvements on the project itself or its repercussions, or reduced negatively felt impacts. So, promoters, by taking territorial characteristics and local concerns into consideration, make their proposals more socially acceptable. In a context where promoters, private or public, present themselves as partners in territorial development projects, SIA becomes an ongoing process of negotiation between the various stakeholders, thus creating openings as a trade-off for improved control in the face of the proposed activity's uncertainty and risks.

"Decision makers and governmental agencies" may also set an SIA process into motion, or require one from the promoter. Such an initiative enhances a participatory approach, conflict prevention, concentration of the project benefits, decentralization and above-the-board decision making. There is another advantage that a better knowledge of the human environment and of the impacts from changes among local populations and individuals will give occasions to the decision makers and their experts to modify their decisions, as to its modalities and conditions, taking into consideration the local and regional reality, an integral part of an equitable development policy for the society as a whole.

In the context of sustainable development for communities, SIA is relevant to "local/regional populations" which are involved in an ongoing type of assessment and which are directly or indirectly affected by such an assessment. This is true in SIA as much as it involves them into learning to master their own life territory and to renew their knowledge base. In practical terms, this implies that recognizing social impacts and costs, corrective or compensatory measures, alternatives or variations to proposals, and letting local populations have an input on an external change and its consequences. Participation gives them a clear-

er vision on how to tackle problems and/or develop priorities for a territory and its communities. Putting into good use local population knowledge, in a way suitable to their learning participation, is not only the guarantee of a fairer distribution of wealth, but it is also one of the pillar of the economy of knowledge.

The stages and functions of SIA

Whatever the project may be a plant or national park, a road infrastructure development, or the establishment of a regional employment program, a big step in the methodology of SIA, as borrowed from Guidelines and Principles for Social Impact Assessment (1995), are as follows:

- identify and consult the stakeholders, as well as the individuals, groups and communities interested or affected by the change;
- describe the proposed move and define the human environment (the communities and the territories);
- propose alternatives or modifications to the initial proposal;
- determine the likely areas of influence within a territory as well as the community and human environment profiles;
- identify and document social issues, and anticipate the social impacts and possible reactions to these impacts;
- recommend modifications to the proposed action or alternatives, and propose mitigation measures;
- develop a follow-up program.

It should be reminded that the authors of Guidelines and Principles for Social Impact Assessment insist on the importance of including the groups and local population concerned and affected by the evaluation process and impact follow up. The consideration of various social points of view at all stages of a planned change is at the very core of SIA. However, such an assessment does not need to be designed by experts or consultants only. In the USA for example, in order to satisfy objectives of environmental justice and social equity, the Federal Actions to Address Environmental Justice in Minority Populations was issued in 1994, by decree. For the European Commission, the social cohesion parameter is included in the environmental assessment.

In literature, many SIA functions are identified, and it is generally accepted that they are as follows: determination of social and political acceptability, inclusion of social factors in the decision making process, environmental management, follow-up, and clarification of development options. To these accepted functions, another should be added to be consistent with the ultimate goal of development and SIA: the promotion of collective learning activi-

ties that includes the dynamics of change and environmental risks.

Tools available to measure social impacts

Once the basic steps of SIA have been determined*, it is time to choose the approaches, techniques and tools to use in order to do an assessment. Some types of social impact are complex, abstract and, therefore, harder to assess. However, this does not mean that the methodological tools to measure and understand them are inadequate or insufficient**. For example, assessing direct social impacts, such as job creation or affordable housing may easily be documented using national and regional statistics. The same methodological tools may be used even if we try to estimate net job creation following a social equity criterion, like employment distribution among social segments, defined by sex and age categories for example. In any case, whichever way, SIA is used, it requires a constant application as much during the conceptualization as during the technical phase.

In order to document social impacts and, more importantly, to situate these in their time and cultural context, researchers and specialists in social sciences may access a variety of databases or sources: literature, published reports, statistics, surveys, interviews, field observations, media, web sites, archives, maps, pictures, etc. It is suggested that more than one source can be used to allow for validation of these sources and field comparison. The exclusive use of a single method, such as "remote sensing" or "rapid appraisal", would run the risk of reducing social impacts to a series of statistics or observations.

There exists a full array of known research tools in the field of social impact assessment, such as the interview. This short presentation will be restricted to three not well known tools, but nevertheless up to par in taking the nature of social impacts into account and enhancing participation or partnership: 1) baseline study of the territories; 2) field observation; 3) geographical information system (GIS).

Baseline study of the territories

We define baseline study of the territories involved as a measure of the initial state of a given territory at one point in time of its evolution. What is meant by territory, here, is

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- SIA must be adapted to the prevalent cultural context, to the type of project and technology and its scope, as well as to the available material and financial resources.
 - Many consultants have underscored the difficulties studying social impacts, and have shown their dissatisfaction with existing tools (Boothroyd, 1995:61). The real problem, here, may be their inability to conceptualize and apprehend these tools. However, SIA applications have been going on for 30 years only, so that the level of knowledge still need building up, and the application of new tools, like the GIS, is largely unexplored for this type of application.

not a simple physical support for activities but rather the social, economic, cultural and environmental outcomes resulting from the stakeholders' activities. Furthermore, it is a mean to describe and provide a better understanding of the various social and economic components of a territory under study, and their interactions. It is also used as a reference that allows comparisons between time *X* and time *Y* to be made, in order to evaluate the changes that happened on a "territory".

Baseline study of the territories is not part of legal requirement of EA. However, it becomes a preliminary step when a comprehensive assessment of the social impacts is demanded by an approach. In sum, baseline study of the territories can be understood as an applied research approach whose object is, for example, the development of a follow-up model*.

Field observation

Field observation may vary from predetermined check-lists to participatory observation. Between these two extremes, SIA requires field observation which should be qualified as natural. In this technique, the researcher is an observer amongst others and perceived as such by all other participants. As such, he follows, in real time and on the field his observation units (social group, community organizations, or any combination of these) with regards to the human impacts associated to the planned change. This type of observation must extend over a sufficiently long time interval, parallel to the project time cycle (planning, consultation, implementation, follow up), to be able to grasp the stakeholders' dynamics.

Geographical information system

Environmental assessment generates a great deal of data and information. Impact studies alone furnishes information of encyclopaedic proportion which can be disjointed and costly. This shows the importance of having integration tools within the framework of social impact assessment for the purpose of compiling, analyzing and managing the information generated. This is even more true if this information is used at a later stage for ongo-

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- * In the case of the Alma aluminium smelter (www.uqac.ca/msiaa), the follow-up model tries to answer the following questions. Are the SIA identified impacts true? How efficient are the initiatives associated with impact mitigation? Are there some unforeseen but significant impacts? What are the learning and blockage processes of the stakeholders involved in the project? What should be the components of the next impact studies associated with an industrial project in an urban community? What approach and follow-up model could the managers and communities adopt to reduce negative impacts and create a "territorial added value", in line with sustainable local and regional development?

ing operations in urban and environmental planning and management. The geographical information system (GIS), with an access to databases, facilitates integration according to the type of data (economic, demographic, landscape, quality of life, etc.) with respect to the time frame. GIS, used together with user-friendly cartographic representation software, furthers data synthesis and spatial analysis. Maps then become a transfer tool to communicate research results.

Conclusions

Throughout, this short text, the relevance of SIA was demonstrated with respect to stakeholder types. Three types of methodological tools which would further SIA knowledge have been described, and the importance of an integrated method has been stressed. Integration of SIA to planning and SD policies pays attention to the concerns and expectations of the affected stakeholders and populations. Accordingly, it is only through the respect of this latter condition that SIA, as well as EA can be efficient at enhancing the steering capacities of territorial development.

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