Social Impact Assessment in the Environmental Sector: Health Network Support Guide

ABBREVIATED VERSION

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Direction de la santé environnementale
et de la toxicologie

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SUMMARY

Taking account that the social aspects allows to measure the human consequences of intervention projects on the environment. However, in Quebec, not a lot of legal guidelines, administrative or consensual suggest how to investigate these social situations.

This guide was developed by the scientific team on the environmental assessments of the Institut national de santé publique du Québec. It represents an abbreviated version of the guide published in French. The objective of this publication is to enable different actors involved in the process of impact assessment to understand the key elements and stages of the procedure for the assessment of social impacts. This guide helps to evaluate a social impact assessment, or to advise the implantation of the process so that they are robust and efficient.

The first chapter defines the concept of social impact by exploring its features and illustrating the words with concrete examples. This chapter outlines the social changes on the quality of life and social capital generated by the social impacts, as well as some factors that modulate the impacts, such as the determinants of health, social acceptability and risk perception.

Thereafter, the second chapter focuses on the definition of social impact assessment and its components. The roles and objectives of the evaluation are shown, as well as the circumstances of the assessment, data collection difficulties and the notion of citizen participation.

Finally, the third chapter presents the ten steps in the social impact assessment process, proposed by the Interorganizational Committee on Guidelines and Principles for SIA.

References and appendix are included in this tool, allowing the user to deepen their knowledge on various aspects of social impact assessment.

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INTRODUCTION

Activities that affect the environment also affect humans and the communities they live in. In environmental health, effects on physiological health are assessed using well-known approaches that have been thoroughly mastered. However, knowing how to assess the social effects associated with environmental matters has often been described as a need within Quebec's public health network.

More specifically, the environmental impact assessment framework points increasingly to the problem of social impacts. Development projects inevitably have repercussions on communities and individuals. Proper identification and assessment of those impacts make it possible to keep Quebecers healthy, within the broad definition proposed by the WHO. However, despite this unanimous observation, there are deficiencies when it comes to assessing the social impacts associated with development projects. First of all, the analysis is generally done by the proponents or initiators of the projects, and these professionals with varying skills may not always have the knowledge required to conduct this type of exercise. Second, the *Environment Quality Act* (EQA), which governs environmental assessments, does not have any special procedures for assessing social impacts. As a result, such assessments are less visible, and this explains why they continue to be secondary in certain comprehensive impact assessments.

This paper presents the highlights of the French version of the Guide. The first chapter provides a definition of social impacts and related concepts. More specifically, the different types of impacts are defined, as is the difference between social impacts, psychological impacts, and the other types of health impacts. Next, the main variables of social change are presented, i.e., quality of life and social capital, along with their modulating factors, including determinants of health, social acceptability, and risk perception.

The second chapter describes social impact assessment. The objectives of the process are presented, as are the various parameters to be considered, namely when the assessment should be done, the investigation techniques that should be used, and difficulties that are encountered most frequently. After that, the concept of citizen participation is looked at, along with the different levels of engagement since public engagement is central to the social impact assessment process.

The third and last chapter of this guide outlines the 10 steps in the social impact assessment process. For each step, the key elements are presented and a few examples are given. A table has been prepared to provide a quick overview of the steps in the social impact assessment process, the links between these steps and environmental impact assessment, and the general principles that characterize them.

The lack of quotations and references in this guide is the result of a summarization and plain-language exercise and arose from the desire to develop a practical guide that is easy to use. This guide is not a scientific document and must not be used as such. The references used in preparing this guide are cited at the end of the document.

1 SOCIAL IMPACTS

Social impacts consist of a wide range of effects within communities affected by development projects.[1] To demystify these various components, the first chapter of this guide defines certain key concepts. The two main social changes resulting from impacts are presented, along with certain factors that may modulate the intensity of the impacts.

1.1 DEFINITIONS

In order to fully understand the objectives of and steps in the social impact assessment process, it is important to fully grasp what an impact is, as well as the difference between social impacts, psychological impacts, and other health impacts.

1.1.1 Impacts

In environmental impact assessment, an *impact* occurs when a positive or negative effect is produced by an event or an action, during a given time and in a defined space, on the elements that make up a community and its environment.

Certain qualifiers are used regularly to describe the nature of an impact. For example, an impact may be *direct* if it results from a cause-effect relationship between a component of the development project and the environment and *indirect* if it arises from a direct impact in a chain of consequences.

An impact may also be *cumulative* if it results from a combination of impacts caused by a development project or by several interventions over time and *residual* if it persists after a mitigation measure has been applied. The intensity of an impact may vary as well. An impact may be *major* if, for example, it is felt over a long period of time, is irreversible, is difficult to mitigate, or generates significant cumulative impacts. Conversely, an impact may be *minor* if it is felt over a short period of time, is reversible, or generates few or no cumulative impacts.

1.1.2 Social impacts versus psychological impacts

This guide distinguishes between psychological impacts and social impacts. The expression “psychosocial impacts” is sometimes used in the literature, but it can lead to certain misunderstandings since it mixes up two separate concepts and has different definitions, depending on the author.

The field of psychology is concerned specifically with individuals. Consequently, *psychological impacts* are attributable to behavior, independence, judgment, reasoning, identity, capacity for resilience, and so on. They can be positive or negative. The most frequent psychological impacts in impact assessment are satisfaction, well-being, relief, stress, anxiety, anguish, despair, anger, and despondency.

[1] To enhance readability, the term “development project” is used as a synonym for the expression “planned development intervention” and refers indiscriminately to a policy, program, plan, or project. In connection with the environmental impact assessment and review procedure, only projects are assessed.

The social field, for its part, is concerned with group dynamics, which include the economic, political, legal, religious, and affiliation variants. Elements as varied as collective identity, the common good, democracy, participation, governance, and social struggles are included in this field of study.

In other words, *social impacts* refer to impacts on groups that may lead to changes in people's everyday lives (lifestyle), in culture (values, cultural confrontation, marginalization), in the community (cohesion, resources, social tension, violence), or in the political system. Other health impacts are also distinguished from social impacts even though they may arise from a similar source and be assessed at the same time. *Environmental impacts* are, by definition, broader than social impacts because they take in all of the beneficial and harmful effects a development project has on the environment, which includes ecosystems, resources, and the quality of life of individuals and groups. *Health impacts* refer specifically to the effects on human health that result from changes in the determinants of health. It is important to distinguish between these different types of impacts during the social impact assessment process.

These various definitions show that social impacts are diversified and present in most development projects. Now that these concepts have been clearly defined, it is important to look at the consequences they have within the affected groups.

1.2 SOCIAL IMPACTS OF CHANGE

Changes bring about social impacts in people's everyday lives, in communities, and in the political system. Of these various changes, quality of life and social capital are the variables affected most frequently.

1.2.1 Quality of life

According to the World Health Organization (WHO), *quality of life* refers to an individual's perception of his/her position in the world. This concept includes physical and psychological health, level of independence, social relationships, beliefs, and relationship with the environment. Quality of life is influenced by an individual's culture, values, expectations, and concerns.

In the light of this definition, quality of life is therefore not a synonym for good health because a person in poor health may have an excellent quality of life and vice versa. Measuring quality of life in the health field is concerned more with taking into account the viewpoints of the group of individuals being assessed with respect to several dimensions (physical condition, psychological condition, somatic sensations, and social status). Quality of life is a subjective and multidimensional concept.

1.2.2 Social capital

Social capital refers to the relationship that unites different individuals within a network. This dynamic takes the form of relationships of acquaintance and recognition. Social capital ensures membership in a group and stability in the form of various supports. This concept is

therefore defined by a precise function: that of shaping social interactions (or social action) within a society.

Social capital is found at various group levels, from family units to businesses and communities, as well as civil society. The most frequent changes in response to certain social impacts are in confidence, civic engagement, and social networks. For instance, loss of trust between two parties, the emergence of opposing groups (polarization of relationships), the forging of bonds, division, conflict, and tension are common manifestations of changes in social capital that can be identified through impact assessment. Social impacts can lead to major changes in quality of life and social capital within groups affected by a development project. However, these changes may vary in intensity depending on the community in question since they may be modulated by certain factors.

1.3 FACTORS MODULATING SOCIAL IMPACTS

As with other types of impacts, social impacts can vary in intensity depending on the community or group affected by them. These differences can be explained by certain factors that modulate impacts, i.e., determinants of health, social acceptability, and risk perception.

1.3.1 Determinants of health

According to the WHO, the *determinants of health* refer to a series of individual or collective factors that influence state of health, including personal, social, economic, and environmental factors. The different determinants of health interact such that a person's health is the complex combination of these components.

The figure 1 illustrates the main determinants of health who can modulate the intensity of the social impacts.

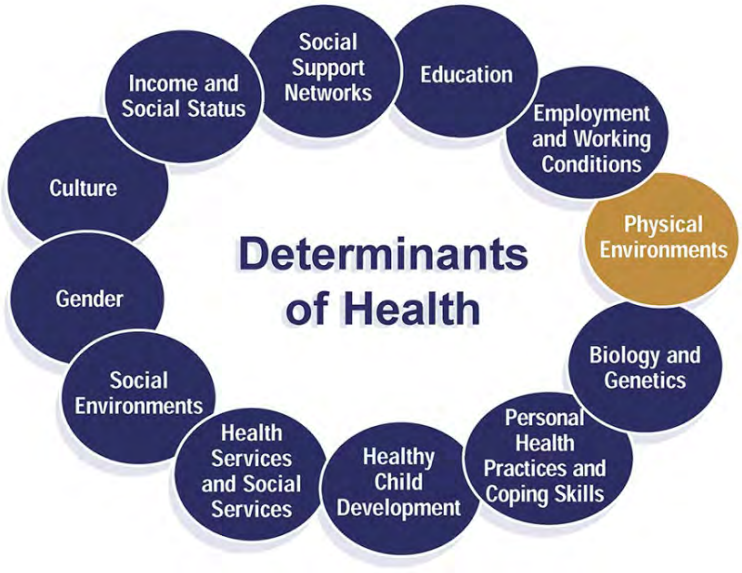

Figure 1 Determinants of health

Source: Santé Canada, 2002

1.3.2 Acceptability and social acceptance

The concept of social acceptability can be looked from two perspectives. In theory, *social acceptability* is a policy assessment process for a project during which many actors involved at various levels interact and on the basis of which they gradually develop institutional rules and arrangements recognized as legitimate since they are consistent with the vision for the land and the development model they are in favour of. In practice, social acceptability is often seen by the social actors as the public's consent for a project likely to have an impact on its activities or values. We therefore prefer to talk about social acceptance, to avoid any confusion.

The concept of social acceptance is very similar to the concept of social acceptability. However, the latter can very often consist in identifying the checks on individual and social acceptance for the utilitarian goal of removing them, whereas acceptance refers to the appropriation and uses of these mechanisms.

Theoretically, and ideally, the foundations of social acceptance must be laid before a development project gets under way, thanks primarily to the mechanism of citizen participation. This process, which is looked at in detail in section 2.6, enables the various actors involved to participate in the design and implementation of a development project. This approach promotes harmonization with the needs of the host community. However, in practice, citizen participation is not always implemented properly or early enough in the process, which requires that the proponent conduct an analysis of community attitudes in order to assess the level of social acceptability.

Attitude is modulated by a number of factors, including social norms, values, beliefs, perceptions, emotions, habits, past experience, knowledge, and the media. Depending on the nature of a development project, it may be aligned with the needs and values of a community, resulting in public consent. A phenomenon frequently associated with the idea of social acceptance is NIMBY, or "not in my backyard." This phenomenon is defined as an attitude of opposition brought about by individual egocentric feelings towards development projects intended to further the common good. However, fewer situations reflect the NIMBY phenomenon than people say, and a warning should be issued about its use. Analysis of many conflict situations shows that some people overuse NIMBY to connote citizen opposition, thus denigrating the public by characterizing its members as egotistical. As a result, everything described as NIMBY is not necessarily so.

1.3.3 Risk perception

Risk perception is the process by which individuals make a judgment about their environment on the basis of the information available to them. It defines all the ways in which humans see, understand, and assess risk (anticipated danger or damage), on the basis of their situation. This may be associated with a professional or personal position or a role as an expert or citizen. The size of a risk is measured using knowledge, concepts, values, needs, interests, and experience, as well as different methods or mediums. After this analysis, dangers are identified, quantified, and compared. However, since the components of the

analysis vary, different perceptions of the risk may be identified during an impact assessment. It is important to consider them as a whole, with no order of priority.

Risk perception analysis often involves taking into account social and psychological factors that inject emotion into the representation of the risk. That is why perception analysis is often confused with social impact assessment. However, these are two different things. Appendix 1 contains a table that can be used to assess the factors that influence risk perception. This non-exhaustive list (to be expanded depending on the project) is used to determine whether the context and type of project increase or reduce risk perception.

2 SOCIAL IMPACT ASSESSMENT

Social impact assessment is a relatively new concern in comprehensive impact assessment. The first references to this type of assessment in the literature date back to the late 1960s in the United States. However, since then, social impact assessment has continued to grow, and the second chapter of this guide describes its current status by proposing a definition of this research field and identifying its distinctive objectives. Assessment circumstances, data collection, and the chief difficulties encountered are then presented. Last, the concept that characterizes the first step in social impact assessment is illustrated, i.e., the citizen participation mechanism and its different levels of engagement.

2.1 DEFINITION

Social impact assessment is a process used to analyze, monitor, and manage the social consequences (expected and unexpected, beneficial and harmful) of a development project. It is generally carried out by the proponent (initiator of a development project) at the same time as the environmental impact assessment (See Table 3.1, Chapter 3). However, the traditional definitions of social impact assessment distinguish it from the socioeconomic analysis in the environmental impact assessment process. It is used to assess the social impacts of projects and to develop strategies for ensuring ongoing monitoring and management. Separate from environmental impact assessment, social impact assessment therefore has its own goal.[2]

2.2 OBJECTIVE AND ROLES

The main objective of social impact assessment is to anticipate the consequences for individuals and their community of any activity likely to alter quality of life and social capital and to propose alternatives or mitigation measures with a view to ensuring that benefits are maximized and negative impacts, minimized.

Social impact assessment therefore makes it possible to:

- better understand and better manage the social changes resulting from a development project;
- predict possible social impacts and assess those caused by earlier projects;
- develop and implement mitigation measures for addressing potential social impacts and unexpected social impacts before they arise;
- develop a monitoring and surveillance program for identifying unexpected social impacts;
- increase knowledge of the proposed project and inform the community affected of any positive or negative consequences.

To achieve these results, many elements are identified within the community under assessment, and that is why establishing the foundations for public engagement is the first step in social impact assessment. Also, this step can be carried out at different times during the development project.

2.3 CIRCUMSTANCES OF THE ASSESSMENT

The assessment of social impacts can be done at various times during a development project, which will influence the assessment's objectives and results. Ideally, social impact assessment is *prospective*, i.e., it is carried out while a project is in the planning stage. However, social impact assessments are also relevant if they are *simultaneous* or even *retrospective*.

Prospective assessment is the most common and the most effective. It is done before a development project is carried out, making it possible to anticipate probable impacts. This also makes it possible to make changes to the proposed project in order to minimize negative impacts and maximize positive impacts for the community. Prospective assessment should encourage citizen participation, thus ensuring that the assessment's conclusions and recommendations are taken into account in the decision-making process and in the planning of the project.

Contemporary assessment is carried out when a project becomes operational and makes it possible to react quickly to address any negative impacts that arise. It also makes it possible to determine whether the anticipated potential impacts actually come about.

Last of all, *retrospective assessment* is done after a development project is completed and makes it possible to take stock of what worked well and what should be changed when similar projects are carried out in the future.

A social impact assessment can also be done during the lifespan of a development project if, for instance, an existing industry moves into a new country, changes its activities, or closes one of its plants. In this type of situation, assessing social impacts according to the difference phases of a project is an effective technique.

The time when an assessment is done can have a huge effect on the results since each phase of a project generates its own series of impacts. In order to adapt to each situation and ensure that all impacts are identified, a number of appropriate investigation techniques are available to the assessor.

2.4 DATA COLLECTION

Data that are useful for social impact assessment can be collected in a number of ways. The social sciences have developed various proven investigation techniques for obtaining specialized information according to the targeted results and the context. Methods such as conversations with information providers and group activities can be used to collect essential data about the community affected by a development project. In addition, analysis of censuses, geographic information and maps, statistics from national and local authorities, documents from community organizations, and newspaper articles can be used to support data collected from the community and the various actors involved in the development project.

The collection techniques presented below are commonly used in the social impact assessment process because they are easy to use and highly effective. It should be noted that a number of other collection tools can also be used to assess the potential social impacts of a development project.

Additional Information

Investigation techniques used to assess social impacts

Surveys

This standardized technique can be used to collect information about a population and its environment based on a representative sample of that population. It can be used, for instance, to analyze the perceptions, representations, attitudes, judgments, and behaviors of the individuals concerned in order to predict possible reactions to the probable impacts of a development project. The surveys used in a social impact assessment can be conducted by the proponent or by an outside investigator.

Participating or non-participating observation

This investigation technique involves visiting the community affected in order to observe or share the lifestyle of the members of that community. It can used to identify or test the reactions of individuals to daily events, which can be highly useful for profiling the community concerned and describing the behaviors of its members.

Semi-structured interviews

Semi-structured interviews are based on flexible verbal interaction and make it possible to collect qualitative data about a person's representations, feelings, experiences, and expertise. This technique makes it possible to collect a tremendous amount of information through the use of open-ended questions since the interviewer can ask the interviewees to expand on their answers and determine whether they actually understood the question.

Discussion groups (also called focus groups)

The discussion group is an interview technique that brings together a small group of participants and a facilitator for a structured discussion of a particular topic. The group dynamics make it possible to establish an atmosphere of trust that is conducive to revelations. This technique can also be used to challenge certain participants and their ideas, which encourages them to develop their viewpoints further.

Simulation

Simulation is a technique that can be carried out using photographs and videos. It can also be based on a computerized model. Its objective is to bring to light the various changes that the development project may bring about, such as the introduction of a new structure or changes to the physical environment, and to determine the social impacts that may arise.

There are many flexible tools that can be used in social impact assessment, making it possible to obtain a broad range of data. Nonetheless, their use can lead to certain difficulties.

2.5 DIFFICULTIES ENCOUNTERED

Difficulties may be encountered throughout the social impact assessment process, which may result in a flawed or incomplete assessment. The difficulties encountered most frequently by proponents are the following:

- proving a causal link between an impact and a development project;
- identifying, in the short term, all potential social impacts since some impacts appear in the long term only;
- anticipating unexpected social impacts;
- construing social impacts as a synonym for effects even though they have a stronger meaning;
- missing data on social impacts because of the type of project under assessment.

Being familiar with and addressing these difficulties may facilitate the impact assessment process and make it possible to avoid certain traps. Creating a climate conducive to citizen participation may be useful as well since this mechanism gives the various actors and citizens involved a say and makes it possible to collect unexpected information.

2.6 CITIZEN PARTICIPATION

Citizen participation is a mechanism for ensuring consensus (harmonious agreement) among the actors and citizens concerned or affected by a development project for the purpose of achieving social acceptability. This process is progressive and meets various objectives, depending on the level of participation achieved.

2.6.1 Five levels of participation

Participation can take various forms, from information to empowerment, depending on the tools used and the objectives being pursued (figure 2). These five levels are hierarchical, and the higher the level, the greater the citizen participation.

Inform	Consult	Involve	Collaborate	Empower
Goal of participation				
To provide the public with balanced and objective information to assist them in understanding the problems, alternatives and solutions.	To obtain public feedback on analysis, alternatives and/or solutions.	To work directly with the public throughout the process to ensure that public issues and concerns are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of preferred solutions.	To place final decision making in the hands of the public.
Promise to public participants				
We will keep you informed.	We will keep you informed, listen to and acknowledge your concerns and provide feedback on how public input influenced the decision.	We will work with you to ensure that your issues and concerns are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for direct advice and innovation in formulating solutions and incorporate your advice and recommendations into the decision to the maximum extent possible.	We will implement what you decide.
Examples of participation tools				
Fact sheets, websites, open houses.	Public comment, focus groups, surveys, public hearings.	Workshops, deliberative polling, MSPs and associated tools, such as scenario building and exploration.	Citizen advisory committees, MSPs including consensus-building processes.	Citizen juries, ballots, delegated decisions, MSPs etc.

Figure 2 Public participation spectrum

Source: Dore, Robinson and Smith 2010.

Additional Information

Guiding principles for successful citizen participation

Adaptation to context

Tools used to promote public participation must be adapted to the historical, cultural, environmental, political, and social contexts of the participants, as well as to their backgrounds.

Neutrality

When the intervention of a moderator is required, the moderator must be impartial about how it is carried out and the anticipated results. The location where the participative event takes place must be neutral as well and not work in the favour of any particular participant.

Early participation

The various actors must be involved and informed from the early stages of a development project so they have an opportunity to participate in all debates and in all decision making.

Transparency

The public must have access to all relevant information, and this information must be reliable, objective, and understandable. In addition, it must be provided in a timely manner.

Equity

It is essential to consider the interests of all actors and citizens, including those who are under-represented or not represented at all.

Respect

Citizen participation must take place in an atmosphere of respect where the viewpoints, values, and interests of everyone are welcome. In some cases, it may be necessary to implement a code of conduct.

3 STEPS IN SOCIAL IMPACT ASSESSMENT

Over the past several years, a few authors and organizations have developed social impact assessment procedures. Appendix 2 of this guide presents two recognized and relatively similar procedures: the first is that of the Interorganizational Committee on Guidelines and Principles for Social Impact Assessment (SIA) and the second is that of the United States of America (USA) National Environmental Protection Agency. In order to fully meet the objective of this guide, the 10 steps proposed by the Interorganizational Committee on Guidelines and Principles for SIA have been used for illustration purposes as they are very clear. The steps in the social impact assessment process can be carried out at the same time as those in the environmental impact assessment process because, even though they deal with different themes, the procedures follow a similar logic. The table below summarizes the 10 steps in the social impact assessment process.

Table 1 10 steps proposed by the Interorganizational Committee on Guidelines and Principles for SIA

Step		Objectives
1	Development of a public engagement plan	• Promote citizen participation. • Ensure public engagement throughout the project.
2	Description of the proposed action and possible scenarios	• Describe in detail the phases of the project and the various possible scenarios. • Describe the actions that could have social impacts.
3	Description of the human environment and areas of influence	• Collect appropriate data on the community's social environment (past and present) and estimate what the future of this human environment would be without the development project. • Identify the different types of possible social impacts in order to focus on the data that are useful for the assessment.
4	Identification of probable impacts	• Draw up a list of all potential social impacts that could result from the project. • Identify all of the groups affected or likely to be affected by the project.
5	Assessment of probable impacts	• Analyze the potential social consequences of the identified impacts for the community affected by the project. • Use assessment methods (consultation with experts, identification of future prospects, development of scenarios, comparative studies, etc.), while incorporating citizen participation mechanisms.
6	Determination of the probable reactions of the parties concerned	• Identify and assess the probable reactions of all of the groups affected by the project, which are modulated by social and psychological criteria such as determinants of health, social acceptability, and risk perception.
7	Assessment of secondary and cumulative impacts	• Analyze the possible social consequences of indirect and cumulative impacts on the community affected by the project. • Use tools similar to those used in the probable impact assessment step (step 5).

Table 1 10 steps proposed by the Interorganizational Committee on Guidelines and Principles for SIA (cont'd)

Step		Objectives
8	Recommendation of changes or proposal of options	• Make any necessary changes to the project in the light of the results of the impact identification and assessment. • Evaluate the new potential social impacts, as described in step 5.
9	Mitigation of impacts, corrective actions, and improvement	• Develop an impact mitigation plan. • Prevent, mitigate, or compensate for negative social impacts during all phases of the project. • Provide a mechanism for citizen participation.
10	Design and implementation of a monitoring and follow-up program	• Track the progress of the development project and avoid unanticipated impacts. • Check whether the identified potential impacts come about and, if applicable, examine the use and effectiveness of the proposed mitigation measures. • Cover the social impacts throughout the project. • Provide a mechanism for citizen participation (may take the form of a monitoring committee).

These 10 steps in the social impact assessment process provide essential elements for gaining a good knowledge and understanding of the social issues associated with a development project. Project proponents are using this analysis methodology more and more frequently in order to ensure the success of their actions.

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APPENDIX 1

TABLE FOR ASSESSING FACTORS THAT INFLUENCE RISK PERCEPTION

TABLE FOR ASSESSING FACTORS THAT INFLUENCE RISK PERCEPTION

How is the table used? The table for assessing factors that influence risk perception can be used to measure whether, in the context of the development project under assessment, certain factors increase (↑), decrease (↓), or have no effect on (-) risk perception. It can be used by public health agencies to identify the context of a project and the probable impacts on a defined population.

A citizen participation mechanism must be used in order to be able to identify the real issues associated with the development project.

Table A1 Table for Assessing Factors that Influence Risk Perception

Categories	Sub-categories	Examples of factors*	Assessment ↑, ↓, -
Individual factors	Emotional	• Confidence in the experts	
		• Sympathy towards the risk source or technology	
		• Anxiety	
		• Caution	
		• Curiosity	
	Personal characteristics	• Proximity of risk	
		• Understanding of technologies	
		• Familiarity with the situation	
		• Personal ability with respect to risk	
		• State of health	
	Sociodemographic	• Age	
		• Sex	
		• Schooling	
		• Place of residence	
		• Sociocultural background	
	Perceived costs and benefits	• Personal benefit	
		• Suspected harmful effect	
		• Level of risk tolerance	
Sociocultural factors	Cultural environment	• Regional determinisms	
		• Collective values	
		• Social and cultural representations	
		• Religious groups	
	Land use planning	• Proximity of factories	
		• Proximity of recreational sites	
	Social environment	• Social class	
		• Socioeconomic environment	
		• Community infrastructures	
		• Employment rate	

* The examples of factors mentioned in this table are meant to be an illustration only, for the purpose of providing public health agencies with some possible themes.

Table A1 Table for Assessing Factors that Influence Risk Perception (cont'd)

Categories	Sub-categories	Examples of factors*	Assessment ↑, ↓, -
External factors	Project pipeline	• Institutional capacity	
		• Media	
		• Level of complexity of legal framework	
		• Level of intergovernmental coordination	
	Decision-making process	• Collaboration between proponents and local decision-makers	
		• Public consultations	
		• Role of local officials	
	Material aspects	• Change in landscape	
		• Choice of location	
		• Impacts on ecosystems	
		• Nuisance during construction phase	

* The examples of factors mentioned in this table are meant to be an illustration only, for the purpose of providing public health agencies with some possible themes.

APPENDIX 2

GENERIC STAGES IN THE SIA PROCESS

GENERIC STAGES IN THE SIA PROCESS

Generic Stages in the SIA Process

Stages from identified by the Interorganisational Committee on Guidelines and Principles for SIA	Stages from the USA National Environmental Protection Agency
Develop public involvement program	Public involvement
Describe proposed action and alternatives	Identification
Describe relevant human environment and zones of influence	Community profile
Identify probable impacts	Scoping
Investigate probable impacts	Projection of estimated effects
Determine probable response of affected parties	
Estimate secondary & cumulative impacts	
Recommend changes in proposed action or alternatives	Formulation of alternatives
Mitigation, remediation, and enhancement plan	Mitigation
Develop and implement monitoring program	Monitoring

←..Include interested and affected parties in all steps of the SIA process..→

Source: Fenton, 2005

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