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Introduction to Socio-Economic Impact Assessment

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2.1 What is Socio-Economic Impact Assessment?

SEIA is the systematic analysis used during EIA to identify and evaluate the potential socio-economic and cultural impacts of a proposed development on the lives and circumstances of people, their families and their communities. If such potential impacts are significant and adverse, SEIA can assist the developer, and other parties to the EIA process, find ways to reduce, remove or prevent these impacts from happening.

Impacts are potential changes caused – directly or indirectly, in whole or in part, for better or for worse – by industrial development activities.

In the past, EIA focused on direct and indirect biophysical impacts of proposed developments (i.e. impacts of development activities on water, air, land, flora and fauna). In recent years, the impacts of industrial development on society, culture and different forms of economic activity have gained equal importance in EIA.

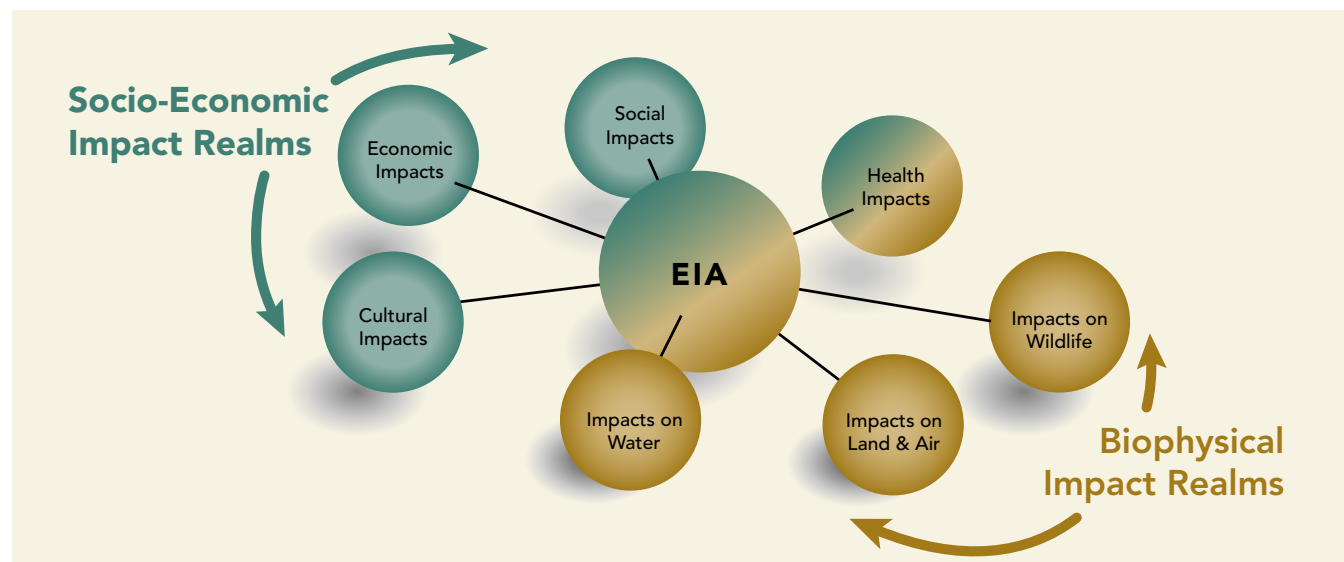
SEIA can identify and distinguish numerous measurable impacts of a proposed development but not every impact may be significant. The people who are impacted, directly or indirectly, have a say in whether impacts on valued socio-economic components are significant.

While SEIA tends to focus on the avoidance of adverse impacts, SEIA also provides a forum for planning how to maximize the beneficial impacts of a proposed development. Beneficial impacts can include: ▶ a better standard of living due to increased access to employment, business opportunities, training and education ▶ greater access to and from a community and ▶ increased funding to improve social infrastructure and cultural maintenance programs.

Specifying how adverse impacts may interact with beneficial impacts, and identifying how to manage these impacts are important steps in SEIA.

The Review Board definition of SEIA recognizes the importance of relationships between people, culture, economic activities and the biophysical environment.

FIGURE 1 Realms of Environmental Impact



The Review Board pays particular attention to how these relationships affect aboriginal people who have based their economies on Mackenzie Valley lands for millennia. The *SEIA Guidelines* address impacts on traditional economic activities such as hunting, fishing and trapping. These economic activities are inherently social, cultural and interrelated with the biophysical environment.

There is a great deal of overlap between different “types” of impacts; many additional subcategories could be included in each type. For example, impacts on cultural maintenance may include: ► loss of language ► loss of time on the land ► loss of practicing of traditional laws ► an altered relationship with the

land and animals and ► altered relationships between youth and elders.

Table 1 provides examples of valued socio-economic components and associated issues. SEIA examines these valued socio-economic components before determining whether and how these valued socio-economic components may interact with the components of a proposed development. For example, in the case of health and well-being, potentially affected communities may identify the possibility of a development causing an increased level of sexually transmitted infections and an increased use of alcohol and drugs as socio-economic impacts.

TABLE 1 Valued Socio-Economic Components

Valued Socio-Economic Component	Issues
<i>Health and well-being</i>	<ul style="list-style-type: none"> • Individual and population health • Community and cultural group cohesion • Family cohesion • Cultural maintenance
<i>Sustainable wildlife harvesting, land access and use</i>	<ul style="list-style-type: none"> • Hunting, trapping and gathering – traditional economy • Recreational and traditional economy – access to land • Value of alternative land uses (e.g. tourism vs. hunting vs. industry)
<i>Protecting heritage and cultural resources</i>	<ul style="list-style-type: none"> • The aesthetic, cultural, archaeological and/or spiritual value of places • Maintenance of traditional language, education, laws and traditions
<i>Equitable business and employment opportunities</i>	<ul style="list-style-type: none"> • Local, regional and territorial business competitiveness • Employment opportunities for local, regional and territorial residents • Training and career development for local, regional, territorial residents • Avoidance of boom and bust cycles (e.g. via economic diversification)
<i>Population sustainability</i>	<ul style="list-style-type: none"> • In- and out-migration effects • Change in social and cultural makeup of affected communities
<i>Adequate services and infrastructure</i>	<ul style="list-style-type: none"> • Pressures on social services such as health care, education, and justice • Housing pressures – affordability, availability, and appropriateness • Traffic and road safety – pressures on physical infrastructure
<i>Adequate sustainable income and lifestyle</i>	<ul style="list-style-type: none"> • Overall amount of money in the community • Uses of money in the community – effects of increased disposable income • Local and regional cost of living • Distribution of costs/benefits among affected people-impact equity • Adverse lifestyle changes – increased gambling, crime, substance abuse

Those impacts may result from, or be accelerated in part, by any of the following: ► having large work camps near small communities ► additional in-migration by new workers ► the presence of more disposable income in the community and ► altered cultural norms.

The main goal of SEIA is identifying such impacts and finding ways to mitigate these impacts.

2.2 Considerations for Conducting SEIA

Considering the following is important when conducting and reviewing SEIA:

1. Matching the scale and focus of a SEIA with the characteristics of the proposed development, and the concerns of responsible authorities and potentially affected communities and individuals.
2. Minimizing adverse impacts while enhancing beneficial impacts.
3. Using the “Precautionary Principle” and other internationally-recognized SEIA principles.
4. Focusing on impacts that are at least partially attributable to the proposed development.
5. Involving various potentially affected communities in the SEIA early and extensively.
6. Conducting long-range, forward-looking studies that rely on the insight of past experiences.
7. Impact equity.
8. Using experts from the government, communities and social sciences.
9. Using reliable, appropriate and relevant information from primary and secondary sources.
10. Using appropriate indicators for the Mackenzie Valley.
11. Balancing traditional knowledge and scientific knowledge.
12. Following up and monitoring socio-economic and cultural mitigation measures.

For a more detailed discussion on these important considerations see Appendix B “Considerations for Conducting SEIA.”

2.3 SEIA and the Mackenzie Valley Resource Management Act

Part 5 of the *Mackenzie Valley Resource Management Act* (MVRMA) governs the EIA system in the Mackenzie Valley. The Review Board is the main instrument for the environmental assessment and environmental impact review of proposed developments. It submits its EIA findings to the federal Minister of Indian and Northern Affairs Canada (INAC) and responsible ministers for a final decision. The Review Board also reports EIA findings about oil and gas development to the National Energy Board.

SEIA is an important part of the EIA process. SEIA is required during EIA pursuant to section 115 of the MVRMA. Section 115 states:

“The process established by this Part shall be carried out in a timely and expeditious manner and shall have regard to

(a) the protection of the environment from the significant adverse impacts of proposed developments;

(b) the protection of the social, cultural and economic well-being of residents and communities in the Mackenzie Valley; and

(c) the importance of conservation to the well-being and way of life of the aboriginal peoples of Canada to whom section 35 of the Constitution Act, 1982 applies, and who use an area of the Mackenzie Valley.”

Section 111 defines “impact on the environment” as:

“any effect on land, water, air or any other component of the environment, as well as on wildlife harvesting, and includes any effect on the social and cultural environment or on heritage resources.”

The *Guiding Principles* of Part 5 include regard for protecting the economic well-being of Mackenzie Valley residents. Economic well-being is linked to the social and cultural context of the Mackenzie Valley. This is particularly true for aboriginal populations and small communities that are transitioning from a traditional subsistence economy to a wage economy.

Increased economic activity can stimulate demographic changes and alter social and cultural practices in many ways. A solid analysis of the economic change that a proposed development is likely to cause is thus essential to SEIA.

In addition, a primary Review Board responsibility during EIA is identifying whether a proposed development is likely to cause “significant public concern” (MVRMA section 128(c)). The Review Board considers how a proposed development could affect economic well-being when determining the potential for significant public concern.

2.4 SEIA and the Mackenzie Valley EIA Process

The following three main factors determine how closely the possible socio-economic impacts of a proposed development are assessed during EIA:

- The level of EIA being conducted
- The nature and scale of the proposed development
- The socio-economic context of the proposed development

Sections 114 and 115 of the MVRMA emphasize that EIA is a singular process with three levels:

- Preliminary screening
- Environmental assessment
- Environmental impact review

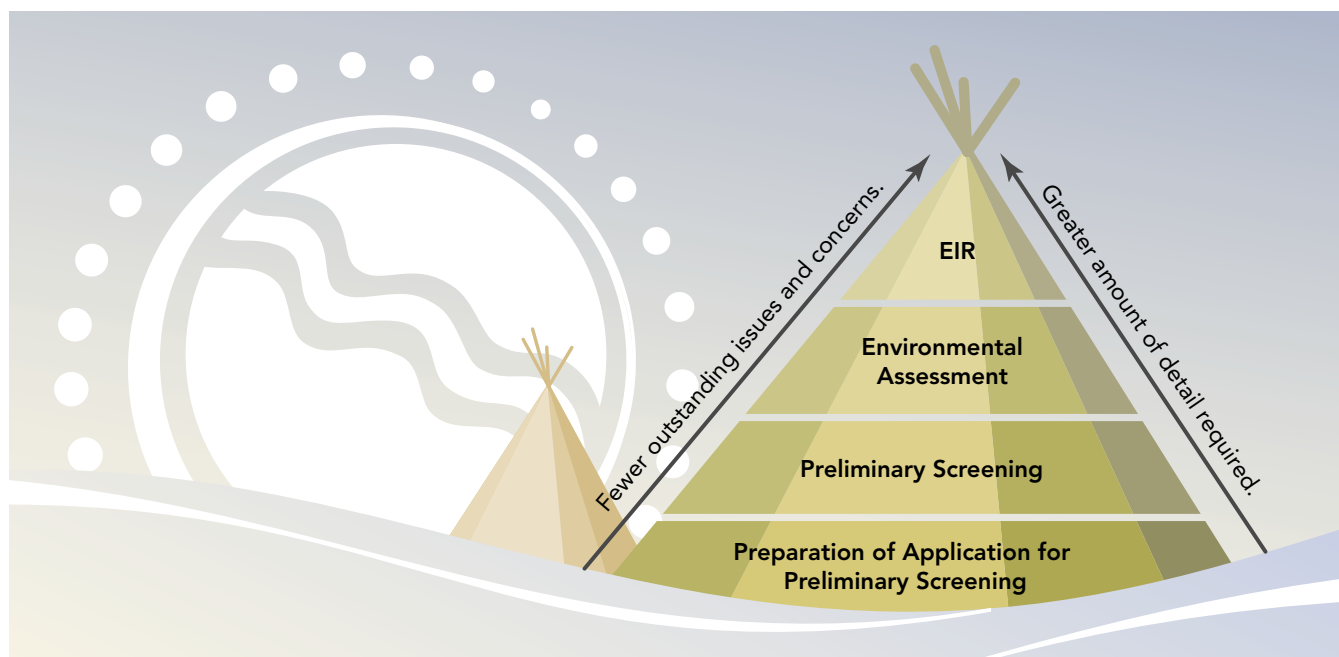
Before entering the EIA process, a developer must do groundwork when preparing its application.

As illustrated in Figure 2, during each stage of EIA, different and more extensive SEIA information requirements may emerge but the scope of potential issues to examine should narrow.

Developments progress from one stage of EIA to another EIA stage when outstanding impact issues or public concerns remain at the end of the previous EIA level. More than 95 percent of proposed developments in the Mackenzie Valley undergo only a preliminary screening. Preliminary screening usually requires a limited amount of socio-economic data and analysis.

The nature of a proposed development and its socio-economic and cultural context helps define the SEIA expectations. Developers must be familiar with how to determine the scale and scope of issues, and the level of SEIA required for each phase of EIA.

FIGURE 2 Stages of EIA



2.5 The General SEIA Process

SEIA focuses on questions identified in Table 2.

SEIA answers these questions using a series of steps for
► identifying ► assessing ► mitigating and ► monitoring

the potential impacts of a proposed development. The SEIA steps are similar to those used during the impact assessment of the biophysical environment. However, SEIA requires different data collection methods, information sources, expertise and analytical tools.

TABLE 2 SEIA Questions

Impact definition	<ul style="list-style-type: none">• What are the potential socio-economic and cultural impacts of the proposed development?
Direction of impacts	<ul style="list-style-type: none">• Is the direction of the potential impacts adverse or beneficial?• Does impact direction shift between different groups and sub-populations? Do some benefit while others don't?• Are the trade offs between potential adverse impacts and potential beneficial impacts acceptable?
Impact causes	<ul style="list-style-type: none">• How could the proposed development cause socio-economic impacts?
Impact attribution	<ul style="list-style-type: none">• Will the proposed development create new impacts or accelerate/exacerbate existing impacts?• How responsible could the proposed development be for causing an impact? If this is immeasurable, how can the developer estimate the level of responsibility in a manner that is fair and precautionary?
Impact scope and scale	<ul style="list-style-type: none">• Which populations and communities will the proposed development most likely impact?• How far and wide, geographically, could individuals and communities feel the impacts of the proposed development?
Impact manageability	<ul style="list-style-type: none">• Will potential impacts support or undermine the affected communities' aspirations and goals?• How resilient are the potentially affected communities? How vulnerable are they to adverse impacts?• Will the impacts cause unmanageable change for a community?
Impact significance	<ul style="list-style-type: none">• Are the potential impacts likely, adverse and/or significant?• Is mitigation available to manage, reduce or eliminate the potential impacts?
Impact mitigation and monitoring	<ul style="list-style-type: none">• Are there existing mitigation measures that have worked for these types of impacts? If so, how can we use them?• How do we track the accuracy of our predictions and use adaptive management to alter mitigation if required?

2.6 The “Six Steps of SEIA”

Scoping

A preliminary analysis that identifies and prioritizes SEIA considerations and required information. Early and effective scoping narrows the focus of SEIA onto issues of potential significance.

2 Profiling Baseline Conditions

Focuses on gathering information about the socio-economic environment and context of the proposed development. This can include defining measurable indicators of valued socio-economic components.

3 Predicting Impacts

Based on the analysis of information gathered from issues scoping, baseline profiling and past experiences to predict possible socio-economic impacts. Identifying trade offs between the adverse and beneficial impacts of a proposed development is part of this analysis.

4 Identifying mitigation

Predicted adverse impacts require mitigation. Mitigation includes strategies, plans and programs to reduce, avoid or manage impacts.

5 Evaluating Significance

Involves determining whether a proposed development is likely to cause significant adverse impacts on valued socio-economic components. If appropriate mitigation measures cannot be identified, a proposed development may not be approved.

6 Applying Mitigation & Monitoring

Good mitigation for socio-economic impacts requires good monitoring programs (also known as “follow up”) to ensure the mitigation is working effectively, and, when necessary, the mitigation is adapted as required.

Notes:

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