Assessing Impacts on Food Security: SIA, EIA, or Both?

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If you had to (re)design impact assessment (as a tool for global food security) what, if anything, would you do differently?

Your Mandate:

To design ESIA legislation that will encourage sustainable development while at the same time will ensure food security for future generations

Food security is achieved -

"when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life"

(World Food Summit, 1996)

OUTLINE

I. Is food security too complex?

II. Is food security adequately covered in SIA?

III. Does EIA already offer adequate assessment? (in the consideration of individual elements)

IV. Is EIA not an appropriate forum or tool?

I. Is Food Security "Too Complex"?

II. Adequately Covered in SIA?

1. Social aspects – Social Impact Assessment

2. Production (agriculture) – Environmental Impact Assessment

"the environmental and social risks and impacts which the Bank will take into account in its due diligence are project-related and include the following:

(a) environmental risks;

(b) social risks and impacts including…

(v) risks or impacts associated with land and natural resource tenure and use, including potential project impacts on… ***food security***"

(emphasis added)

(World Bank, Environmental and Social Framework: Setting Standards for Sustainable Development (*DRAFT* July 2014), page 16, paragraph 4(b) and page 34, paragraph 26(b))

Too Complex? – Simplify!

1. Government policies/programs with direct/indirect consequences (e.g., trade impact assessment).
2. Agricultural development projects - see *Environmental impact assessment guidelines for FAO field projects*. (2012)
3. **Non-agricultural projects – proposed development with implications for agriculture.**

III. Does EIA Already Offer Adequate Assessment?

- land, water, plant and animal genetic resources are assessed in EIA
- is that enough?

Canadian Environmental Assessment Act, 2012 (CEAA 2012)

(1) The purposes of this Act are

(a) *to protect the components of the environment* that are within the legislative authority of Parliament from significant adverse environmental effects caused by a designated project;

(2) [The federal government] must exercise their powers *in a manner that protects the environment* ***and human health*** and applies the precautionary principle.

(*emphasis added*)

National Energy Board (NEB) Filing Manual

Table A-2: Filing Requirements for Biophysical Elements

Soil and Soil Productivity [Requirements]

1. Describe general soil characteristics and the current level of disturbance associated with soils.
2. For agricultural lands or forested lands with agricultural capability, describe:

- the soil classification, including the order, group, family, series and type of soil prior to construction, and quantify the soil classification; ... (etc.)

Table A-2: Filing Requirements for Biophysical Elements

Soil and Soil Productivity [Guidance]

Soil profile descriptions for dominant soil types must consider:

- soil horizons; thickness of horizons; [etc.]
- ***Where there is a potential for human health effects***, see Table A-3 [Filing Requirements for Socio-Economic Elements].

- *[Similar approach for Water, Air, etc.]*

(emphasis added)

IV. Is EIA not an appropriate forum or tool?

- Population growth
- Rates of urbanization
- Changing diets
- "Sustainable" intensification
  - Diminishing inputs to continue to achieve yield increases
  - Diminishing land base – limited arable lands

By 2050, need to increase food production by 50-70%

- Purpose of EIA – “impact assessment is a practical tool for helping meet today's needs without compromising the opportunities of future generations.”

(IAIA Website)

- In AFF sectors, sustainable development “conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable”

(FAO, 1989)

OUTLINE

I. Is food security too complex?

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V. Is EIA working?

Report Card

United States

- 470 million acres of arable land under cultivation
- 1 million acres lost every year (development)
- 2 million acres lost every year (practices)
- 1.6 acres per person of arable land (current)
- 0.6 acres per person (estimated by 2050)

(US Environmental Protection Agency)

Report Card

Canada

- 94% of land mass unsuitable for farming
- 0.5% classified as Class 1 land
- 1971 to 2001 – 14,000 sq. km. lost
- 2001 to 2011 – 3,158 sq.km. lost
  (half the size of Prince Edward Island)

(Statistics Canada)

Report Card

	2000	2012
Arable	10.6%	10.8%
Per/Cap	0.23	0.20

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(*emphasis added*)

Thank you!

www.foodsecuritybydesign.com

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