Developing a Methodology for Social Life Cycle Assessment: The North American Tomato's CSR case

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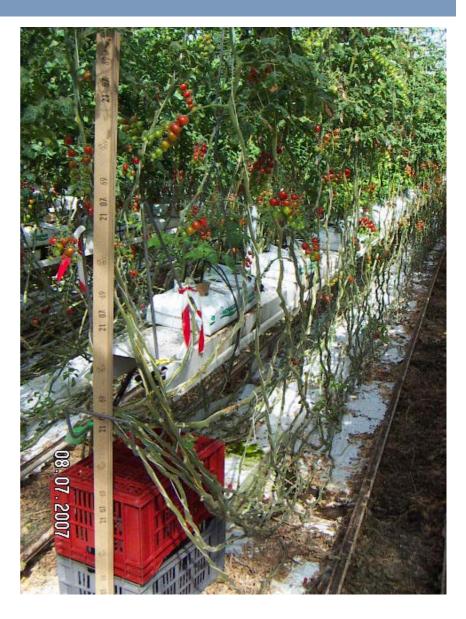


# **Objectives**

**1.** To present an overview of the methodology being developed by our research group.

**2**. To share preliminary results of our case study.

*3*, To discuss about future development.





# **Corporate Social Responsibilities**

### **Voluntary Standards and Initiatives:**

- -Principles
- -Responsibility and monitoring framework
- -Guidelines
- -Standards and norms
- -Initiatives
- -Codes of conduct

### International legal framework:

-Conventions (address to the states)

# Negotiation concerning the elaboration of a legal norm that would be address to transnational companies:

"ECOSOC draft norms on the responsibilities of transnational corporations and other business enterprises with regard to human rights"

#### **Private sector:**

-Certification and Audit agency -Think tank



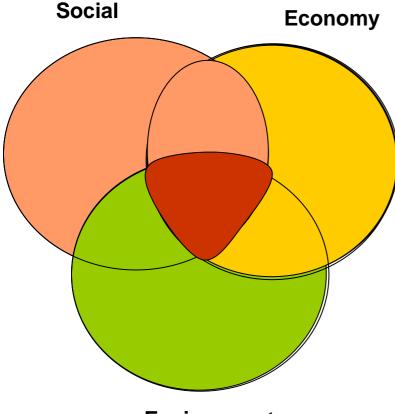
#### **Motivations:**

- -Risks and opportunities
- -End of impunity
- -Access to information technology



### A common ground

## Sustainable development



Environment

(Jacobs et Saddler, 1990)

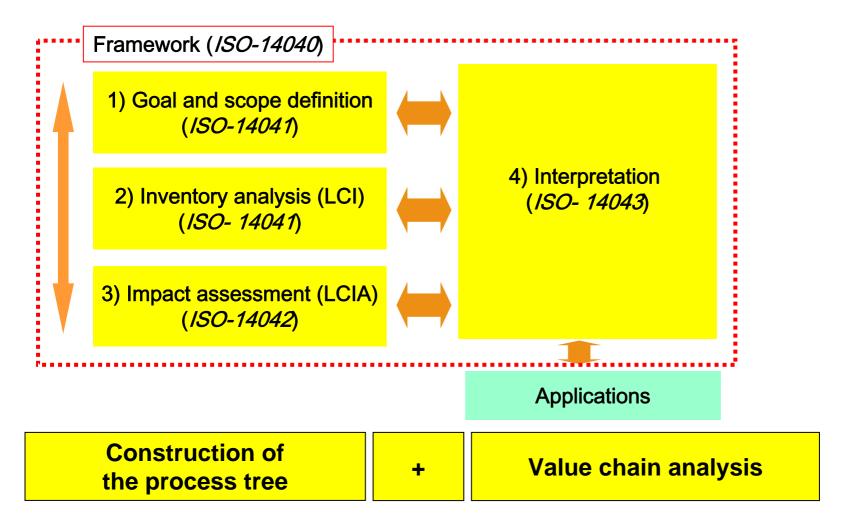
CIRAIG

Hence, because we could not imagine a development without the ecological support of all human life " the preservation of our environment" must stand as a condition of sustainable development. In other respects, insofar as development aim to answer to population needs, the social dimension constitute an objective of sustainable development. Economy, the industry and trade represent, means to implement development" (translation of Reveret, Gendron, 2002).

**Toolbox includes:** 

**Social Impact Assessment** 

# **Approach to Social Life Cycle Assessment**



Process tree and chain analysis are essential to SLCA

# **Approach to Social Life Cycle Assessment**

### **Functional unit**

Unit corresponding to the environmental LCA unit

In the tomatoes case study: Net Production of 1 kg of table tomatoes

The functional unit does not apply to the process indicators which are compared on a qualitative basis.



A maximal integration of S-LCA to E-LCA

# **Data collection methodologies**

# How?

### Literature review Internet Phone interview Directed and semi-directed interviews Focus group Participative approach Rapid rural appraisal

# Who?

Management Employees NGO Communities representatives Experts Journalists Unions Business associations

A range of methodologies to adapt on a case by case basis

based on goals and scope



### **Indicators system – Inventory and Impact assessment**

Inventory		Impact assessment	
Stakeholders categories	Inventory categories	Impacts categories	Final indicator
<ol> <li>1- Relations Company/Company</li> <li>2- Relations Company/Employees</li> <li>3- Relations Company/Community</li> <li>4- Relations Company/Society</li> <li>5- Relations Company/Consumers</li> </ol>	<ol> <li>Human Rights</li> <li>Work conditions</li> <li>Health and safety</li> <li>Cultural aspects</li> <li>Governance</li> <li>Socio-economic repercussions</li> <li>Value and impacts of the product</li> </ol>	<ol> <li>Human Rights</li> <li>Work conditions</li> <li>Health and safety</li> <li>Cultural aspects</li> <li>Governance</li> <li>Socio-economic repercussions</li> <li>Value and impacts of the product</li> </ol>	Fair relations

A complete overview of social impacts and benefits

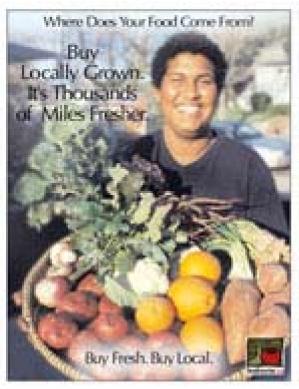


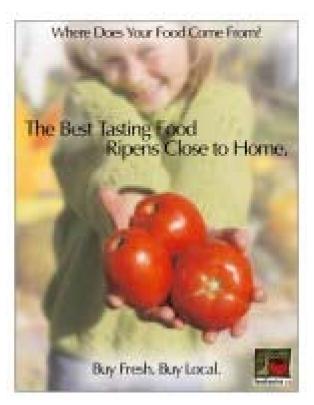
# Summary

.org

Social	Stakeholders	Categories	Indicators	Variables
	Employees	Human Rights		
	Companies	Work conditions		
	Community	Health and safety		
	Society	Cultural aspects		
	Consumers	Governance		
		Socio-economic		
		repercussions		
0 CIR	AIG <sup>∞</sup>	Product value and impacts		

- o Starting SLCA case study with a simple case!!
- o Working in the agro sector because of high interest and demands.
- o Experience in the sector.







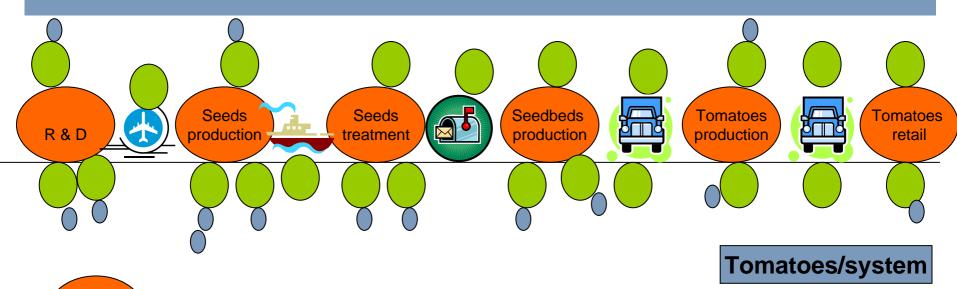
www.foodroutes.org

# **Tomatoes story**





# The value chain



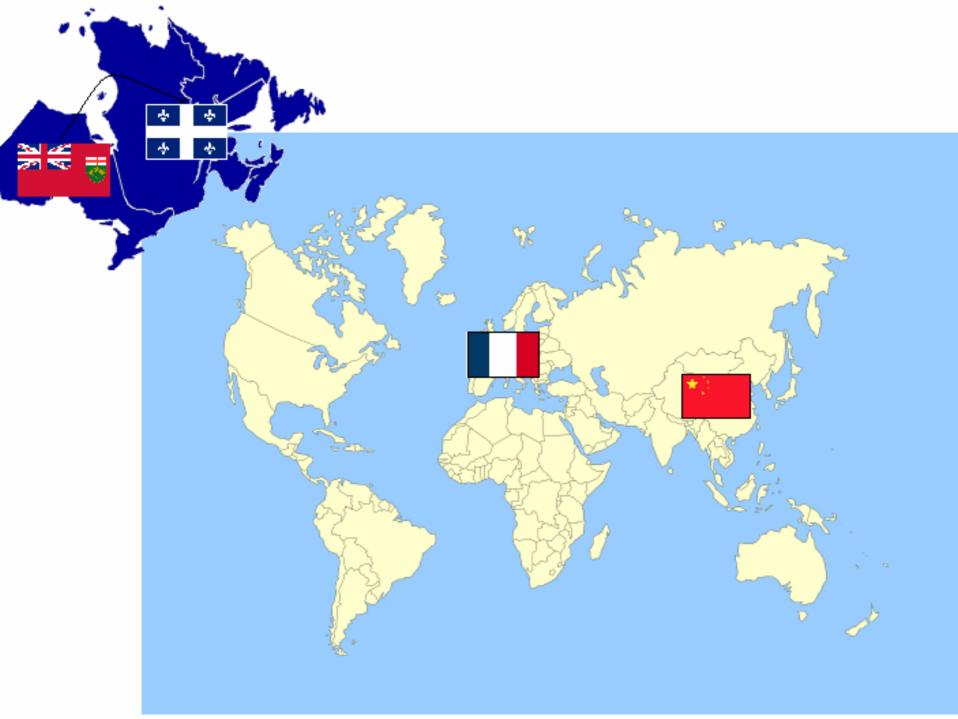
- Production company in the chain
- Companies suppliers
- Suppliers of suppliers

Various means of transport can be used at every stages depending of the seeds type and quality and the country of production/destination.

A complete life cycle assessment,



From cradle to grave



# Inputs considered

Life cycle stages	Inputs considered
Research and development	No other inputs considered
Seeds production	Water, Soil (land occupation), Pesticides/Insecticides, Fertilizers
Seeds treatment	Chlorine
Seedbeds production	Water, Rockwool, Fertilizers,
	Pesticides/Insecticides
Tomatoes production	Water, Coco peat, Fertilizers, Pesticides/Insecticides, Insects (biological control)



### A choice of variable to evaluate a multidimensional reality

Stakeholders	Categories	Indicators	Variables
Relation Individual- company (employee)	Work conditions	Hours of work	-Context/legislation -Management

Context	Management
-Standards and legislation	-Hours work by employees category

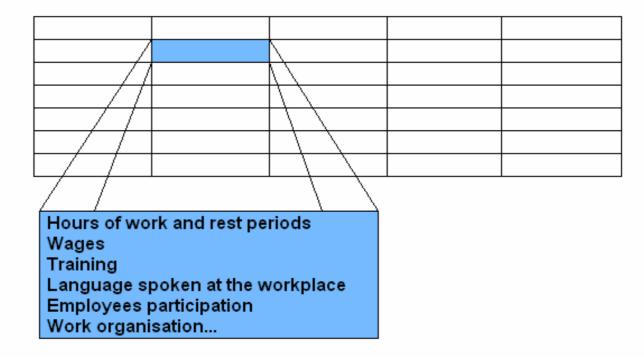


Greenhouse tomatoes production stages



Human rights Work conditions Health and safety Socio-economic repercussions Governance Cultural aspects Product's value and impacts

Indicators





# Indicator: Hours of work and rest periods

#### Variables:

Local workers (20)

8 hours per day

40 hours per week (5 days)

2 days of rest per week

Migrant workers (10) 10 hours per day 70 hours per week (7 days) 0 day of rest per week (On a "voluntary" basis)

Student workers (summer) (10)

8 hours per day

48 hours per week (6 days)

1 day of rest per week



All employees

30 minutes of rest for meals

Winter: 15 minutes break am & pm

Summer: 2X10 minutes break am, and 10 minutes break pm

### What are supposed to be equitable hours of work/rest?

#### **ILO Conventions**

8 hours of work per day

40 hours per week

24 consecutive hours of rest per week

#### Migrant workers: contract of the program FARMS

10 hours per day

50-60 hours per week

1 day of rest per week

30 minutes break for meal 10 minutes break am and pm Labour standards (Quebec)

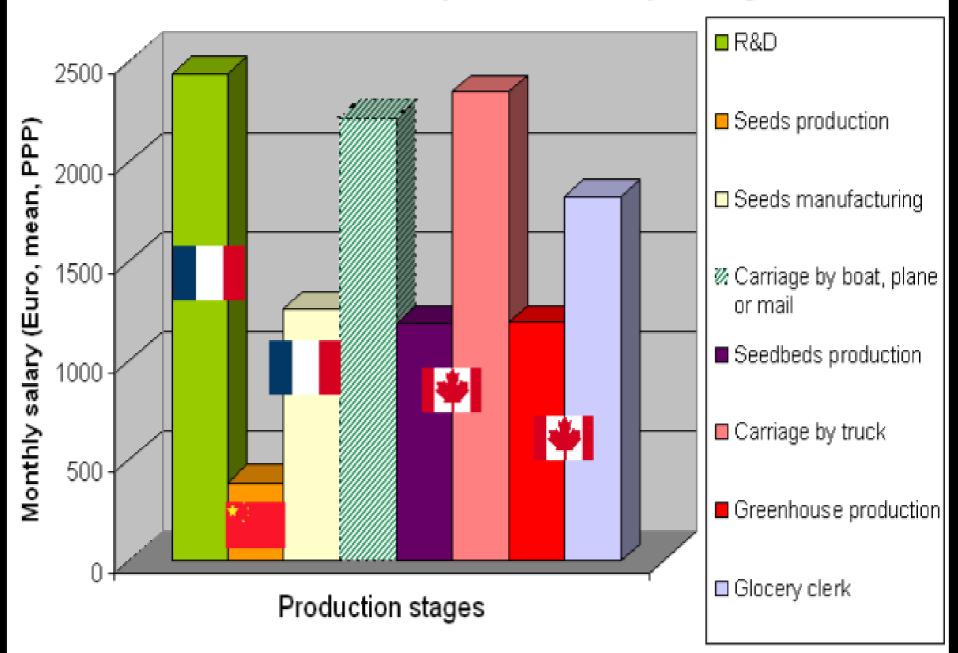
8 hours per day

40 hours per week (For the purposes of computing overtime)

32 consecutive hours of rest per week (In the case of a farm worker, that day of rest may be postponed to the following week if the employee consents thereto.)

30 minutes break for meal

# Salaries for tomatoes production life cycle stages



### **Quebec Research Program**

To continue the development of the complete SLCA method

To apply the methodology to case studies

2

To validate the methodology

To encourage, participate, support and feed international work initiative on SLCA



A work plan for the next three years

### Conclusion

Studying social impacts of products offers us valuable information on the tight international support links entailed by modern goods production and gives us clues on society transformation and future organization.





# Thank you for your participation

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