

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

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GOVERNANCE AND LIFE CYCLE ANALYSIS
Opportunities for Going Beyond ISO-LCA
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CIRAIG^{MC}
.org
Centre interuniversitaire de recherche sur le
cycle de vie des produits, procédés et services

CHAIRE de responsabilité
sociale et de
développement durable
ESG UQÀM

 ÉCOLE
POLYTECHNIQUE
MONTRÉAL

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:

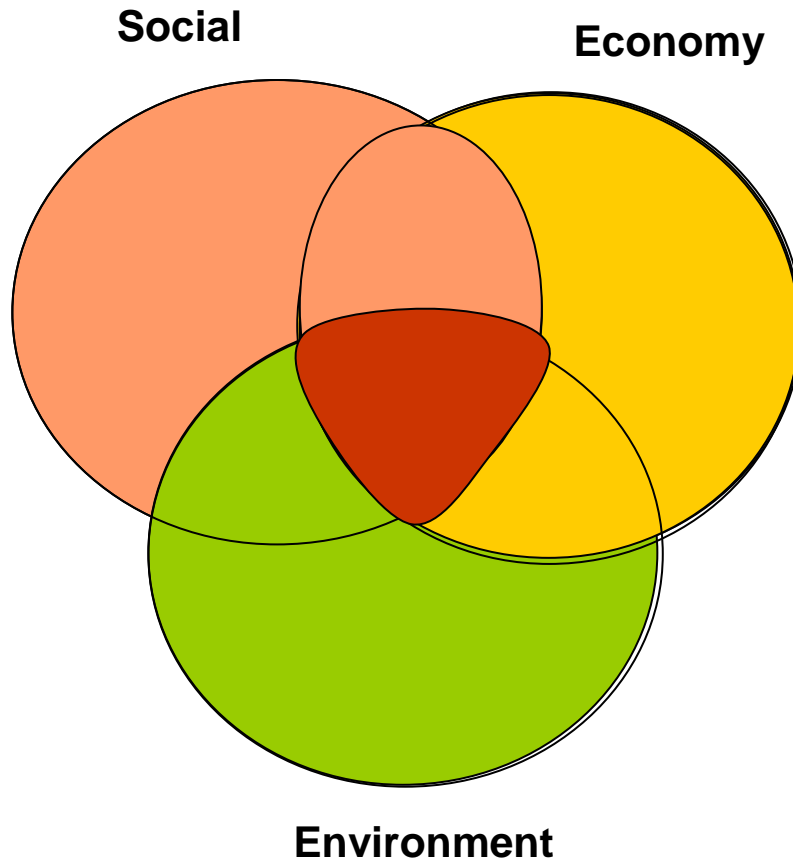
- Certification and Audit agency
- Think tank



Motivations:

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

Sustainable development



(Jacobs et Saddler, 1990)

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

Groupe de travail du PNUE-SETAC Analyse Sociale du Cycle de Vie

2003: L'Initiative Cycle de Vie du PNUE-SETAC a défini des thèmes ciblés de priorité de recherche parmi lesquels figure la prise en compte des aspects sociaux dans l'analyse du cycle de vie.

2004: Le groupe de travail sur l'intégration des aspects sociaux dans l'analyse du cycle de vie est créé. **Bernard Mazjin**, professeur de l'Université de Gand y agit en tant que président, secondé par **Andrée-Lise Méthot**, associée principale de Cycle Capital et **Bo Weidema**, consultant pour 2.-0 LCA Consultant.

2006: Le premier mandat se termine. Les livrables comprennent une étude de faisabilité, une revue des initiatives et expériences existantes et un plan de travail pour le second mandat.

Le groupe de travail est ouvert et composé d'environ 40 experts et d'étudiants de doctorat de différents pays, provenant à la fois des secteurs académiques, publics et privés.

Implication du CIRAIG dans le groupe de travail du PNUE-SETAC

<p>Élaboration d'un code de pratique</p>	<p>- Concevoir et rédiger un code de pratique se fondant sur les points de consensus obtenus au sein du groupe de travail et servant de base à la planification de nouvelles études.</p>
<p>Établir un consensus méthodologique face aux indicateurs</p>	<p>- Construire des fiches méthodologiques pour les indicateurs classifiés par groupe de partie prenante (travailleur, communauté, société, consommateur)*</p>

Fiches d'indicateurs finalisées / Groupe de travail

Partie prenante : Travailleur

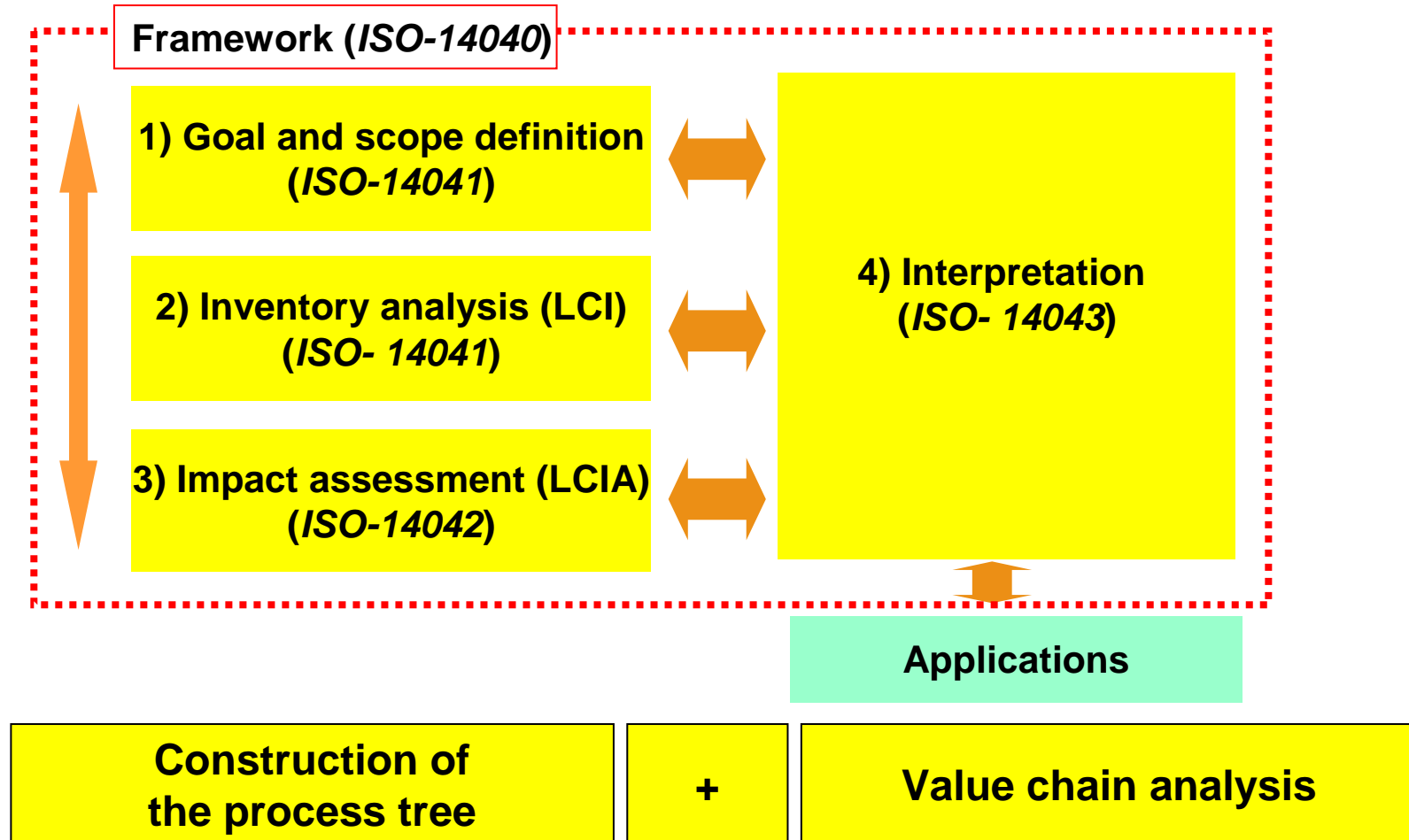
- 1. Travail des enfants**
- 2. Salaire**
- 3. Liberté d'association**
- 4. Heures de travail**
- 5. Travail Forcé**
- 6. Équité et discrimination**
- 7. Santé et sécurité au travail**
- 8. Bénéfices sociaux et sécurité sociale.**

Et

- 9. Corruption**

Travail sur communauté et société

Approach to Social Life Cycle Assessment



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.

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
1- Relations Company/Company 2- Relations Company/Employees 3- Relations Company/Community 4- Relations Company/Society 5- Relations Company/Consumers	1- Human Rights 2- Work conditions 3- Health and safety 4- Cultural aspects 5- Governance 6- Socio-economic repercussions 7- Value and impacts of the product	1- Human Rights 2- Work conditions 3- Health and safety 4- Cultural aspects 5- Governance 6- Socio-economic repercussions 7- Value and impacts of the product	Fair relations

A complete overview of social impacts and benefits

Summary

Social

Stakeholders

Categories

Indicators

Variables

Employees

Human Rights



Companies

Work conditions



Community

Health and safety



Society

Cultural aspects



Consumers

Governance



Socio-economic
repercussions

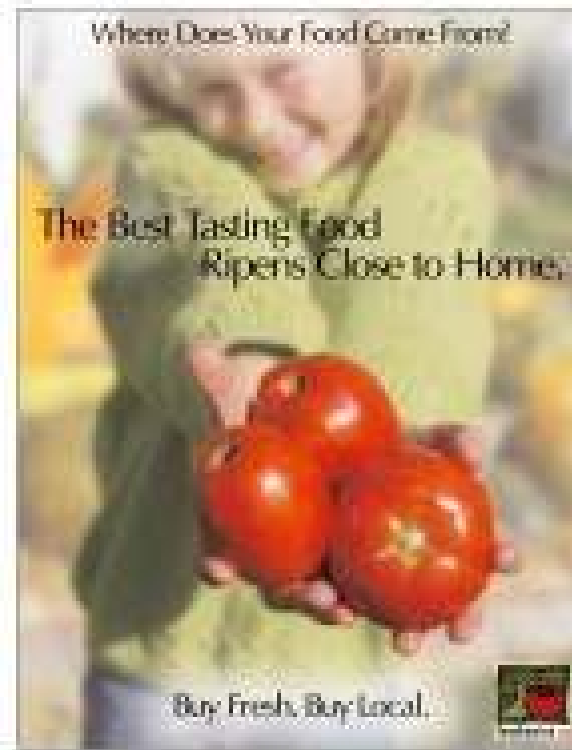
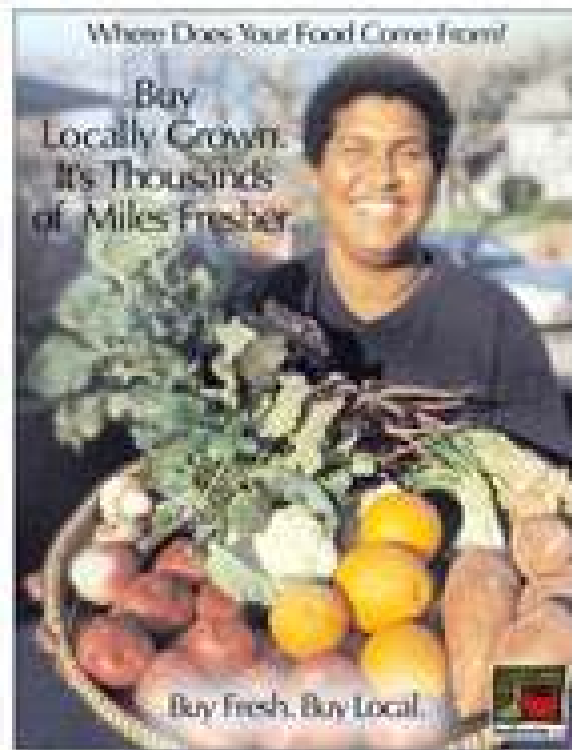


Product value and
impacts



Why Tomatoes CSR case study?

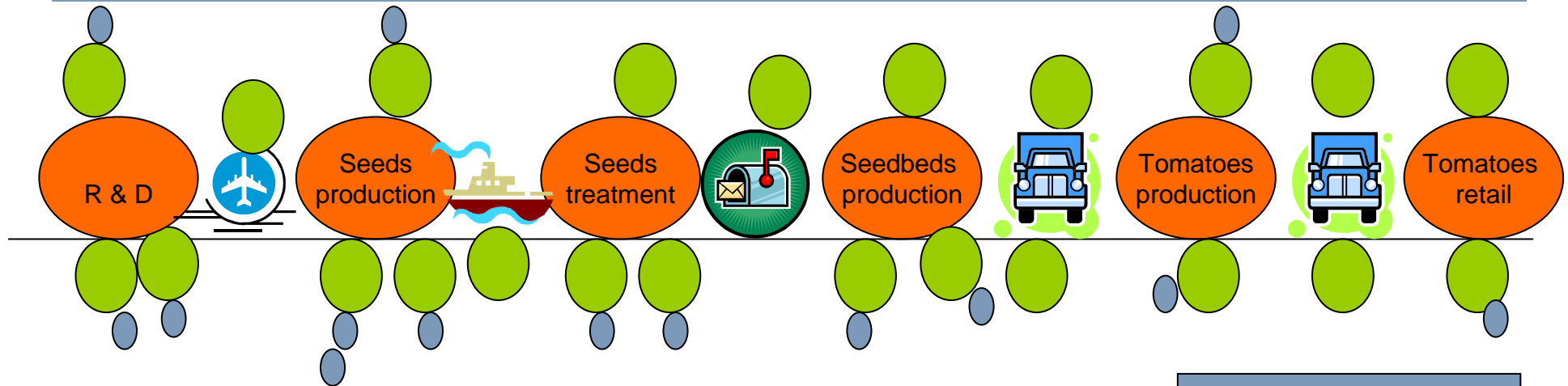
- o Starting SLCA case study with a simple case!!
- o Working in the agro sector because of high interest and demands.
- o Experience in the sector.



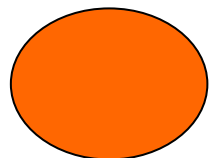


Tomatoes story



The value chain



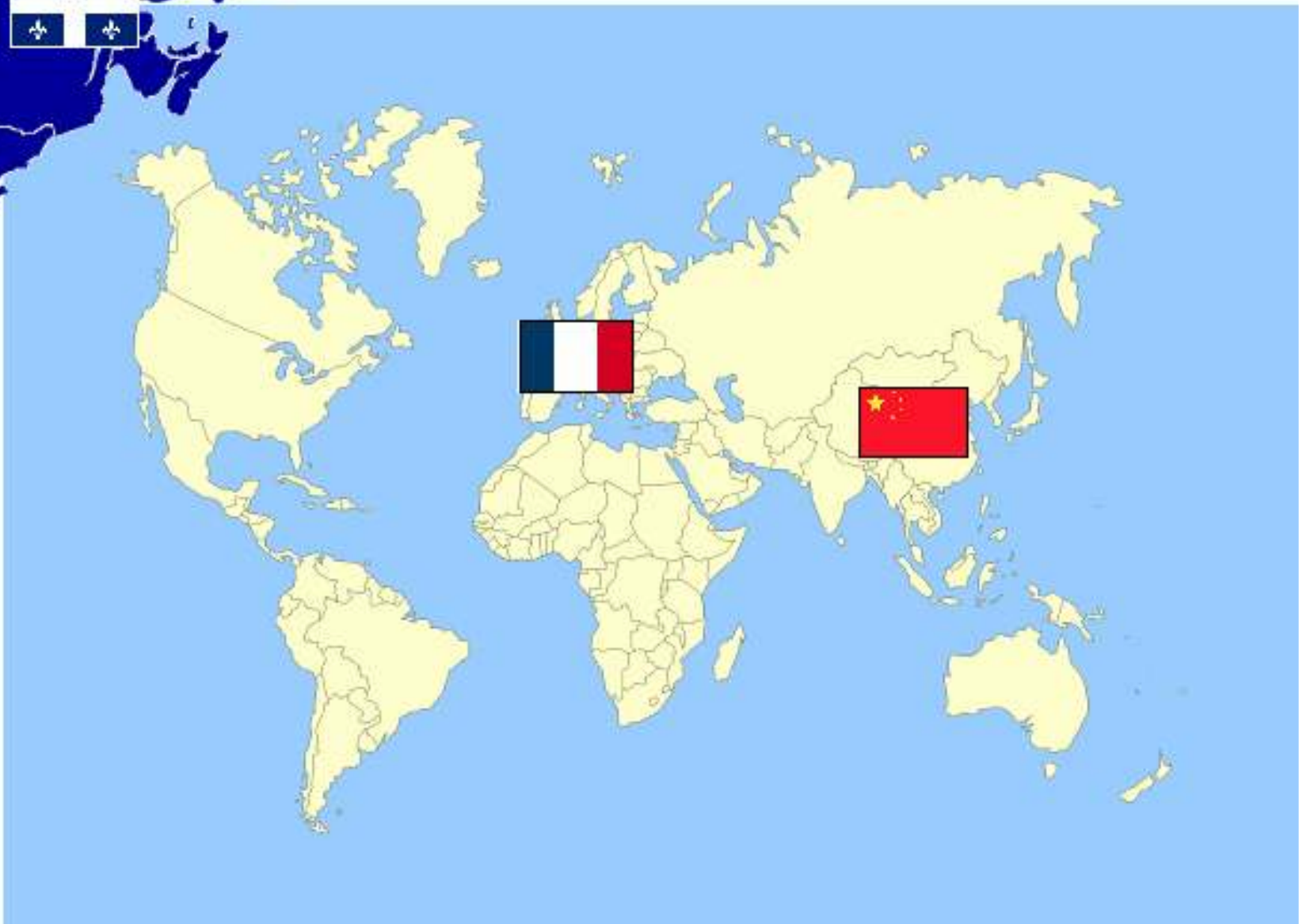
Tomatoes/system

-  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)

Case study: Hours of work

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

Relation between the company and...

Companies

Employees

Community

Society

Consumers

Human rights

Work conditions

Health and safety

Socio-economic repercussions

Governance

Cultural aspects

Product's value and impacts

	Companies	Employees	Community	Society	Consumers
Human rights					
Work conditions					
Health and safety					
Socio-economic repercussions					
Governance					
Cultural aspects					
Product's value and impacts					

Indicators

Hours of work and rest periods
 Wages
 Training
 Language spoken at the workplace
 Employees participation
 Work organisation...

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

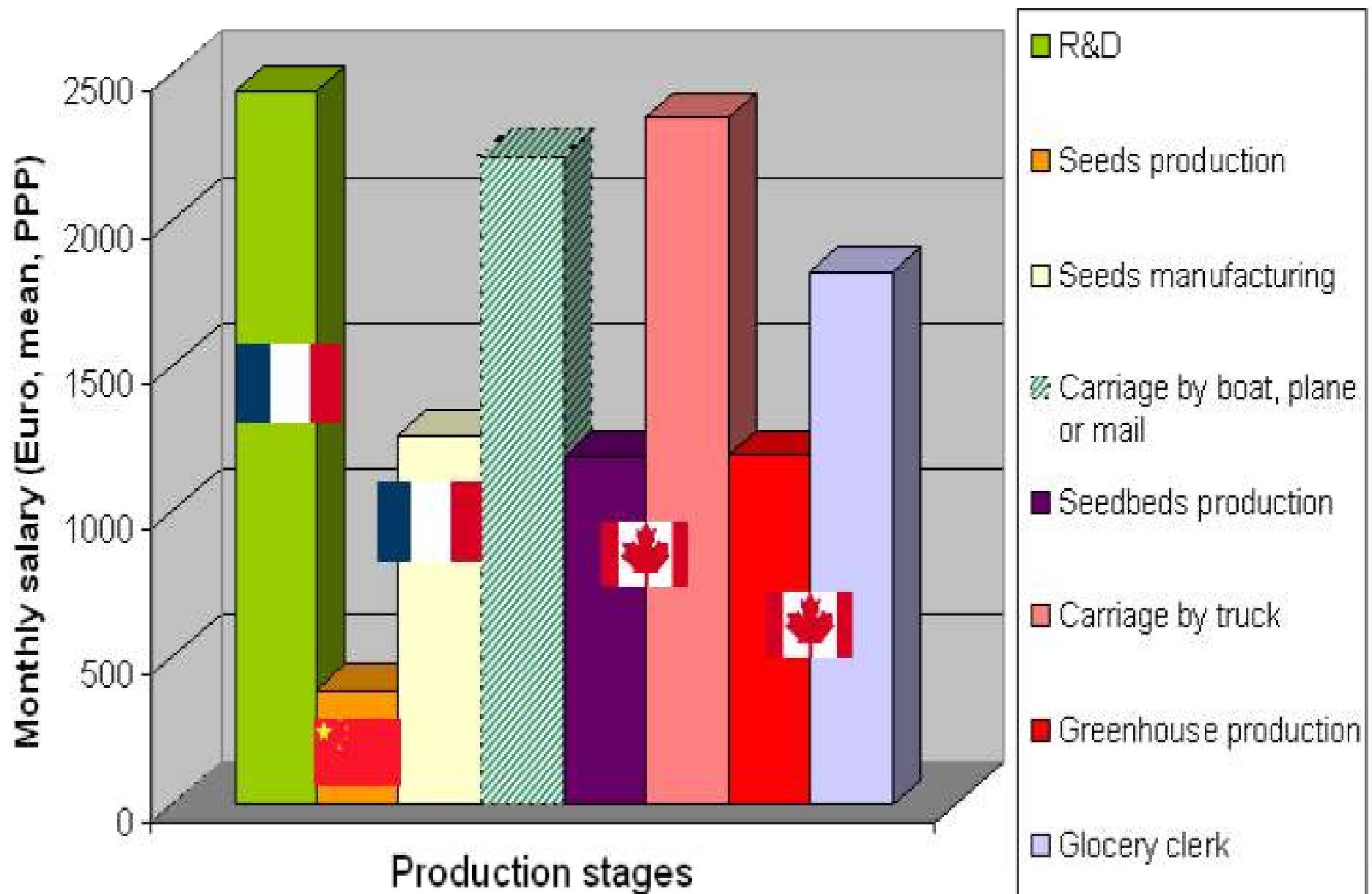
40 hours per week

(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

1

To continue the development of the complete SLCA method

2

To apply the methodology to case studies

3

To validate the methodology

4

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

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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