

## **SMALL SUPPLIER DEVELOPMENT PROGRAM: IMPLEMENTING AND ADAPTING WALMART'S SUSTAINABILITY INDEX FOR 12 SMALL SUPPLIERS FROM WALMART CHILE**

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### **ABSTRACT**

Retailers, as “gatekeepers” between production and consumption, can influence their supply chains to improve their environmental and social performance in key areas (hotspots).

Walmart has been a leader in the sustainability agenda for retailers through the creation of a product Sustainability Index, based on the Sustainability Consortium’s Sustainability Measurement and Reporting System (SMRS®).

This paper presents a pilot Supplier Development Program co-financed by the Chilean Economic Development Agency (CORFO) and Walmart Chile.

A Life Cycle Assessment (LCA) based diagnostic approach, aligned with the SMRS®, was implemented with 12 medium and small suppliers for 9 different product categories. The program conveyed an initial qualitative approach and established 2.5 year action plans, which include implementation of management practices using quantitative indicators for the identified environmental and social hotspots.

### **INTRODUCTION**

Through LCA, retailers, as “gatekeepers” between production and consumption, can identify where in the supply chain key environmental and social impacts (hotspots) occur, and influence suppliers to improve performance in these areas.

Walmart, seeking “to sell products that sustain people and the environment”, has been leading the sustainability agenda for retailers through the creation of a product Sustainability Index (Walmart, 2009), based on The Sustainability Consortium’s (TSC) Sustainability Measurement and Reporting System (SMRS®) (TSC, 2012). In pursuing a practical application of the Sustainability Index and SMRS®, a pilot program has been developed to create industry engagement for Walmart Chile’s suppliers to promote the implementation of improvements across the products’ supply chain.

A LCA based hotspot approach, aligned with TSC’s SMRS® (Dooley et al., 2011), was implemented with 12 medium and small suppliers for 9 different product categories (see Bengtsson et al., 2012). The industry engagement started with a qualitative rating of each

supplier’s performance in each hotspot, which in turn provided the basis for a 2.5 year development plan. The plans include implementation of management practices based on quantitative indicators for the key hotspots with the main objective to provide suppliers the tools and focus to measure life cycle sustainability performance, identifying improvement opportunities and prioritizing and implementing solutions.

The following table summarizes the suppliers respective product category and a general description of their operations:

<b>Product</b>	<b>Operations Summary</b>
<b>Olive Oil</b>	Crop production (40-48 tons of olives during harvest time), oil extraction, packing and distribution.
<b>Lettuce</b>	Hidroponic and conventional cropping, harvesting, packing and transport.
<b>Tomato</b>	Cropping, harvesting, packing and transport to point of sale.
<b>Bread</b>	Producing, packing and transportto distribution point.
<b>Orange Juice</b>	Pulp import from Spain, juice production, packing and transportto distribution point.
<b>Cookies</b>	Producing, packing and transport to distribution point.
<b>Mushrooms</b>	Sowing, harvesting, packing and transport to distribution point.
<b>Detergent</b>	Producing, packing and transport to distribution point.
<b>Rice</b>	Rice import from Argentina, Paraguay and Vietnam, packing and transport to distribution point.

Table 1: Product categories included with description of each supplier’s operations

## METHODOLOGY

The main objective of this project is to provide suppliers with capacity to measure life cycle sustainability performance, identify improvement opportunities, prioritize and implement solutions. This is primarily realized through:

- workshops,
- establishment of guidelines
- support to meet performance and management goals.

Progress and improvement will be continuously monitored and an integrated life cycle based management tool is being tailored for each supplier.

The project is being implemented in the following steps:

**Step 1:** Complete a scoping LCA based sustainability management diagnostic for each supplier in order to identify and understand their most relevant process, hotspots and improvement opportunities.

**Step 2:** Improve each scoping LCA model with real data and develop data for each supplier with information that they manage and have access to. Specific questionnaires, based on hotspot analysis, were developed for each product category. The questionnaire considered social, economic and environmental dimensions.

Every answer was scored from 0 to 4 according to: **0:** it is not a hotspot, **1:** supplier knows and understands the hotspots and its related impacts, **2:** supplier measures and monitors

metrics related to hotspots, **3:** supplier has goals for improvement and manages hotspots, and **4:** supplier has implemented solutions on hotspots.

**Step 3:** Develop key performance indicators (KPIs) that will help establish performance baselines to measure and monitor improvement, and to report progress to relevant stakeholders.

**Step 4:** Select their preferred list of actions to implement improvements not only for their production process but also across their value chain. The list of possible actions will be technically, economically and environmentally reviewed to integrate each into a strategy for implementation.

**Step 5:** With the data developed and KPIs identified, those will be integrated into a tailor made LCA based management tool, to support their decision making. This tool will allow immediate evaluation of different actions in the decision making process.

## RESULTS

Figure 1 presents the survey results for every supplier, showing their environmental, social and economic management performance. Horizontal lines represent the average score for each dimension.

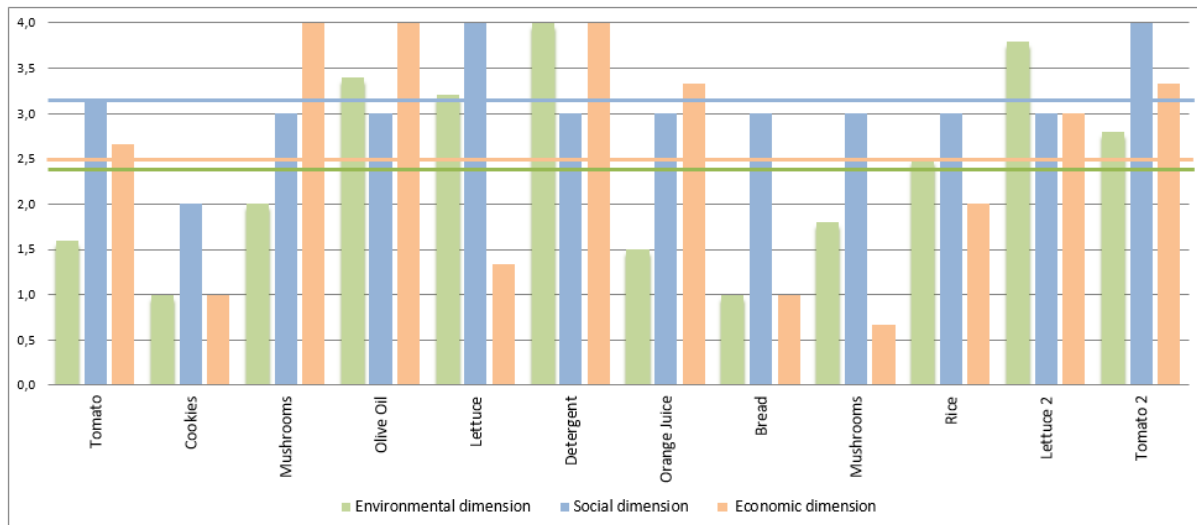


Figure 1: Survey results for supplier's performance per dimension.

Currently, specific baseline data is being implemented to help suppliers meet the completion of the following three types of baseline data: **(i)** Management level according to diagnostic. **(ii)** Identification of KPIs related to the specific suppliers and the phases they can have influence on, **(iii)** LCIs developed specifically for each supplier, which will be integrated to KPIs identified in previous point.

Meanwhile, several workshops and guidelines have already been completed, introducing suppliers to the LCA framework and methodology, as well as providing the information to understand the impacts of agrochemicals, packaging and energy efficiency in order to further engage and encourage them with the project.



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## **DISCUSSION**

The product Sustainability Index, based on the SMRS<sup>®</sup> provides a flexible framework to focus efforts in social and environmental hotspot management while saving time and resources, providing useful and practical guidelines for improvement, while maintaining business sustainability in sight.

Workshops and site visits have proven crucial to understand how suppliers make decisions and learn about the issues they are most concerned with. This has led the project team to develop customized approaches for improvement, presented as case studies to the suppliers.

Within the first 9 months, several initial improvement opportunities have been already identified and actioned. For example an olive oil supplier replaced heavy glass bottle for lighter ones saving resources for production and transportation. A lettuce supplier is implementing a solar powered water pump reducing energy demand and greenhouse gasses. A small tomato supplier identified plant varieties that require low pesticide input.

## **CONCLUSIONS**

The project is successfully engaging with medium sized retail suppliers to realize sustainability improvements using a pragmatic and scientific approach for awareness, education and business management.

The customized approach has been instrumental to encourage the suppliers to further engage with the development of the project.

The project will continue to develop specific LCAs for each supplier, which, along with the customized tool and social guidance, to continue to improve each suppliers' sustainability performance.

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