

social hotspots database
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IDENTIFYING SOCIAL IMPACTS IN PRODUCT SUPPLY CHAINS: OVERVIEW AND APPLICATION OF THE SOCIAL HOTSPOT DATABASE

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EMERGENCE OF SOCIAL LCA

- Derived from well-established fields of environmental LCA and Corporate Social Responsibility
- Considers social and socio-economic impacts throughout the life cycle of products, including raw material extraction, manufacture, distribution, use, and disposal
- Guidelines developed by UNEP-SETAC Task Force in 2009
- More research is needed on methods



SITE SPECIFIC VS. GENERIC DATA

- Site-specific data is preferred, however, it is timely and cost-prohibitive due to complexity of supply chains
- Generic data can be used to identify “hotspots” or places in the supply chain that may be of great risk for social issues
- These hotspots should be specific to a unit process in the supply chain which takes place in country-specific sector (CSS)



SOCIAL HOTSPOT DATABASE (SHDB)

- Eases inventory data collection effort – ↓time & ↓cost
- Consists of Social Theme Tables by country and sector and points to CSS that are at risk or offer opportunity for improvement
- References publicly available, international, secondary sources on human and worker rights, investment in people & community, and positive business practices.
- Data indicators are characterized for level or risk or opportunity (eg., low, medium, high, very high)
- Uses a Worker Hours Model to determine the CSS with the greatest share of labor in the supply chain



SOCIAL THEME TABLES

Currently in Database

- Labor Laws/Conventions
- Wage Assessment
- Population living in Poverty
- Child Labor
- Forced Labor
- Excessive Working Time
- Freedom of Association, Collective Bargaining, Right to Strike
- Legal System
- Indigenous Rights
- Gender Equity
- High Conflict Zones
- Children Out of School
- Access to Improved Drinking water
- Access to Improved Sanitation
- Access to Hospital Beds

NEW as of Sept 30!!

- Unemployment
- Health Issues
- Smallholder vs. Commercial Farms
- Injuries and Deaths in the Workplace
- Migrant Workers

Upcoming

- Toxics in the Workplace
- Corruption
- Intellectual Property Rights / Traditional Knowledge



WORKER HOURS MODEL

- Economic Input/Output model by Global Trade Analysis Project (GTAP) used to determine wage payments by country and sector
- Wage rates by country and sector available from International Labor Org (ILO) and other sources
- Divided Wage Payment/\$ output in a CSS by the wage rate (\$/hr) in that CSS to obtain data on Hours per \$ output for Worker Hours Model



SOCIAL SCOPING ASSESSMENTS (SSA)

- The SHDB was tested on 7 pilot studies for different product categories
- Supply chain of product was evaluated using Worker Hours Model and literature review of the necessary materials and processes
 - Resulted in 2 CSS lists modeled with SHDB
- A Hotspot Index was calculated for each CSS that incorporated number of social issues weighted by risk level and share of worker hours
- CSS with highest Hotspot Index are recommended as “hotspots” that should be investigated further for full S-LCA



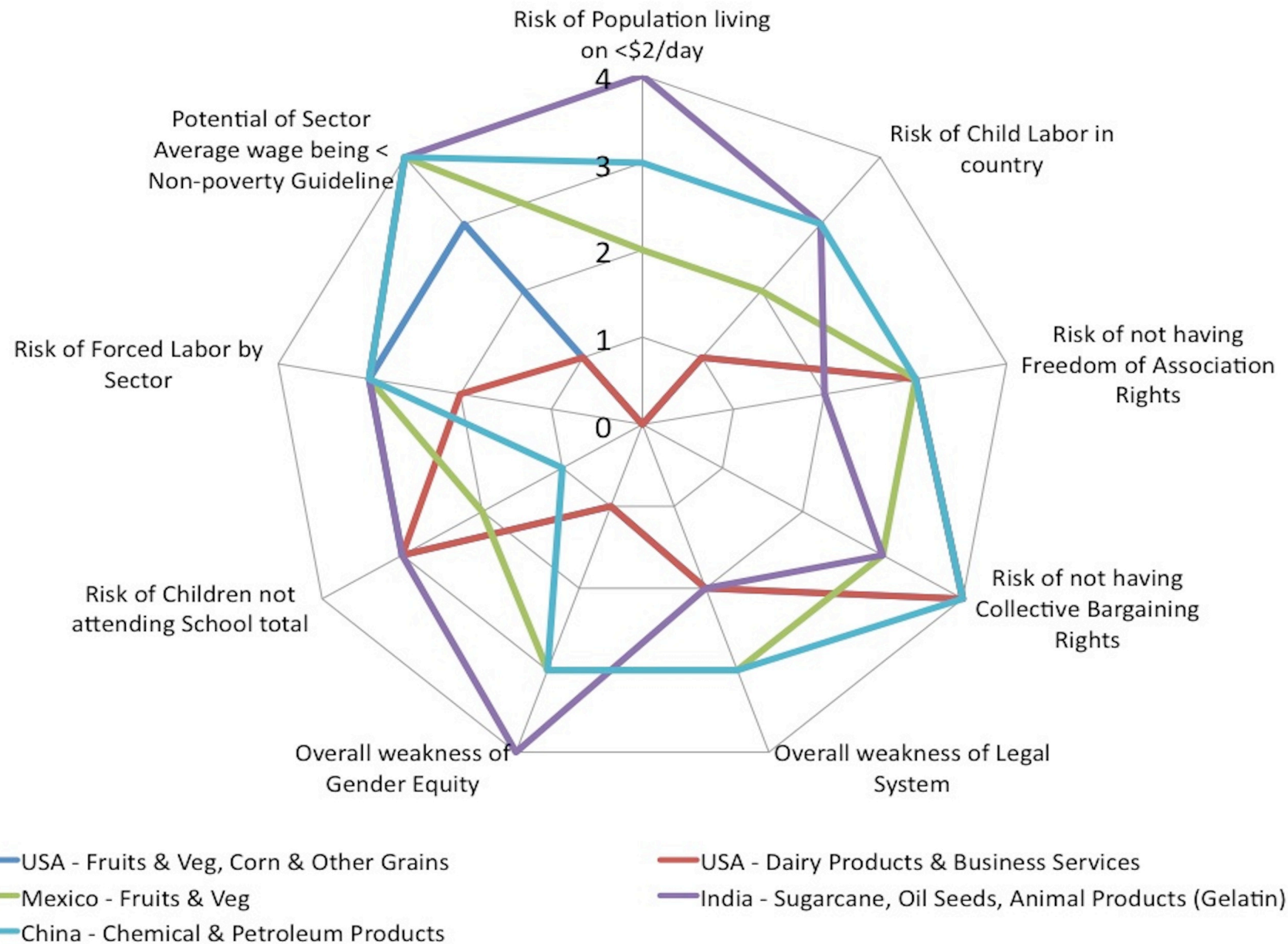
STRAWBERRY YOGURT SSA

- The two primary CSS of interest, the dairy products and fruit and vegetables sectors in the U.S. were assessed with Worker Hours Model
- Other CSS were determined through literature review
- The following CSS were found to be hotspots:

Sectors to be aware of:	Countries to be aware of within sector:
Vegetables and Fruits - strawberries	USA, Mexico, China
Corn and other cereal grains	USA
Animal products - gelatin	India, China
Other foods - starches	China
Sugarcane, beet sugar, oil seeds	India
Chemical products – containers	China, Venezuela, Indonesia
Petroleum products - fertilizers	China



SOCIAL ISSUES FOR HOTSPOTS IN STRAWBERRY YOGURT SUPPLY CHAIN



CONCLUSIONS

- SHDB is a good resource for determining social hotspots in supply chains
- Results were confirmed by a literature review of the prominent social issues that exist in the strawberry and dairy industries, including media campaigns
- Strawberry yogurt made in the U.S. has issues within its supply chain both in the U.S. and in other countries like Mexico, China, Venezuela and India
- Companies should use this data to investigate hotspots deeper with site-specific audits of their suppliers

