Assessing Risk in Frutura's Global Supply Chain and Operations

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Purpose and Objectives

The global fruit industry faces increasing social and environmental risks. Shifting weather, unstable rainfall, and pollinator decline threaten yields, while labor exploitation and social inequities weaken supply chain resilience, leaving the sector increasingly fragile.

Founded in 2021, Frutura is a platform of fruit growers, packers, and marketers, managing a portfolio of seven primary business units with operations spanning across various levels of the supply chain, from farming to export. Headquartered across six countries – Chile, Colombia, Peru, Mexico, Uruguay, and the U.S. – each business unit maintains its own suppliers, facilities, and practices, while Frutura provides centralized strategic direction.

The purpose of this project was to assess key social and environmental risks facing Frutura's operations and supply chain. Our deliverables enhanced Frutura's understanding of risk in their supply chain and created a risk analysis strategy and framework moving forward.

Methodology

Data Collection & Cleaning

Gather and organize data for each site: site name, operation type, geographic coordinates, commodity, kilos sourced or handled (grown or serviced)

Generate Risk Scores

Calculate social and environmental inherent risk scores -- on a scale from 1-10 -- using Sedex and the World Wildlife Fund (WWF) databases

Map Sites & Scores in ArcGIS

Create three maps with site information and risk scores: 1. Dayka and Hackett Suppliers 2. Sun Belle U.S. Suppliers 3. Direct Operations

Identify Hotspots & Trends

Use ArcGIS analysis tools to identify hotspots -- a geographic location with a statistically significant aggregation of high risk for a given topic

Provide Recommendations to Frutura to Mitigate Risk

Outline next steps for Frutura to address the identified inherent risks, including suggestions for how to approach a site specific risk analysis

Deliverables

GIS Maps suppliers and direct operaton sites

ArcGIS StoryMap detailing hotspots and the most pervasive risks across all maps

Recommendations for Frutura to create a risk analysis strategy going forward

Our risk assessment serves as an important step in strengthening risk mitigation and management strategies. It also serves as a foundational piece for several elements of supply chain management for Frutura, including retailer compliance, B Corp requirements, and current and potential regulatory requirements, particularly for markets in the EU. Additionally, a risk analysis will help inform how the company strengthens a robust supplier onboarding and management program.

Data Sources

Sedex

A comprehensive suite of tools and services to manage human rights within business supply chains. We utilized their *inherent* risk tool to generate social risk scores based on the country, industry, activity, and commodity of a given site.

10 Social Risk Categories

1 Emissions Category

WWF

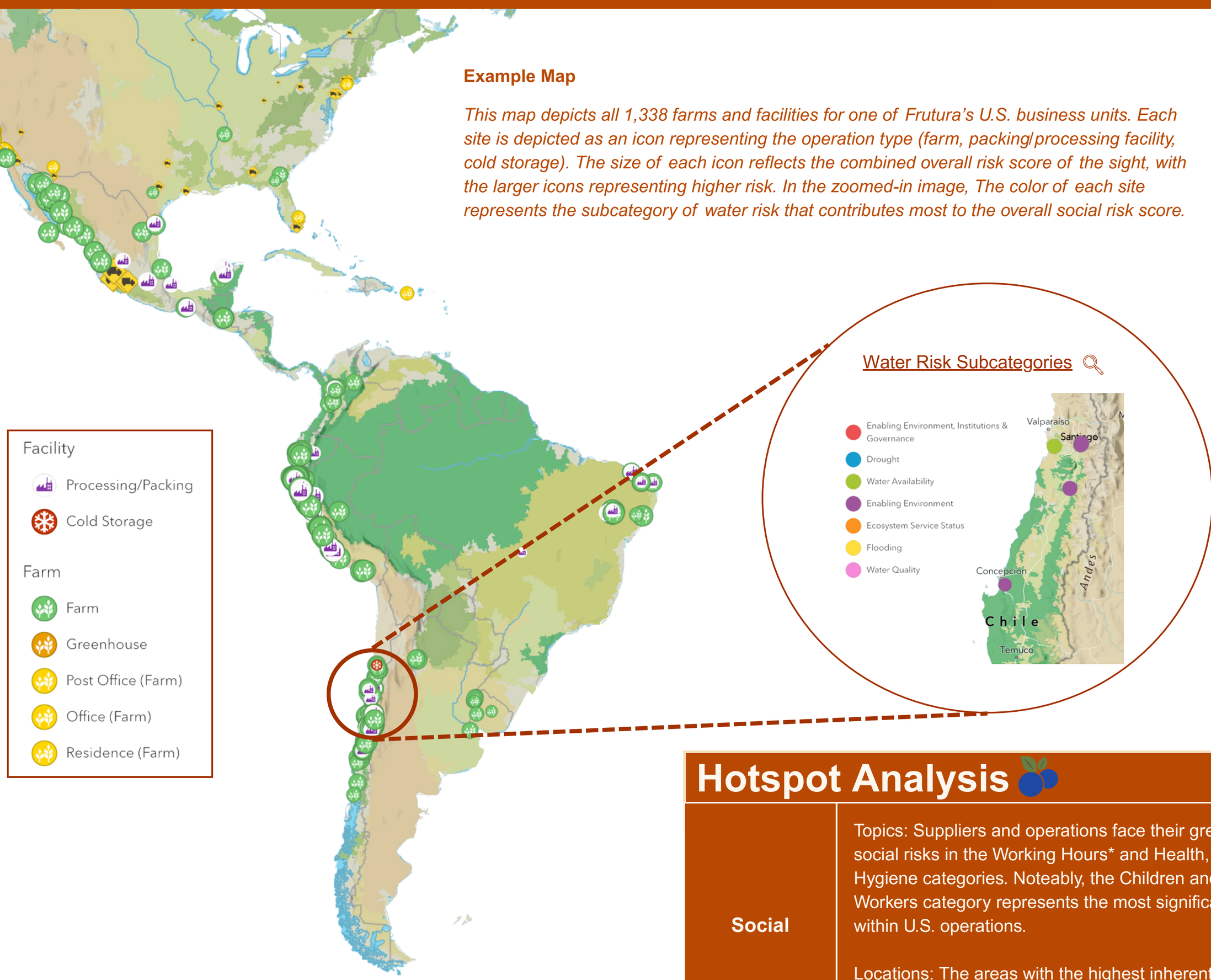
A suite of filters to analyze water and biodiversity risks across business operations and supply chains. Each water and biodiversity *inherent* risk score is based on the specific geographic region, industry, and operation type of a given site.

8 Water Risk Categories

4 Biodiversity Risk Categories

Outcomes

Frutura.



Example Map

This map depicts all 1,338 farms and facilities for one of Frutura's U.S. business units. Each site is depicted as an icon representing the operation type (farm, packing/processing facility, cold storage). The size of each icon reflects the combined overall risk score of the sight, with the larger icons representing higher risk. In the zoomed-in image, The color of each site represents the subcategory of water risk that contributes most to the overall social risk score.

Recommendations

The team recommends that Frutura strengthen its supply-chain risk management by moving from inherent risk data to site-specific assessments that capture on-the-ground realities.

Key actions include:

- **Use site-specific tools:** Leverage Sedex for social risk (SAQs, audits) and WWF's Risk Filter Suite for water and biodiversity.
- **Expand supplier scope:** Extend analyses beyond Tier 1 to include Tier 2 suppliers, improving transparency and accountability across the full supply chain.
- **Improve data quality:** Standardize location data using coordinates, maintain consistent data entry practices, and require regular updates to ensure accuracy.
- **Develop company policies:** Finalize deforestation and human-rights policies aligned with the Accountability Framework Initiative (AFi) and international standards.
- **Implement a phased approach:** Prioritize high-risk regions first (e.g., Central Mexico, Peru, California), followed by medium and low-risk sites.
- **Institutionalize risk management:** Conduct assessments regularly, integrate tools and training for suppliers, and use consistent reporting systems

Overall, these steps create a structured roadmap for Frutura to enhance risk management, improve data credibility, and build long-term supply-chain resilience.

Hotspot Analysis

Social	Topics: Suppliers and operations face their greatest social risks in the Working Hours* and Health, Safety & Hygiene categories. Noteably, the Children and Young Workers category represents the most significant risk within U.S. operations. Locations: The areas with the highest inherent social risk across all suppliers and operations are Mexico, the Coast of Peru, and Guatemala.
Water	Topics: Frutura's greatest inherent water risks are Drought, Water availability, and Enabling Environment. Drought is of particular importance as it shows up in almost every water hotspot that was identified Locations: The highest inherent water risk was found in Central Mexico, Southern California, the Cost of Peru, and Chile.
Biodiversity	Topics: The highest biodiversity risk categories across suppliers and direct operations are Regulating and Supporting Services - Enabling and Regulating Services - Mitigating Locations: West and Central Mexico are consistently a biodiversity risk hotspot across direct operations and suppliers.
Overall	Central/Western Mexico and the Coast of Peru are consistently hotspots across all risk categories for suppliers and Frutura's direct operations.

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