Voluntary Sustainability Standards (VSSs) and Resilient Supply Chains

Lessons from Banana, Cotton, Palm Oil, and Soybean Markets

June 25, 2020 at 9:00 a.m. EST / 3:00 p.m. CET

Speakers:
- Steffany Bermudez, IISD’s Associate Co-Author of Sustainable Commodities Marketplace Series 2019
- Thomas Bernet, Group Lead, Value Chains and Markets, FiBL
- Pierre Courtemanche, Sustainability and Supply Chain Strategist, Founder of GeoTraceability, Groupe OPTEL
- Rochelle Eisen, Organic Certification Expert, Former president of Canadian Organic Growers
- Verina Ingram, Senior Researcher and Assistant Professor, Forest & Nature Conservation Policy Group, Wageningen University & Research Centre

Presenter:
- Vivek Voora, Sustainability Standards Advisor and Lead Author of Sustainable Commodities Marketplace Series 2019, International Institute for Sustainable Development
Agenda

- Welcome and panel introduction
- Background
- Part 1: Production and Consumption Trends: Soybeans, Cotton, Palm Oil, and Bananas
  - First panel discussion
- Part 2: Potential for VSS Expansion in Existing Production Areas and Opportunities for Building More Resilient Agricultural Supply Chains
  - Second panel discussion
- Q&A
- Conclusions
State of Sustainability Initiatives (SSI)

Sustainable Commodities Marketplace Series 2019: Global Market Reports

- IISD is an independent think tank delivering knowledge to act.

- IISD’s SSI is an international transparency and capacity building project aimed at improving strategic planning and sustainable development outcomes related to voluntary sustainability standards.

- Objective of the series: to provide a market performance outlook on global consumption and production trends of eight agricultural commodities in a short, easy to read format, target to producers, value chain actors and government institutions.

- Overarching theme: the 2019 edition explores the potential for expanding VSS-compliant production in Low Human Development Countries (LHDC).
State of Sustainability Initiatives (SSI)

Sustainable Commodities Marketplace Series 2019: Global Market Reports

IISD’s data collection strategy includes:

For production data: collaboration between ITC, FiBL, and IISD to collect data directly from VSSs

• Data as of 2016 was collected in 2018 (used in 2019 series published in 2019-2020)
• In 2020, we collect data as of 2018

For consumption data: IISD collects data directly from buyers and via literature review

Sustainable Commodities Marketplace Series 2019: Global overview, showcasing consumption/production trends of sustainable and conventional markets: economic planning

With the support of the Swedish Government.
Production and Consumption Trends
Soybeans, Palm oil, Cotton and Bananas
Global Market Reports
Snapshot of Soybean, Palm Oil, Cotton, and Banana markets

**Soybeans**
- 80% of production is dominated by large industrial farms
- 18 producing LHDCs
  - 5 VSS-compliant
- 44% of total production exported in 2017, worth $146B
- Source of nutrition and food security for 400M people
- 27 producing LHDCs
  - 3 VSS-compliant
- 20% of total production exported in 2017, worth $58B
- $146B retail market value (2017)

**Palm Oil**
- 3M smallholders, producing 40% of total palm oil
- Jobs for 2.9M people (2013/14)
- 17 producing LHDCs
  - 6 VSS-compliant
- 75% of total production exported in 2016, worth more than $28B
- Source of nutrition and food security for 400M people
- 27 producing LHDCs
  - 3 VSS-compliant
- 20% of total production exported in 2017, worth $11B
- $56B retail market value (2016)

**Cotton**
- Provides livelihoods for 1B people, incl. 100M farmers
- 29 producing LHDCs
  - 11 VSS-compliant
- 30% of total raw cotton production exported in 2017, worth $13.5B
- Supports a $748B global textile mills market (2016)
- Source of nutrition and food security for 400M people
- 27 producing LHDCs
  - 3 VSS-compliant
- 20% of total production exported in 2017, worth $11B
- $20-$25B retail value (2016)

**Bananas**
- 80% of production is dominated by large industrial farms
- 18 producing LHDCs
  - 5 VSS-compliant
- 44% of total production exported in 2017, worth $146B
- Source of nutrition and food security for 400M people
- 27 producing LHDCs
  - 3 VSS-compliant
- 20% of total production exported in 2017, worth $58B
- $146B retail market value (2017)
Production Trends  Soybeans, Cotton, and Bananas (2008-2016)

**CAGR (2008-2016)**
- **Soybeans**: +4.68%
- **Cotton**: -0.58%
- **Bananas**: +0.71%

**CAGR (2008-2016)**
- **Soybeans**: +2.62%
- **Cotton**: + 48.05%
- **Bananas**: + 43.11%

**Source:** FAOStat, ITC-FIBL-IISD/SSI
Production Trends

Conventional vs. VSS-Compliant Palm Oil Production (2008-2016)

CAGR (2008-2016)

Conventional Palm Oil: +1.86%

VSS-Compliant Palm Oil: +110%

Source: FAOStat, ITC-FIIBL-IISD/SSI
## Consumption Trends

### Conventional and VSS-Compliant Consumption Trends: Palm Oil and Soybeans

<table>
<thead>
<tr>
<th>Soybeans</th>
<th>Palm Oil</th>
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</thead>
<tbody>
<tr>
<td><strong>Conventional</strong></td>
<td><strong>VSS-Compliant</strong></td>
</tr>
<tr>
<td>Growing demand: Increased consumption of meat (in emerging economies)</td>
<td>VSS-compliant palm oil demand continues to grow, but it remains lower than supply. Not a completely &quot;consumer-facing&quot; commodity.</td>
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<tr>
<td>and soy-based products.</td>
<td>VSS-compliant consumption is concentrated in <strong>Europe</strong> and <strong>North America</strong>.</td>
</tr>
<tr>
<td>Positive forecast from <strong>Asia</strong> (China) and <strong>Europe</strong>,</td>
<td>Leading buyers sourcing commitments: driven by reputational risks, supply chain risks, and consumers preferences, given the links between palm oil cultivation, global deforestation, and biodiversity loss.</td>
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<td>soymeal and cake for animal feed and soybean oil to produce biofuels.</td>
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<tr>
<td><strong>VSS-Compliant</strong></td>
<td></td>
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<tr>
<td>Low demand, estimated oversupply of VSS-compliant production sales,</td>
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<tr>
<td>it limits market uptake.</td>
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<td>Mainly driven by commitments from <strong>European</strong> countries which have</td>
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<td>imposed bans on importing GM crops. The <strong>Asia-Pacific</strong> region leads</td>
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<td>demand for organic soy-based products.</td>
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<tr>
<td>Not a completely &quot;consumer-facing&quot; commodity; main buyers/processors</td>
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<td>have established sustainable commitments based on deforestation-free</td>
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<td>production.</td>
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**Asia**: (India, China, Indonesia)
## Consumption Trends

### Conventional and VSS-Compliant Consumption Trends: Cotton and Bananas

<table>
<thead>
<tr>
<th></th>
<th>Cotton</th>
<th>Bananas</th>
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<tbody>
<tr>
<td><strong>Conventional</strong></td>
<td>Increasing demand, growing population and demand for textiles and apparel, particularly in the Asia-Pacific region.</td>
<td>Largely consumed domestically, important crop for food security and nutrition in Asia and Africa.</td>
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<td></td>
<td>Consumption (raw cotton) is increasing in Chinese and Indian mills, with potential growth in Bangladesh, Indonesia, and Vietnam (lower tariffs and labour costs in textile factories).</td>
<td>Forecast: demand expansion in Asia-Pacific (India, China, and the Philippines) due to population growth, shifts in healthy diets and growing per capita incomes.</td>
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<td></td>
<td>Competition from cheaper synthetic fibres.</td>
<td>Bananas are also popular in Europe and North America, with consumers looking to healthy options, fruits to replace products containing refined sugar.</td>
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<td><strong>VSS-Compliant</strong></td>
<td>Demand comes primarily from Europe and North America- consumer preferences towards eco-friendly clothes and homeware.</td>
<td>Most VSS-compliant bananas produced are sold and marketed as such (80% in 2012).</td>
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<td></td>
<td>Demand for organic cotton is expected to outpace supply in coming years.</td>
<td>Regions driving demand: North America (US) and Europe (UK, Belgium, and the Netherlands), consumer awareness, preferences for more sustainable and healthy products.</td>
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<td></td>
<td>Buyers of cotton (clothing and apparel industry): interest/progress towards identification of raw materials in the chain (i.e.GM cotton), use of technology and communicating their sustainability performance.</td>
<td>Main banana sourcing companies have made commitments to grow only VSS-compliant bananas, progress of sourcing volumes are largely unknown.</td>
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</table>
Challenges of Commodity Markets

Existing Challenges for Soybean, Palm Oil, Cotton, and Banana Markets

Economic

- Price volatility
- Income disparity across the value chains
- Low farm-gate prices
- Effects of changing trade policies (i.e. subsidies, stockpiling)
- Market concentration (i.e. land tenure, production/importing regions, trade)

Market penetration of VSS-compliant products is increasing, but still limited in some sectors

- Consumer preferences: developed vs. developing countries
- Business risks and reputational risks
- Regulatory frameworks (i.e. deforestation free soybeans and palm oil; GM cotton)
- Limited uptake of VSS-compliant products (i.e. hidden commodities, education/awareness, purchasing power)
- Weak visibility across the supply chain and emerging traceability
Challenges of Commodity Markets

Existing Challenges for Soybean, Palm Oil, Cotton, and Banana Markets

Environmental

- Agronomic/management practices
- Soil erosion and infertility
- Agrochemicals, water use
- Deforestation and biodiversity loss
- Pest and diseases
- GM crops
- Climate change and extreme weather

Social

- Land grabbing
- Poor working conditions
- Low wages
- Reported cases of modern slavery
- Inequality of cultivated land tenure
Resilience of Agricultural Supply Chains and System Change Towards Sustainability?

Responses to Covid-19 Supply Chain Impacts

Driving forces towards safety and sustainability

- Technology, data and analytics
- Consumer preferences: from global to local. Estimated increase organic sales
- “Need for visibility, transparency and traceability”
- “Vulnerability of supply chain to shocks”
- “Transition to environmental recovery and regeneration”
- Transition to a “carbon-neutral society”
- Stronger government role

Resilience of Supply chains to shocks

Panel Discussion
Resilience of Agricultural Supply Chains and System Change Towards Sustainability?
Potential for VSS Expansion in Existing Production Areas
Opportunities for Building More Resilient Agricultural Supply Chains
Voluntary Sustainability Standards and Resilient Agricultural Supply Chains

- Our rapidly changing, interconnected world requires more resilient global agricultural systems.
- Standards and resilient agricultural systems: a potential contradiction of sorts?
- Examples of VSS contributions to resilient agricultural systems.
- Important opportunities remain for enabling more resilient agricultural systems.
Opportunities for a More Resilient Banana Sector

- The production share of LHDCs to the total and VSS-compliant global production was 12% and 2%, respectively, in 2016.

- Greatest potential for expanding VSS-compliant production to enable development and resilience based on contribution to global production, absence of VSS, and their Human Development Index: Tanzania, Rwanda, Papua New Guinea, Burundi, and Sudan.

- Greatest potential for expanding VSS-compliant production based on contribution to global production and absence of VSS: India, China, Indonesia, Brazil, and the Philippines.
Opportunities for a More Resilient Palm Oil Sector

- The production share of LHDCs to the total and VSS-compliant global palm oil production was 5% and 6%, respectively, in 2016.
- Greatest potential for development by expanding VSS-compliant production in LHDCs: Côte d’Ivoire, Nigeria, Congo, Guinea, and Benin.
- Greatest potential for expanding VSS-compliant production: Colombia, Indonesia, Malaysia, Nigeria, and Thailand.
Opportunities for a More Resilient Cotton Sector

- The production share of LHDCs to the total and VSS-compliant global production was 6% and 6%, respectively, in 2016.

- Greatest potential for expanding VSS-compliant production in LHDCs: Mali, Burkina Faso, Benin, Nigeria, and Sudan.

- Greatest potential for expanding VSS-compliant production: India, China and the United States, Pakistan, and Uzbekistan.
Opportunities for a More Resilient Soybean Sector

- The production share of LHDCs to the total and VSS-compliant global soy production was 0.5% and 1%, respectively, in 2016.

- Greatest potential for expanding VSS-compliant production in LHDCs: Nigeria, Benin, Malawi, and Uganda.

- Greatest potential for expanding standard-compliant production: United States, Brazil, Argentina, India, and China.
Panel Discussion
The Role of VSSs in Building Resilient Agricultural Supply Chains
Thank You!

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