Sustainable Supply Chain
Perspective and trends
Sustainability in supply chain - Setting the context

Range of issues
- Child labour
- Forced and bonded labour
- Gender inclusion
- Fair wages
- Decent work
- Carbon savings
- Traceability

Spread across sectors
- Fast Fashion and Ready Made Garments
- Electronics industry
- Auto
- Food and Beverage
- Logistics
- IT and other service sectors

Regulations and Standards
- GRI G4
- Modern Slavery Act, UK
- California Transparency Act
- France duty of care vigilance plan
- MSA, Australia
- Child Labour due diligence bill, Netherlands
- E-waste rules, Plastic rules - India

Others
- Export Competiveness
- Increasing role of MSME
- Disruption – Business models, technology, new set of challenges
Agenda

1. Understanding Sustainability in today’s Supply Chains
2. External factors impacting the supply chain
3. Linking Export competitiveness to sustainability in supply chain
4. Popular supply chain sustainability framework and standards
Understanding Sustainability in today’s Supply Chains
The current state of supply chain

• Over the last decade, supply chains have become global, highly complex and of significant scale.
• Simultaneously, building and maintaining resiliency has become a key success factor for business

Key characteristics that define today’s supply chains:

01 Extremely complex network of material, processes and services spread across different territories
02 Are dynamic and technologically evolving
03 Open to stakeholder scrutiny due to the widespread social media revolution
The current state of supply chain

- In a traditional sense, a simple solution to tackle *business impact on sustainability* could have been

  “just pursue the company/brand to tell its factory to shape up”

A decade ago, that company/brand might own the factory, or be a handful of its customers, and the terms of business relationship would be clear and direct.

Source: https://www.fairwear.org/about/
The current state of supply chain

- But the context in which today’s supply chains operate, is drastically different

Source: https://www.fairwear.org/about/
Challenge of embedding sustainability in complex global supply chain

- Over the past few years, sustainability has taken a central role in the procurement and sourcing criteria for many companies.

- Workforce health and safety incidents, labor disputes, geopolitical conflicts, raw materials shortages, environmental disasters and new legislation in areas such as conflict minerals and modern slavery has been added to the list.

- Growing awareness of supply chain risks among customers, consumers, investors, employees and local communities
Supply chains are still plagued with core social issues: Child Labor

Major Car firms linked to child labour over glittery mica paint

Major smartphone suppliers accused of using child labour

An investigation by Amnesty International has found that cobalt in smartphone batteries is being mined by children as young as 7.

152 million children are still in child labour, of which 73 million are in hazardous work - ILO Report 2017

OF THE 152 MILLION CHILDREN IN CHILD LABOUR

<table>
<thead>
<tr>
<th>AGE PROFILE</th>
<th>GENDER</th>
<th>ECONOMIC ACTIVITY</th>
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<tbody>
<tr>
<td>5-11 years-olds</td>
<td>48%</td>
<td>70.9% Agriculture</td>
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<tr>
<td>12-14 years-olds</td>
<td>28%</td>
<td>11.9% Industry</td>
</tr>
<tr>
<td>15-17 years-olds</td>
<td>24%</td>
<td>17.2% Services</td>
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Source: ILO Report, 2017
Environmental concerns and scrutiny is on the rise..

Consumer Goods Company accused for mercury poisoning

Major brands admitting that recycling is not enough to tackle plastic pollution crisis

by Greenpeace International  •  15 January 2019

“While today's announcement is a step in the right direction, the company needs to scale up its efforts toward reusable systems rather than grasping at a quick fix that could...

Oceans will have more plastic than fish by 2050 - CMFRI, India

80% of World’s wastewater discharged untreated, due to lack of infrastructure and technical expertise - UN Report, 2017

Water scarcity could result in some regions losing 6% of their GDP: World Bank report

Water is at the focal point of socio-economic development and its scarcity is one of the most difficult of the UN sustainable development goals to achieve.

Tuticorin plant shutdown to affect over 800 SMEs

- The Economic Times

Source: Google News
Unsafe work environment is taking its toll..

Rana Plaza building collapse in Bangladesh **killed at least 1,132 people** and injured more than 2,500 - ILO

Several Major brands were impacted by Rana Plaza collapse

ILO Estimates Over **2.3 Million workers** succumb to work-related accidents or diseases every year.. this corresponds to over **6000 deaths every single day**

Economic burden of poor occupational safety and health practices is estimated at **3.94 per cent of global Gross Domestic Product** each year - ILO

British Safety Council report says **48,000 die yearly** due to occupational accidents in India


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**Major brands are still found guilty of exploitation of human rights.**

Workers at factories of smartphone are being paid less wage

Workers abused at factories of major brands

47% of spinning mills in Tamil Nadu use bonded labour schemes (2016 report ICN – fabric of Slavery)

Worker held captive in Indian mills supplying

Guardian inquiry into concerns raised by reveals Tamil Nadu firm, which also supplies major UK brands, stops women leaving factory

41% Indian employees feel they are *poorly paid*, says ILO study
Recent trend of demanding stricter product safety and traceability

Welspun takes Rs 501 crore hit over Egyptian cotton issue.

Target dumped one of its biggest Indian supplier for fake Egyptian cotton bedsheets

August 2016 – Welspun Global Brands, one of Target Corp’s biggest suppliers was removed from the supply chain because of the fake Egyptian cotton bedsheets supplied by them. This has wiped $740 million off Welspun’s market value, halving the share price within one week of the announcement. Target US is expected to spend $90 million in refunds.

91% CEO agree that it’s important to them to ensure the integrity of their supply chain.

PwC Global CEO Survey

Better bananas: settles lawsuit over green marketing, but the legal battle isn’t over

The lawsuit filed against NGO for Deceptive Sustainability Claims by US NGO. US NGO "advertises that its bananas are farmed in an ecologically friendly and sustainable manner."

Brands Using Certification Schemes Fail to Stop Labor Abuse

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External factors driving the supply chain sustainability
External factors driving the supply chain

Growing Global and domestic Regulations

Rising Customer Expectations and Innovation

Diminishing traditional Supply Chain boundaries

Digital Transformations

Climate Change and other environmental concerns

How external factors affect supply chain?

Financial Performance

Disruption of supply chain due to lack of availability of raw material

Customer Satisfaction
International Regulations are becoming more stringent and also expanding their boundaries

- US - Foreign Corrupt Practices Act
- Restriction of Hazardous Substances (RoHS) – EU and US
- Waste from Electrical and Electronic Equipment (WEEE)
- The EU Directive on Non-financial reporting
- Duty of Vigilance - France
- UK Bribery Act and Modern Slavery Act
- Import ban on 24 types of solid waste including plastic - China
- Modern Slavery Act - Australia

Enforcement after 2017
Before 2017
Indian Regulations are getting more stringent

Packaging charges comprise about 2 - 3% of fulfilment costs. Use of biodegradable plastic or other alternatives could push these costs even higher. Cardboard boxes, for example, could cost nearly a third more than plastic packing.

Due to the new e-waste requirements, many consumer goods companies will have to make a provision for the cost of meeting the e-waste collection targets, which in turn is linked to the past sales of the product and its expected life.
Growing customers' expectations

Sustainability Performance

Only **16%** of consumers consider that companies provide enough information on product manufacturing processes – GreenFlex Ethnicity Survey.

Certification of commodities

**33%** of consumers look for sustainability information while making purchases in Asia and South America – UN Global Compact Report and Accenture Study 2014.

Increased interest in sustainably sourced products

53% of shoppers in the UK and **78%** in the US, **88%** in India and **85%** in both Brazil and Turkey buy products that are sustainably produced - Unilever Study 2017.

Willingness to pay more

66% percent of global consumers are willing to pay more for sustainable goods, which consists of **73%** Millennials – The Sustainability imperative, New insights on consumer expectations, Nielson 2015.
**Diminishing Supply Chain boundaries**

**Traditional view**
Diminishing Supply Chain boundaries

The boundaries of supply chain management have shifted from manufacturing and are disappearing.
Digital Transformation raising supply-chain performance

Internet Of Things Market revenue to reach 3 trillion USD By 2020 – PwC FinTech Insights

By 2023, Alibaba and Amazon will have captured 40% market share of global online retail

IBM developed a block chain solution to improve supply chain management in the mining and metals industry—which is estimated at $1.8 trillion

Prime Air from Amazon can deliver packages to customers in 30 minutes or less using drones.

NASA Satellite Data Used to Study the Impact of Oil Palm Expansion Across Indonesian Borneo

U.S. Department of Labor using IoT and AI to track immigrant workers

Honeywell and Intel unveil a wearable, connected safety solution for industrial workers and first responders.
Environmental factors affecting supply chain....

**Resource Scarcity**

With a population of 8.3 billion people by 2030, we’ll need...

Demands of the global population by 2030

- +35% Food
- +40% Water
- +50% Energy

2016 2030

Source: National Intelligence Council

**Environmental Pollution**

By 2050, there will be more plastic than fish in the world’s oceans - CMFRI, India

Air pollution-linked deaths in India could increase to 3.6 million by 2050 if no further actions are taken - Health Effects Institute and IIT

Water shortages could affect 5bn people by 2050 - UN report

**Climate Change**

150-200 million people will be on the move...

...from land today that will be under water by 2100

Source: Climatecentral.org

To stay within 2°C, the world needs to cut its carbon intensity by 6.5% every year to 2100

Source: PwC Low Carbon Economy Index (2016)

- Severe impact on agricultural based supply chain
- Increase in the intensity of the extreme weather events like droughts, cyclone, temperature rise impacting supply chain

Present scenario

- Water scarcity in the textile processing regions in Tamil Nadu
- 54% Indian cities faces acute water crises
- Increase in conflict with local stakeholders over access to resources

- Indian is facing severe issues with dropping ambient air quality
- Presently, 80 Percent Of World’s Wastewater Discharged Untreated – UN

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PwC

January 2019
Linking export competitiveness to sustainability in supply chain
Export competitiveness

Global value chains (GVCs) are becoming the new paradigm of domestic manufacturing and international trade.

More than 60% of global trade consists of trade in intermediate goods and services.

Further, GVC trade accounts for 30% of the GDP of developing countries

- United Nations Conference on Trade and Development
The current Export Scenario

In 2017 India exported 4,418 products to 219 countries having a value of US$ 294,364 million

Precious Metals 15%
Textiles 13%
Chemical Products 15%
Mineral Products 10%
Machines 9.50%
Metals 7.30%
Transportation 7.20%
Agricultural Products 5.60%
Diary Products 3.80%
Plastics and Rubber 2.90%
Stone and Glass 1.20%
Footwear and Head Wear 1.40%

India’s exports rose 9.8% during 2017-18, the highest growth compared to previous 6 years.

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The size of the ESG-linked investment market in India is pegged to be $30 billion and estimated to touch $240 billion in the next decade – Morningstar, 2017

32% (up from 23 per cent in the previous year) of the companies give specific targets to their suppliers to reduce their carbon footprint and conduct environmental audits of new suppliers

A survey of 221 venture capital fund managers show that sustainability and impact on environment and society are becoming key factors for investment decisions – Preqin
Sustainability – a success lever for Make in India

1. Ease in getting approvals and clearances
2. Improved the land acquisition process
3. More efficient tax structures and procedures
4. Better contract enforcement procedures

Sustainable manufacturing growth

Understand sustainability needs of buyers and supply side challenges

Measure and monitor sustainability performance of potential vendors (focus on MSMEs)

Plan policy interventions to facilitate sustainable manufacturing growth

Make In India - Success Levers
Sustainability Links to Make in India

Buyers
- Communicate sustainability needs to a larger supplier community
- Customise vendor engagement and monitoring tools based on supplier concerns
- Leverage on existing policies on sustainability and engage in a dialogue with GOI on future policies

Suppliers
- Understand sustainability needs of brands
- Make sustainability a competitive advantage
- Adopt govt. policies that facilitate green growth
- Demonstrate innovate practices on sustainability in brand meets

Linkage to “Make in India” Objectives:
- **Facilitate investment**
  By using sustainability as a competitive advantage to attract brands
- **Foster innovation**
  By rewarding innovation in processes and products to foster sustainable growth
- **Best-in-class manufacturing infra**
  By facilitating adoption of cleaner technologies
Popular supply chain sustainability framework and standards
Popular sustainability framework and standards

<table>
<thead>
<tr>
<th>Framework/Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>ISO 20400:2017</td>
<td>Ensures supply chain security, prevents financial, environmental and reputational risks</td>
</tr>
<tr>
<td>SA 8000</td>
<td>Measures social performance in eight areas important to social accountability in workplaces</td>
</tr>
<tr>
<td>UN Global Compact</td>
<td>Encourages companies to make sustainability a priority, from the top of the organization</td>
</tr>
<tr>
<td>OHSAS 18001</td>
<td>It is designed to help companies in promoting occupational safety and health through the supply chain</td>
</tr>
<tr>
<td>ILO</td>
<td>Promotes sustainable global supply chains through international standards, due diligence and grievance mechanisms</td>
</tr>
<tr>
<td>IFC</td>
<td>With IFC’s assistance, FIs can offer financing packages designed to improve supplier performance and credit risk</td>
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January 2019
Growth in Sustainability Disclosures

115 of the largest purchasing organizations engage suppliers through CDP's supply chain program.

11,000+ suppliers requested to provide information to their customers through CDP in 2018.

2094 companies participated in the DJSI assessment in 2018.

Launched in 1999, the DJSI is the first global indices tracking the financial performance of leading sustainability-driven companies worldwide.

The MSCI ESG Indexes also provide institutional investors with transparency into ESG sustainability and values alignment, together with the ability to compare holdings.

82 new companies to be added to the FTSE4Good Developed Index

34 new companies to be added to the FTSE4Good Emerging Index. 8 new Japanese firms enter FTSE4Good and FTSE Blossom Japan Index
Voluntary Certifications and Standards

More stringent environmental and social criteria
Niche markets
Fair Compensation
Reliance on Certification

Accessible standards
Continuous improvement for reaching more stringent regulations
Ease in verification
Mainstreaming Sustainability

- Forest Stewardship Council
- Better Cotton Initiative
- Roundtable on Sustainable Palm Oil
- Sustainable Natural Rubber Initiative (SNR-i)
- Sustainable Apparel Coalition
- Ethical Trading Initiative (ETI)
- Fair Trade
- Rainforest Alliance
- 4C Coffee
In a nutshell

Sustainability in supply chains can no longer be ignored

- Sustainability across industries has evolved and grown in importance.

- Most organizations that once felt it was something they needed to do to meet their social, legal and regulatory responsibilities, today, consider improving sustainability of their supply chain as a strategic area of focus.
In a nutshell

01 Supply Chain sustainability can not be ignored

02 Companies are predominantly risk driven with aspirations to unblock strategic opportunities and benefits

03 Companies apply cross-functional approaches and governance to create sustainable supply chains

04 Leading companies are establishing a shared commitment with suppliers

05 Technology enables visibility beyond Tier 1

06 Collaboration is critical for companies to achieve greater impacts.
Thank You