Environmental regulatory systems in the garment sector: comparative analysis of four countries

Webinar #1

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Outline of webinar

- Context
- Overview of environmental impacts of the sector
- Comparative analysis
- Gaps, implications and next steps

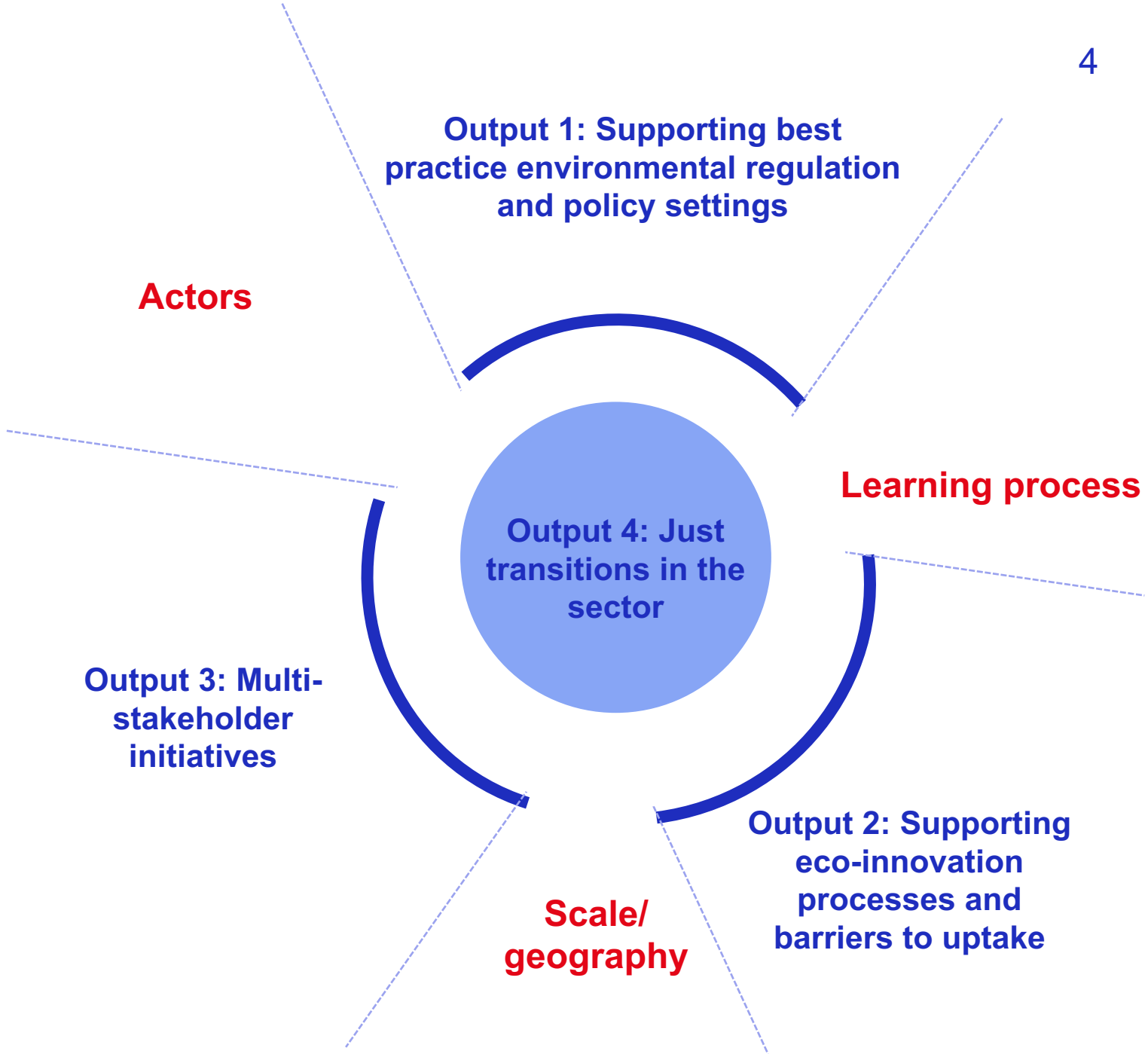
Context and definitions

- **Environmental and regulatory policy systems:** policies are the positions taken by governments that **recognise a problem** and set out what will be done about it. Policy is created through a **process**, and influenced by a **set of policy actors**. Regulation is only one policy tool - but explicit, it creates the laws that govern behaviour – in effect the **minimum standards**.

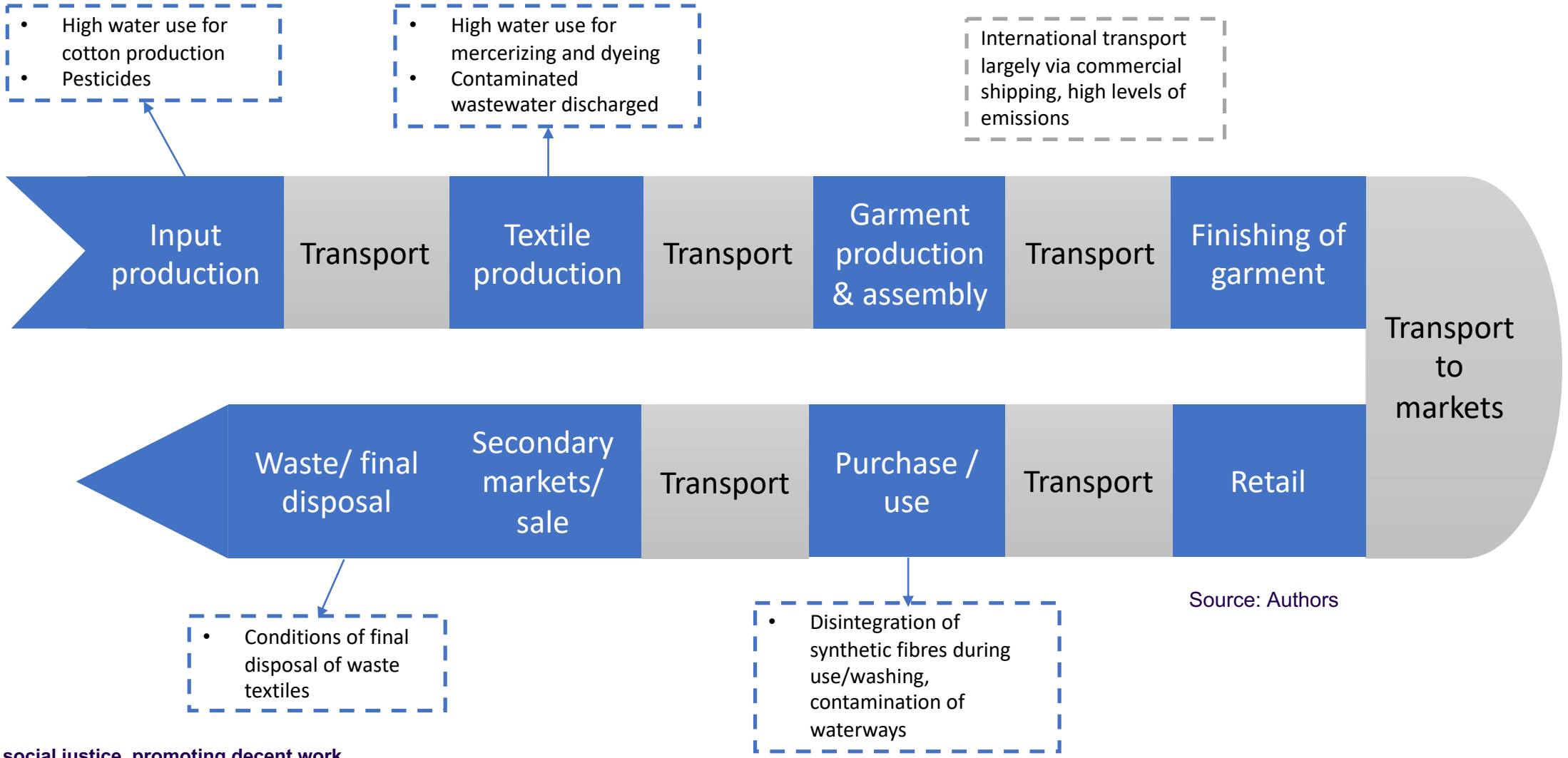
- **Why analyze environmental regulations:** nexus of environment and development – how we manage issues of resource depletion, pollution and waste and the impacts both have on ecological systems with the development of society.

- **Why compare**: understand how it can be done better. Useful ideas, practices insights, best practice drawn from one context can be useful in another context, especially when thinking about an industry with global supply chain over multiple countries.

- **Outcome 4: ENHANCE ENVIRONMENTAL SUSTAINABILITY** by strengthening (a) policy and regulatory guidance, and (b) tools and knowledge to support eco-innovation and the Just Transition



Key environmental impacts in the garment supply chain



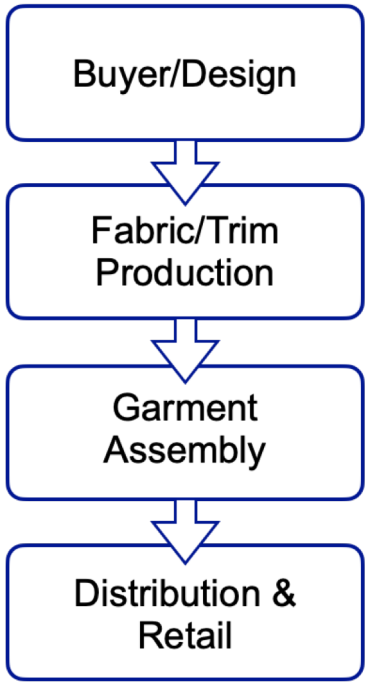
Source: Authors

Environmental impacts of the garment sector: Textile production

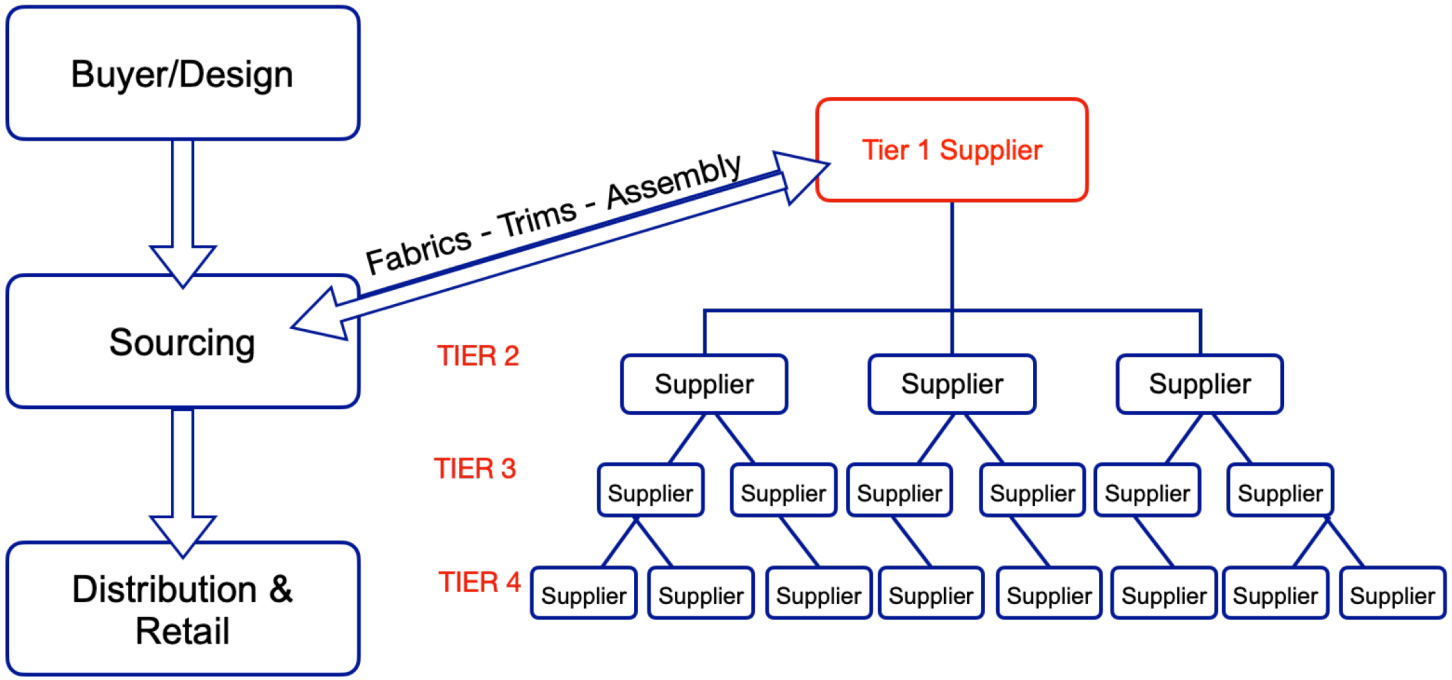
- **Wet processing:** 200 L fresh water used per kilogram of textiles produced
- **Discharge of untreated wastewater is the largest impact:** Wastewater discharge can include: Salt, surfactants, ionic metals, toxic organic chemicals, toxic anions, biocides, heavy metals
- **Emissions to air and odours:** Combustion products from boilers – particulates, nitrogen and sulfur oxides; High temperature drying ovens release volatile organic compounds; Bleaching releases chlorine and chlorine gas; Finishing processes release formaldehyde
- **Microfibre plastics:** plastic particles emitted to the air and wastewater – released through the creation of synthetic garments, from fibre making to finishing
- Fibre and textile production is energy and water intensive, lower labour requirements
- Garment and textile production is labour intensive, lower energy use

Operating models

Vertically Integrated



Buyer / Sourcing / Distribute



Textile and garment sector characteristics in four countries

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Textile and garment sectors in four countries

	Vietnam	Bangladesh	Indonesia	Cambodia
No. employees	3 million	5.5 million	4 million	1 million
No. enterprises	7000 (majority SMEs)	8,500 (180,000 SMEs/ informal units)	5000 (LMEs), 500,000 (MSMEs)	660
Export value (USD)	$30 billion	$30 billion (+ domestic market)	$15 billion (+ domestic market)	$12 billion
Business model	Cut-make-trim	Textiles and cut-make-trim	Textiles and cut-make-trim	Cut-make-trim
Foreign ownership?	Majority of tier 1 firms	Majority domestic ownership	Mixed	90%

Key environmental issues in each country

- **Vietnam: cut-make-trim, with future focus on wet processing**

Vertically integrating with more wet processing activities increasing environmental risks

- **Bangladesh: whole supply chain, including wet processing**

Contaminated wastewater discharge – low lying delta areas, impacts on water table, contamination into agriculture and aquaculture

- **Indonesia: whole supply chain, including wet processing**

Contaminated wastewater discharge, impacts on downstream agriculture, air pollution with health impacts

- **Cambodia: focus on cut-make-trim**

Solid waste from garment offcuts – landfilled without management or burned for fuel – air pollution

International Labour Organization

Overall comparison

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Environmental Governance

Policy mix	Vietnam	Bangladesh	Indonesia	Cambodia
Statute law	Environment Law (2014), Water Resources Law (2002)	Environmental Conservation Act (1995), Environmental Courts Act (2010), Water Act (2013)	Environmental Protection and Mgmt Law (2009), Water Resources (2019), Waste Mgmt (2008)	Environmental Protection and Natural Resource Mgmt (1996)
Impact of Common Law	Disputes increasing, practice of settlement	Significant – rivers have legal status	Minimal – successful class actions revoked licenses, but reinstated	Minimal
Conventions and similar	Stockholm, Basel	Stockholm, Basel	Stockholm, Basel	Stockholm, Basel
Market based mechanisms	Ecolabel	Ecolabelling, emissions reduction	Ecolabel, Green Industry standard	Some ecolabelling for international market
Environmental subsidies	Import concession, concessional loans	Minimal, significant international activities	Government green loan scheme for SMEs	Limited

Regulatory composition – Water and wastewater

	Vietnam	Bangladesh	Indonesia	Cambodia
Water use	Permit system (5 year)	EIA, Allocations permit system	Permit system	Permit system
Wastewater discharge	Permit system (1-8 years)	EIA linked to ETP permit system	Permit system	Permit system
Mechanism of control	Discharge limits, fees for discharge	Discharge limits, fees for discharge, requirements for ETP	Discharge limits – does not include many pollutants from textiles	Discharge limits – concentration, not load, not specific to textiles industry
Monitoring and sanctions	Self-monitoring and reporting to local officials. Range of sanctions, high degree of discretion in application.	Ministry of Environment, scheduled monitoring activities. Range of sanction, relative low cost to operation	Self-monitoring and reporting to local officials. Government monitoring very limited. Sanctions include removal of permit.	Ministry of Environment conducts monitoring. The factory owner pays. Owner should also test and keep records. Penalties for factories and officials.

Where are the gaps?

Compliance, monitoring and enforcement

- Strong link between regulation, compliance and enforcement
- Monitoring not well resourced

- **Transparency:** what is transparency and how can this be enhanced.

- **Cumulative impact assessment –** e.g. water use, linkages to national water resource planning.

Implications for project

1. Building capacity for compliance and investment in enforcement

- Building awareness and motivation for compliance – focus on SMEs
- identifying best practice and pathways for achieving enhancements in focus countries
- Increased monitoring and enforcement building demand for environmental management services/ jobs
- Role of international regulation – eg EU REACH

2. Building resources to enable transparency

- Identifying and equipping actors including workers, enterprises, CSO with skills and capacity to understand and use data

3. Cumulative impact assessment

- Building capacity for policy coordination and coherence through JT planning framework

Implications for project

4. COVID-19 represents an unpredicted window for change

- Environmental management contributing to building resilience / sophistication into production activities/ jobs
- Recovery plans need to build towards carbon neutrality, environmental sustainability, circularity and sustainable production and consumption
- Prioritise SMEs – focus on cluster approach
- Potential to build partnerships/ collaboration across the supply chain – new networks – new business/ operating models and development of shared financing and use of infrastructure

- **Workplaces** – focus on WASH – linked to better environmental management as well as on-site hygiene
- Links between environmental pollution and respiratory illness.