



**TextileExchange**  
Creating Material Change

# Enhancing Transparency and Traceability of Sustainable Value Chains in the Garment and Footwear Sector

---

## Landscape of Preferred Fiber and Material

30 October 2019

# Textile Exchange

Textile Exchange **inspires** and **equips** people to **accelerate sustainable practices** in the textile value chain. We focus on **minimizing the harmful impacts** of the global textile industry and **maximizing its positive effects**.

# Journey To Preferred

---

Drive and increase in the adoption of preferred fibers and materials

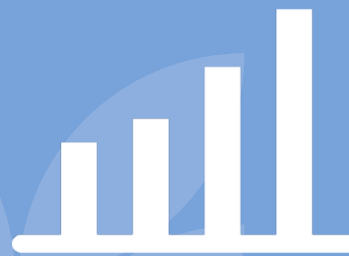
Commitments



Standards



Benchmarking



Peer Learning



# Preferred Fibers & Materials

Textile Exchange defines a preferred fiber or material as one which results in improved environmental and/or social sustainability outcomes and impacts in comparison to conventional production.



Four levels of engagement. Each level has increasing requirements or criteria to satisfy, which seek to move the industry towards meeting the SDGs.

# Industry and Collaboration



Alignment with existing industry tools.



Setting a direction of travel.



A detailed scoring matrix will be developed for Level 1, 2, and 3.



Fiber-specific performance requirements, to ensure that “hot spots” of each unique fiber type is prioritized.

1

2

3

4

Risk mitigation



No steps taken

Addresses risks  
Continuous Improvement

Standard set at  
aspirational level  
Some barriers to entry

Regenerative or  
circular

Standard or  
program  
requirements



No known efforts

Minimizes  
negative impacts

Minimizes negative  
and maximizes some  
positive impacts

Maximizes  
positive impacts

Outcomes and  
impacts



No known  
improvements

Some environmental  
and/or social  
outcomes and impacts

Proven environmental  
and/or social  
outcomes and impacts

Proven environmental  
and social outcomes  
and impacts

Integrity &  
verification



No known  
Integrity  
measures

Simplified  
verification

Robust  
verification

Robust verification  
including impact  
measurement

# A Portfolio Approach

Taking a portfolio approach means recognizing that there might not be one single fiber, material, or program that meets all requirements or business needs, and that a company's selection might change over time.

It can be achieved by....





# Portfolio Options

## PLANT FIBERS



### COTTON

- Organic Fair Trade
- Organic cotton
- Fair Trade
- Cotton made in Africa
- Better Cotton Initiative
- REEL Cotton
- Abrapa
- BASF e3
- Cleaner Cotton
- Field 2 Market
- ISSC Certified
- myBMP
- bioRe
- Regenerative Organic Certified
- Recycled cotton



### LINEN

- Organic linen



### HEMP

- Organic hemp

## ANIMAL FIBERS



### WOOL

- Organic wool
- Responsible Wool Standard
- ZQ Certified
- Recycled wool
- Other animal wool



### DOWN

- Organic down
- Responsible Down Standard
- Traceable Down Standard
- Downpass
- Recycled down



### LEATHER

- Organic leather
- Recycled leather



### SILK

- Organic silk
- Fair Trade silk
- Ahimsa/Peace silk

## REGENERATED FIBERS



### MANMADE CELLULOSTICS

- Lyocell (FSC, PEFC)
- Modal (FSC, PEFC)
- Viscose (FSC, PEFC)
- Acetate (FSC, PEFC)
- Recycled cellulose
- Cupro

## SYNTHETIC FIBERS



### POLYESTER

- Bio-based polyester
- Recycled polyester



### NYLON

- Bio-based nylon
- Recycled nylon



# Fiber Production

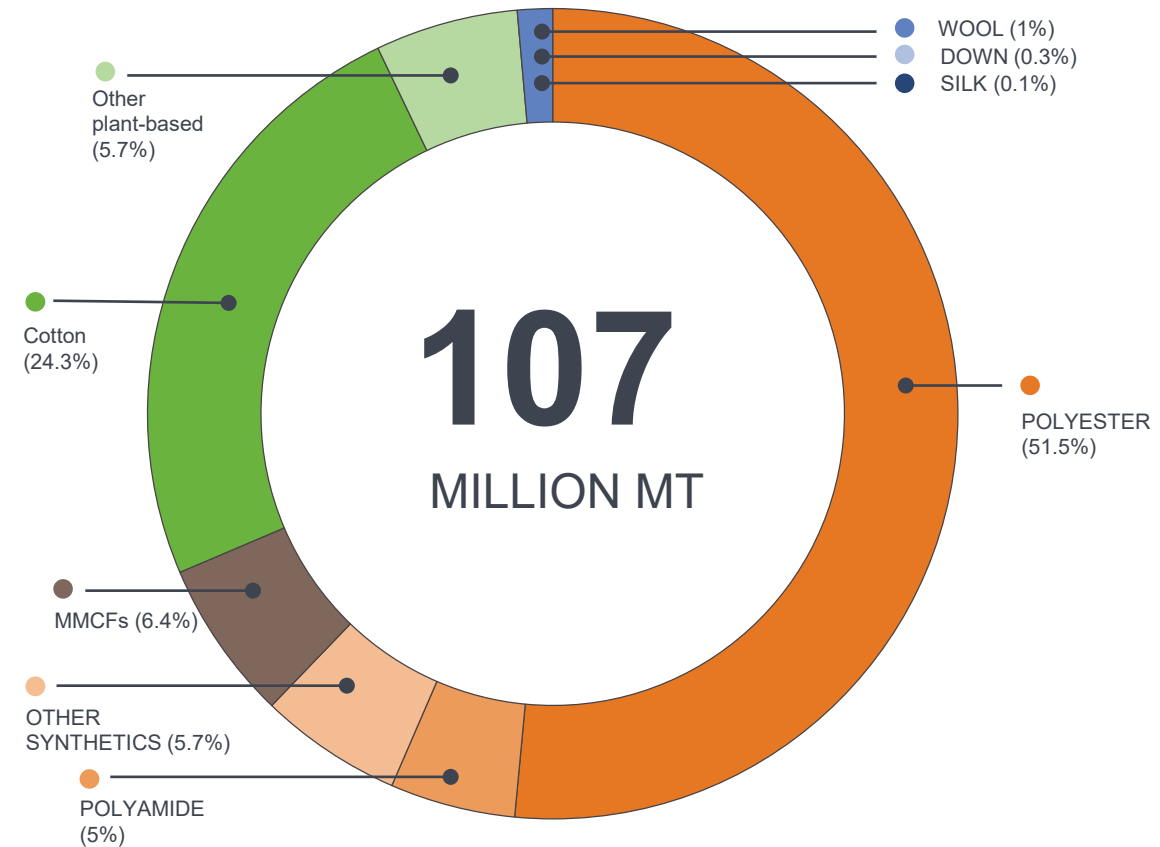
Over 100 million metric tonnes of fibers are produced each year

Polyester dominates the fiber market

Annual production of cotton is steady but the share is shrinking

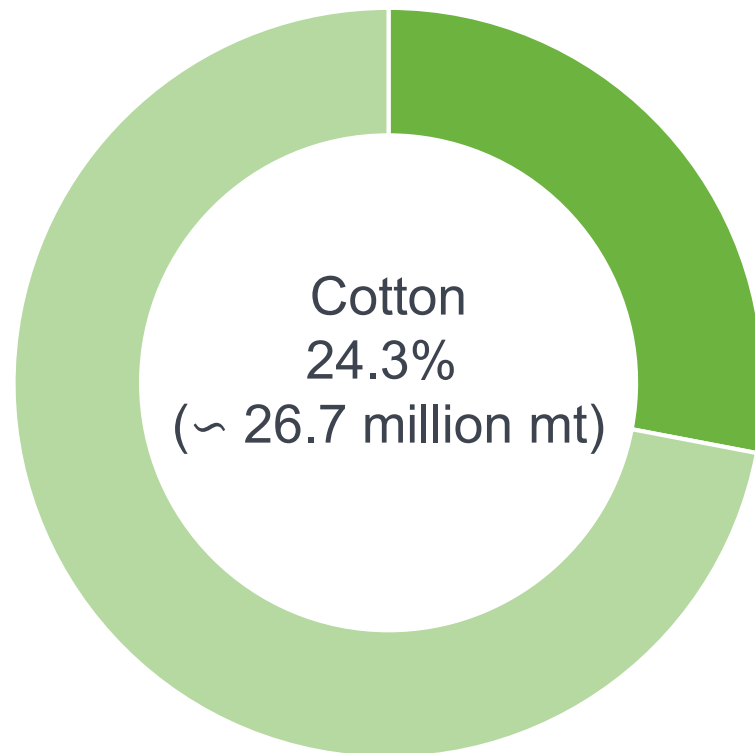
Growth in manmade cellulosic fibers is predominantly viscose

GLOBAL FIBER PRODUCTION IN 2018



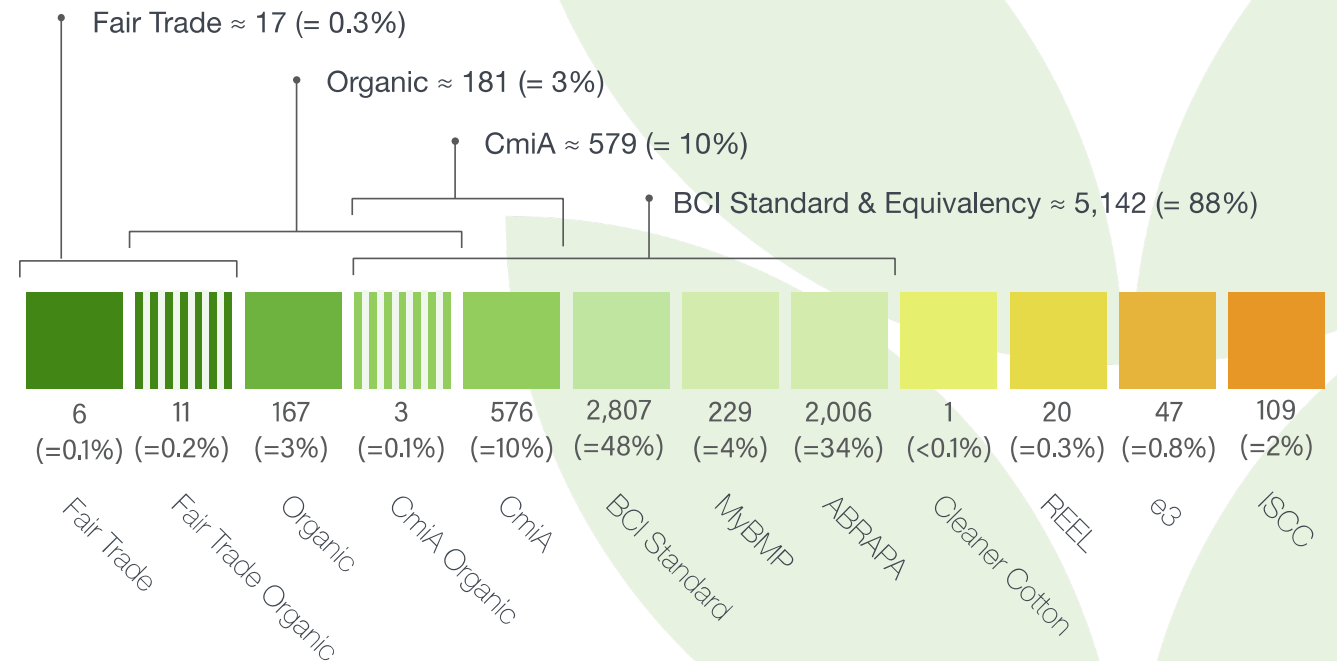
# Cotton

22% (~5.87 Million mt)  
Preferred cotton



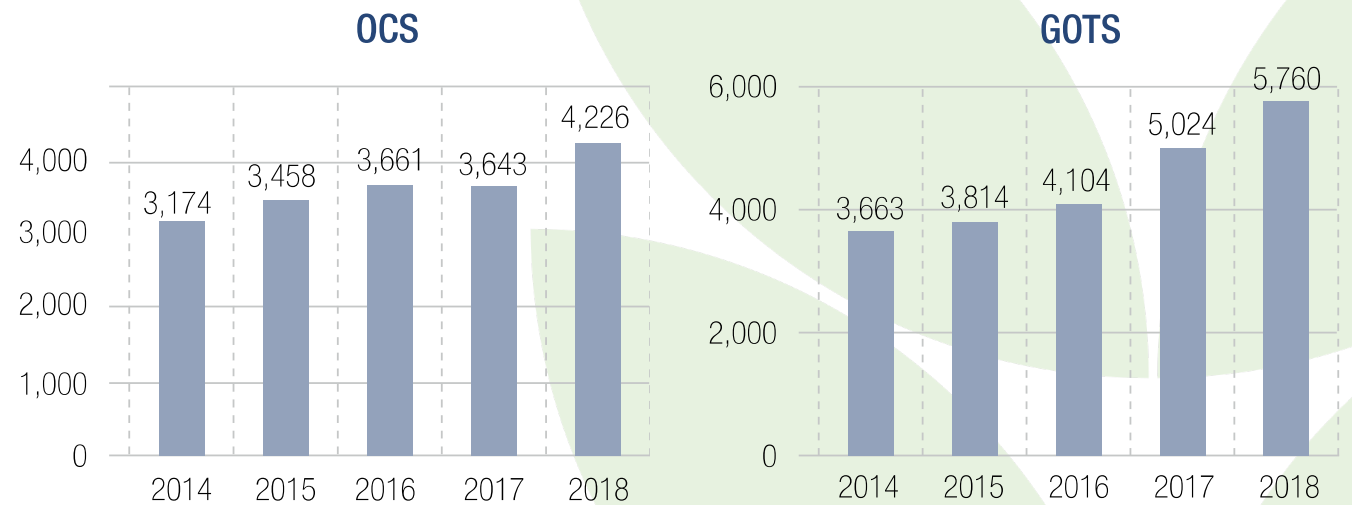
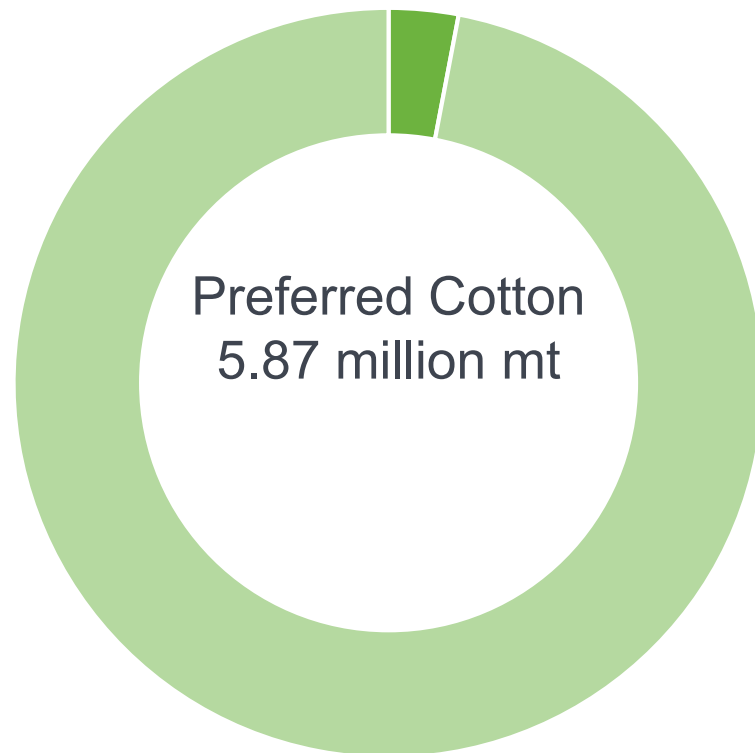
## PREFERRED COTTON FIBER PRODUCTION IN 2017-18 5.9 million MT

in ,000 mt and percent of pCotton

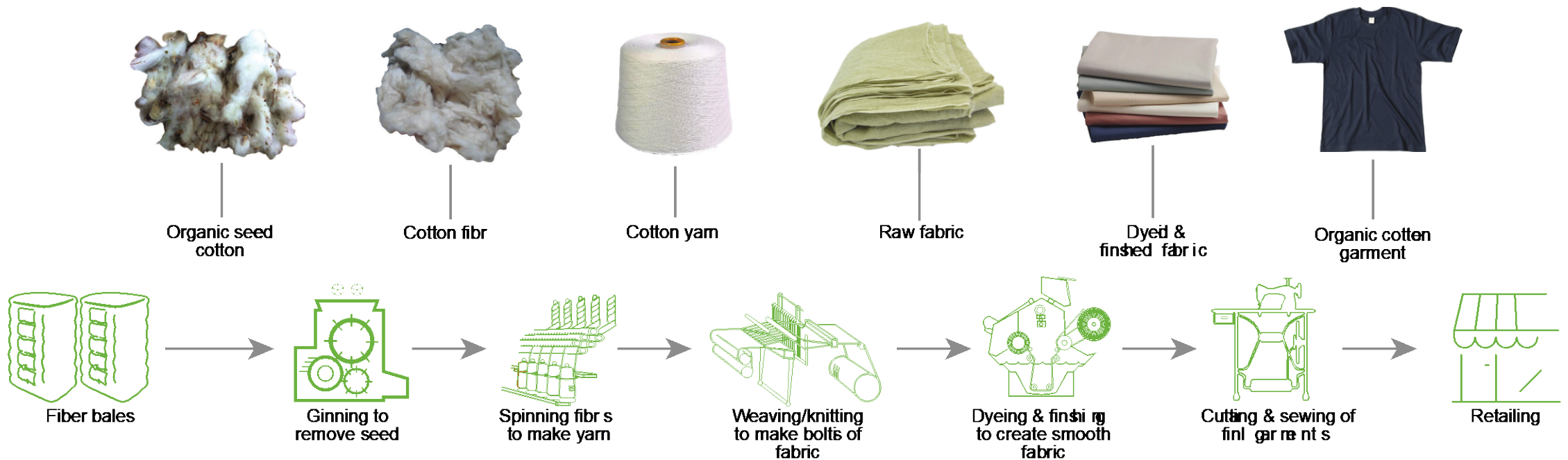


# Organic Cotton

3% (~180,871 mt)  
organic cotton



# Cotton Value Chain



**TIER 4**  
RAW MATERIAL  
EXTRACTION

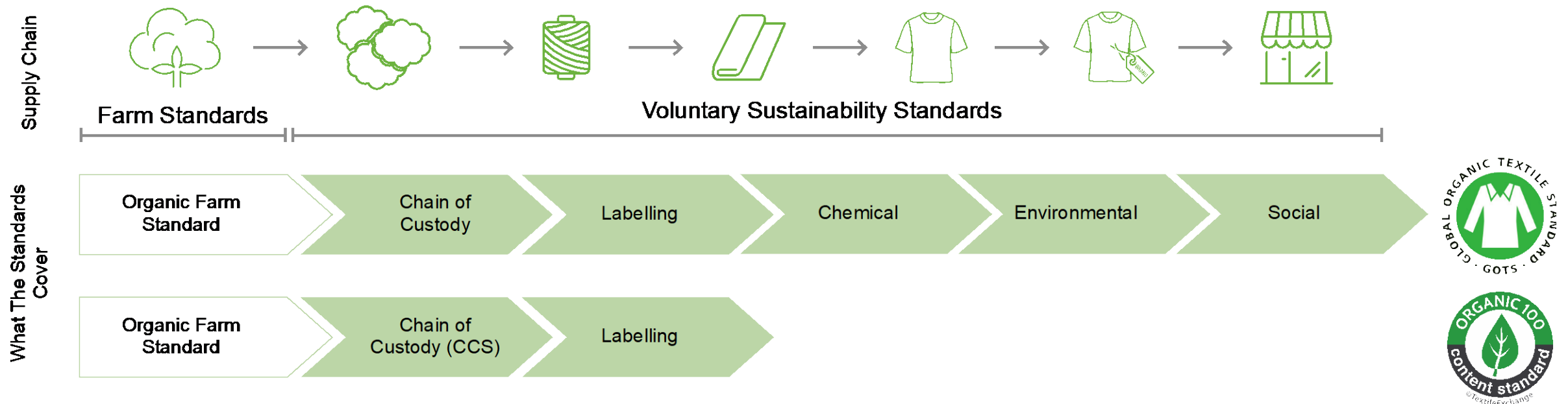
**TIER 3**  
RAW MATERIAL  
PROCESSING

**TIER 2**  
FABRIC  
PRODUCTION

**TIER 1**  
PRODUCT  
ASSEMBLY

**TIER 0**  
DISTRIBUTION  
& RETAIL

# Organic Cotton Standards



# Challenges

---

## Environmental

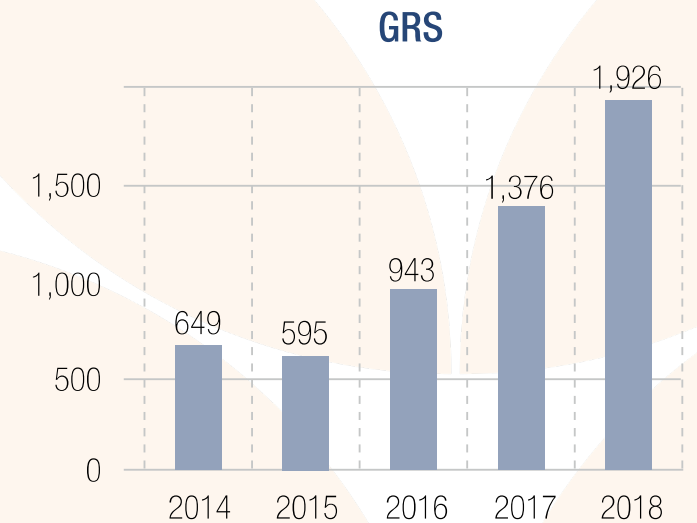
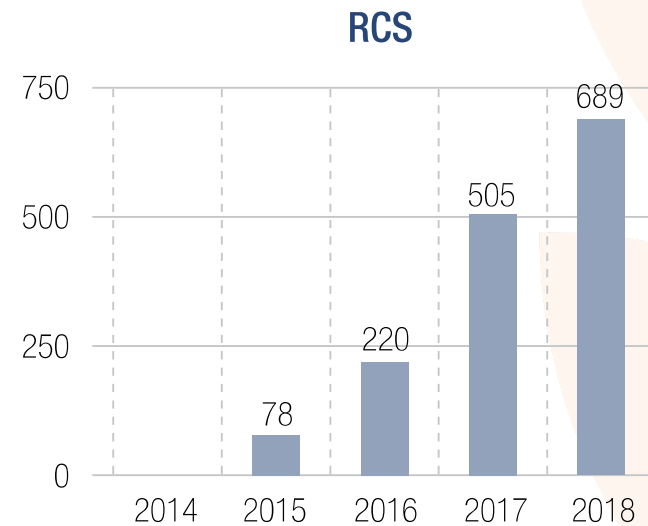
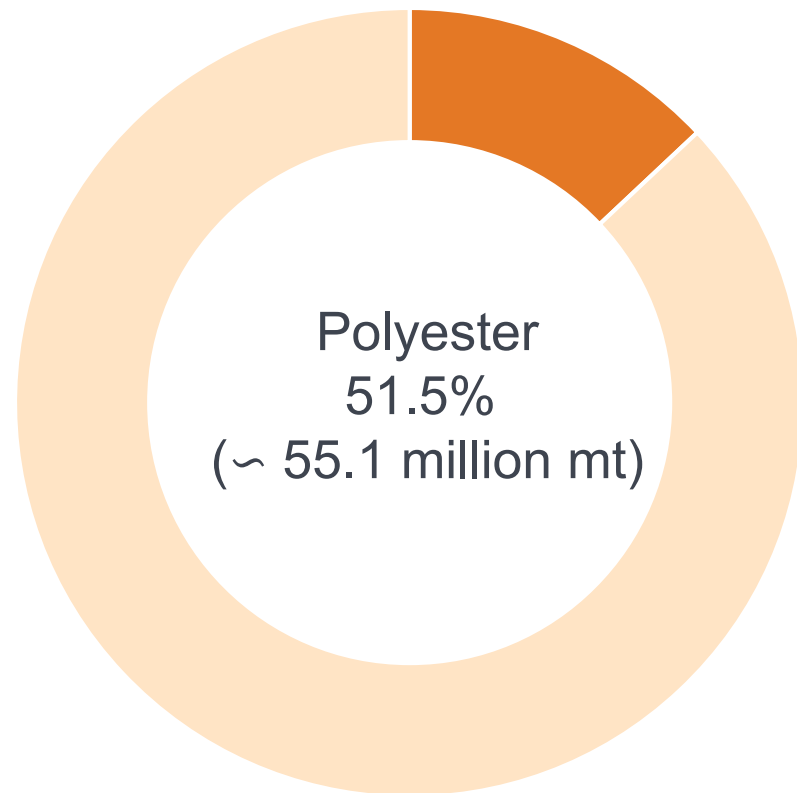
- Monoculture
- Loss of seed varieties
- GMOs
- Agrichemicals
- Water
- Soil degradation

## Socio-Economic

- Poverty and debt
- Urban migration
- Chemical exposure
- Gender inequality
- Child labour

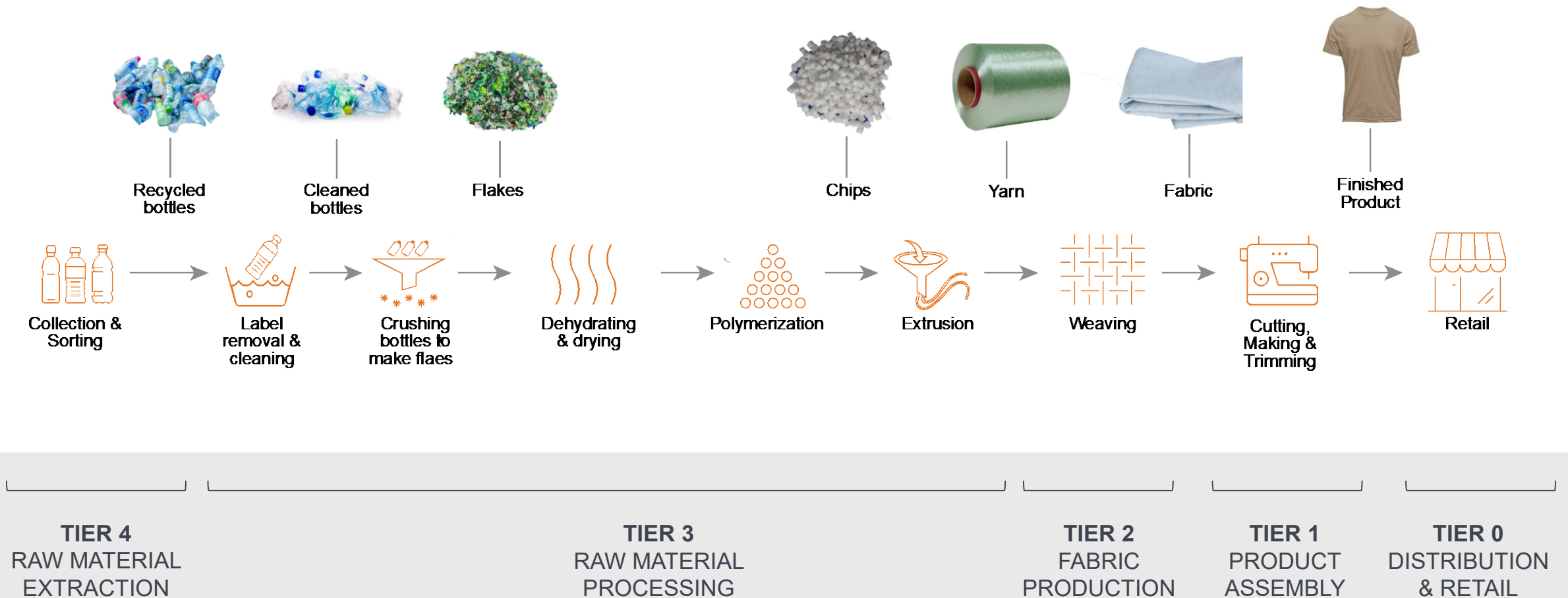
# Polyester

13% (~ 7.22 Million mt)  
recycled polyester

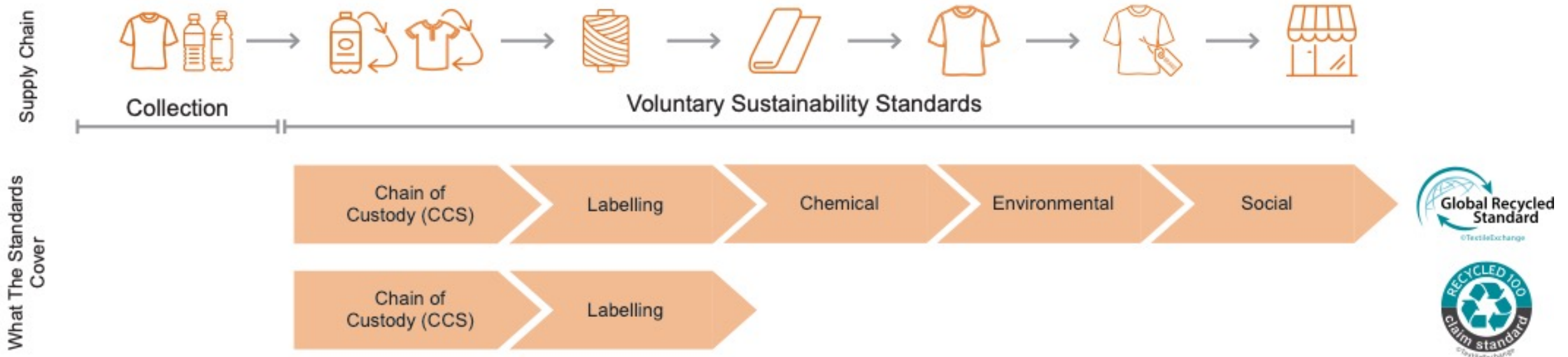




# Recycled Polyester Value Chain







# Recycled Synthetics Standards





# Challenges

---

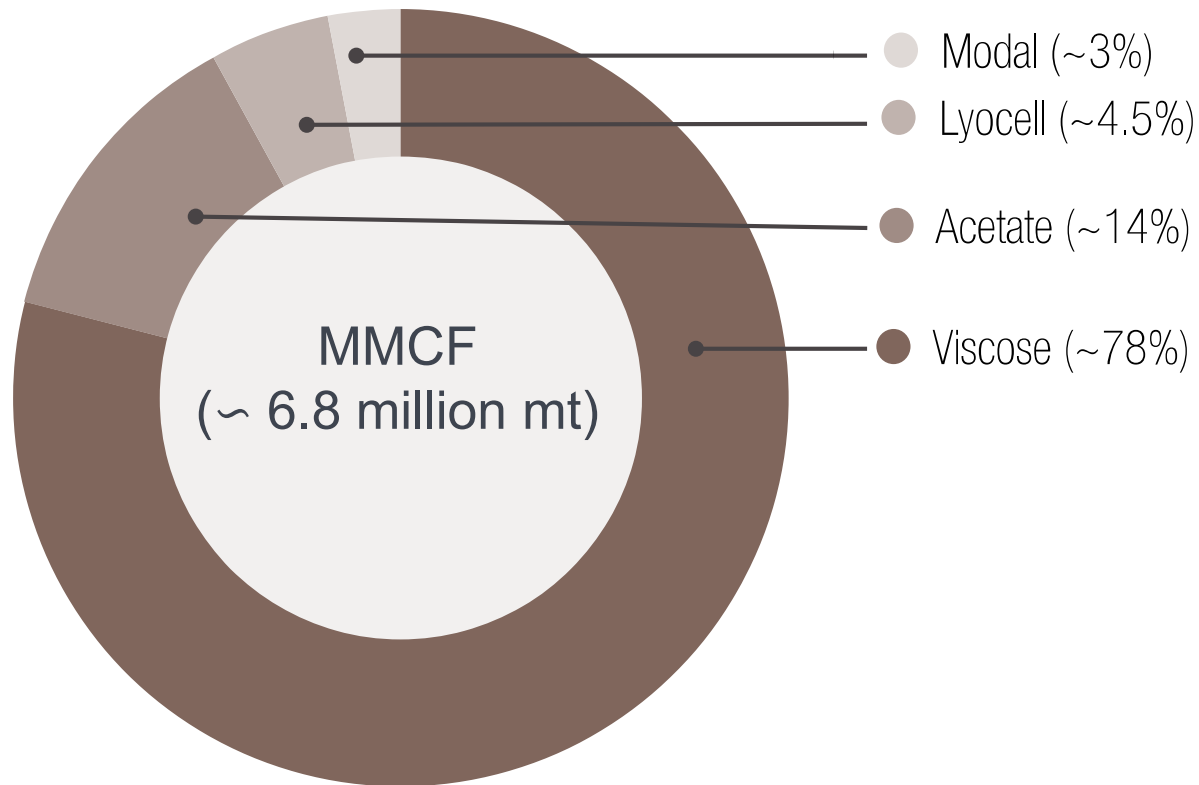
## Environmental

-  Derived from petrochemicals
-  Microfiber pollution
-  Associated with climate change
-  Persistent in the environment

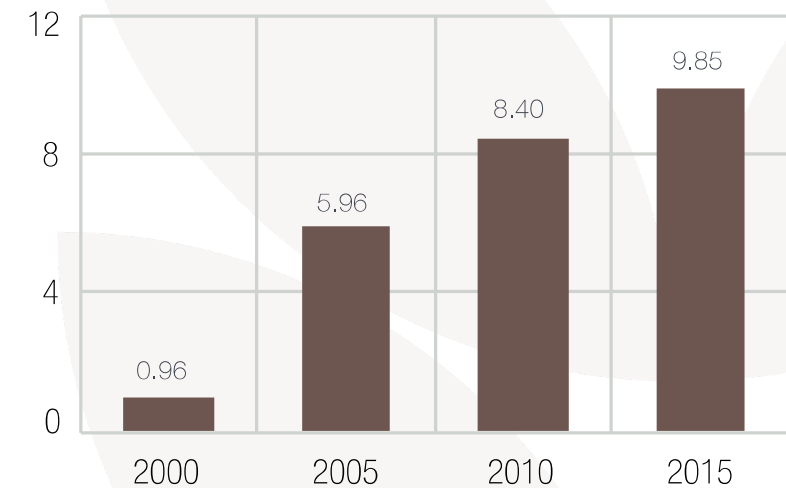
## Socio-Economic

-  Chemical exposure
-  Air quality
-  Waste and contamination

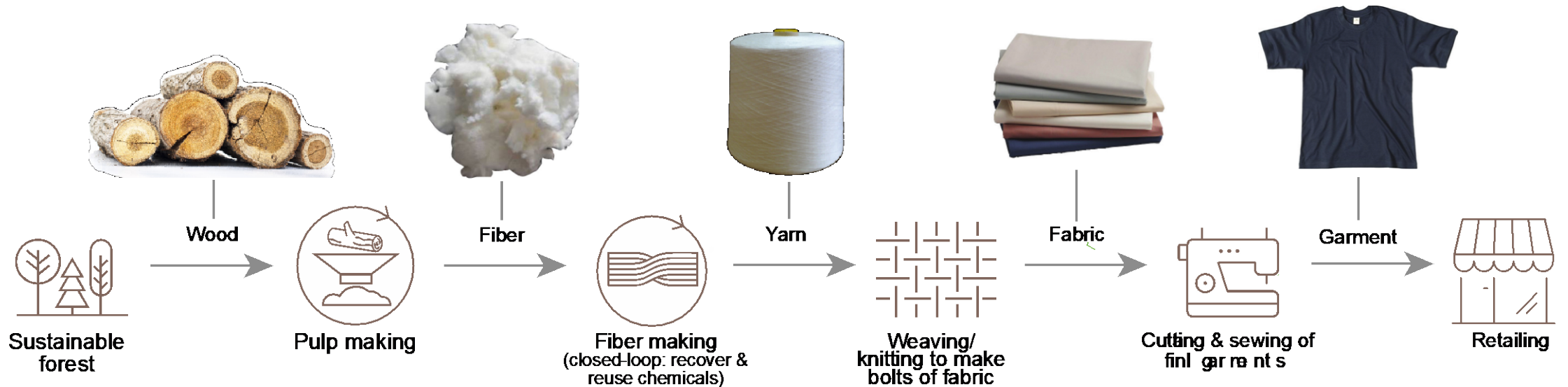
# Man Made Cellulosic Fibers



GLOBAL CERTIFIED FOREST AREA (% OF FOREST)



# MMCF Value Chain



**TIER 4**  
RAW MATERIAL  
EXTRACTION

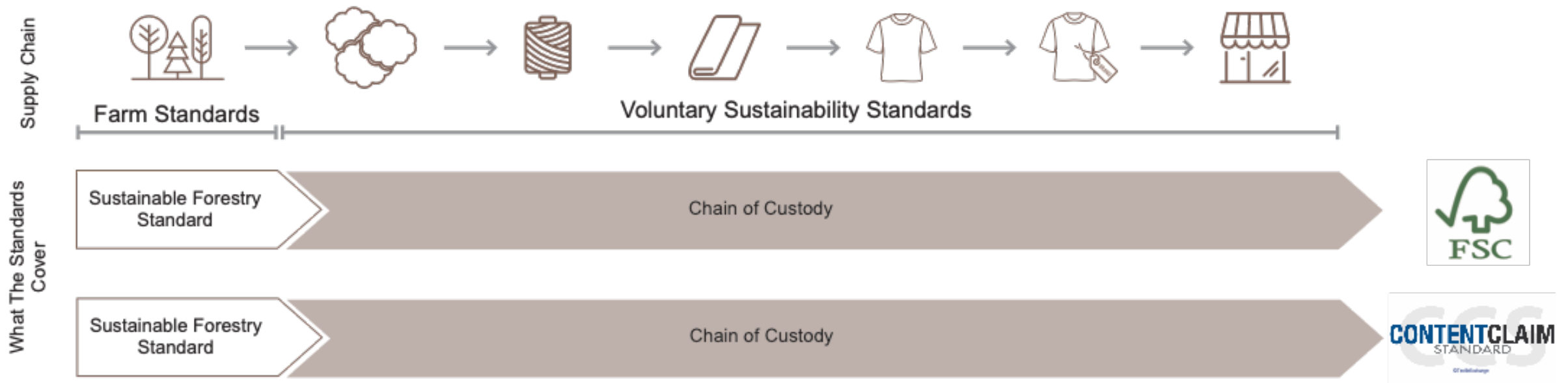
**TIER 3**  
RAW MATERIAL  
PROCESSING

**TIER 2**  
FABRIC  
PRODUCTION

**TIER 1**  
PRODUCT  
ASSEMBLY

**TIER 0**  
DISTRIBUTION  
& RETAIL

# MMCF Standards







# Challenges

---

## Feedstock

-  Deforestation
-  Indigenous communities
-  Biodiversity
-  Old growth forests
-  Endangered species

## Processing

-  Chemical use
-  Sludge / solid waste
-  Water pollution
-  Health and safety



# Down



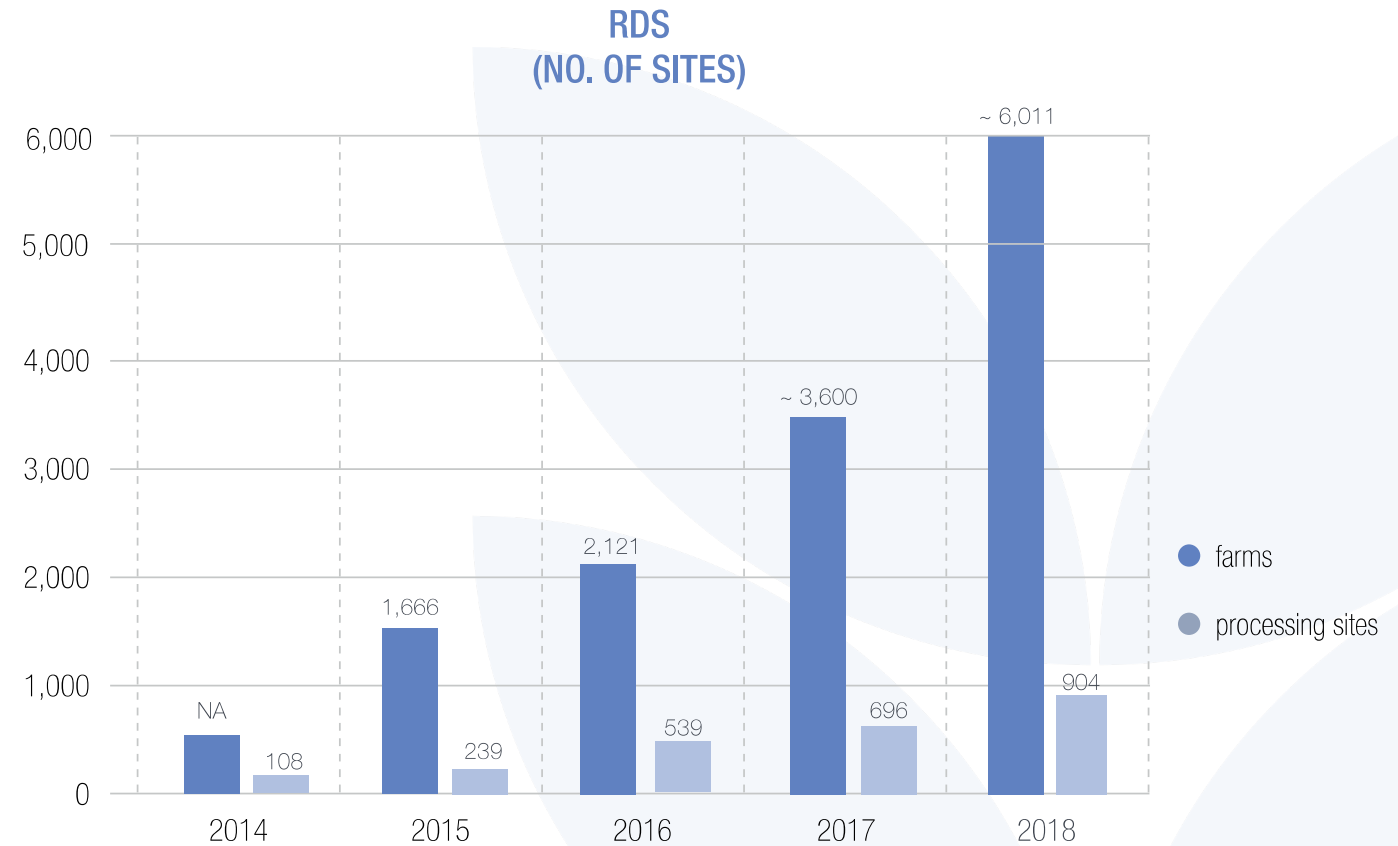
>270,000 mt  
of down and feathers  
produced globally



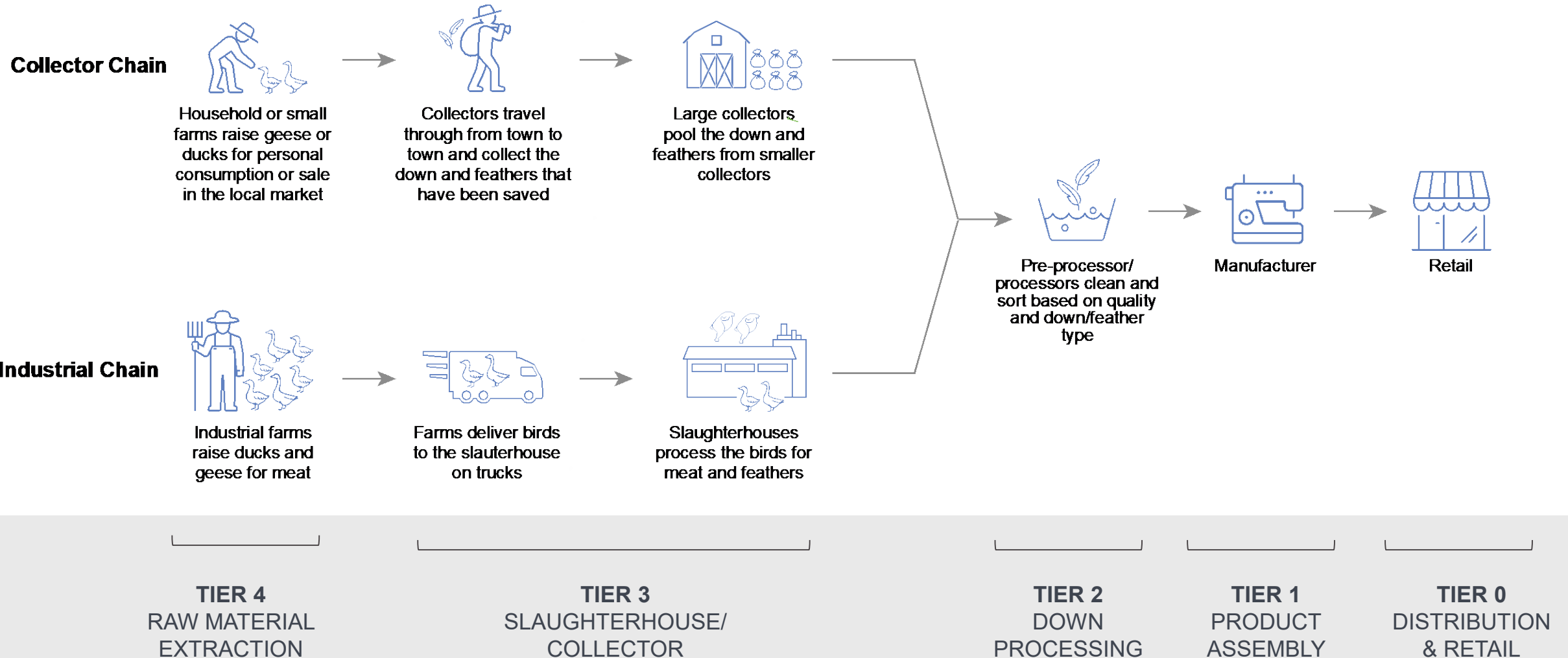
70-90%  
produced in  
China



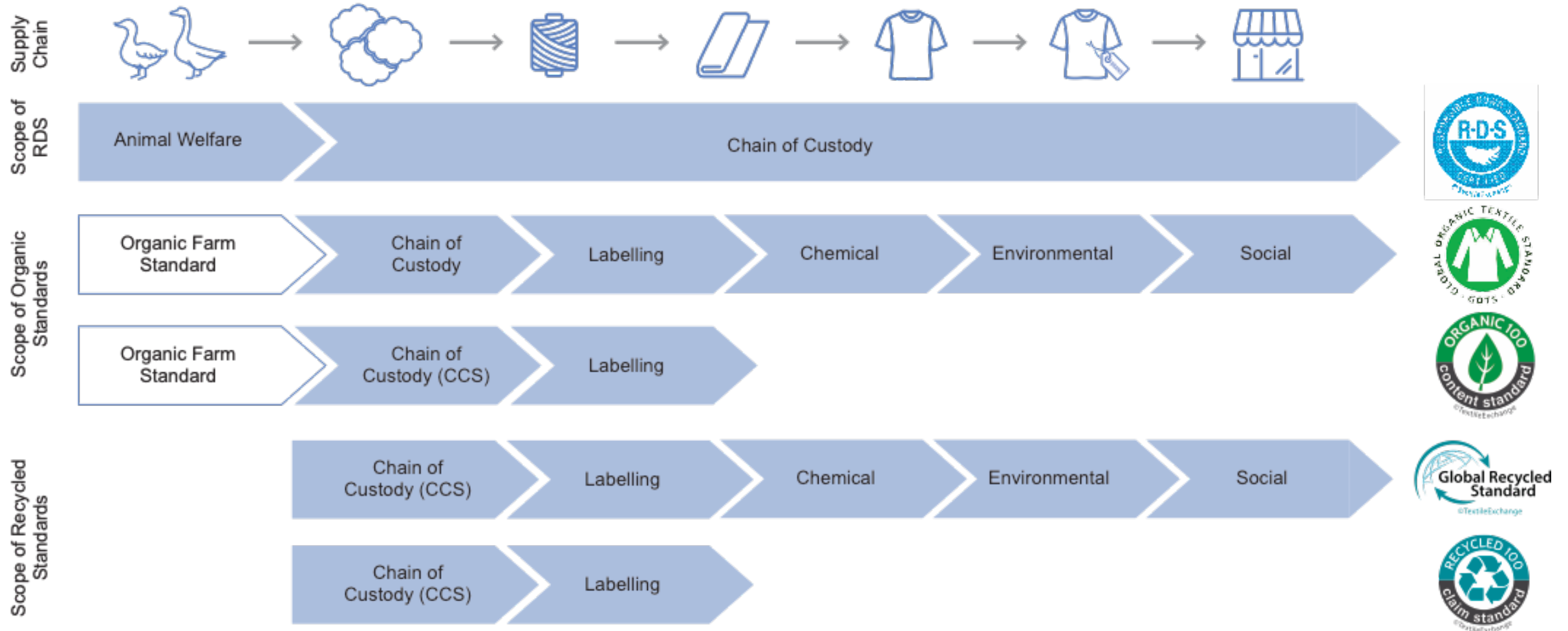
75-90%  
from ducks,  
rest from geese



# Down Value Chain

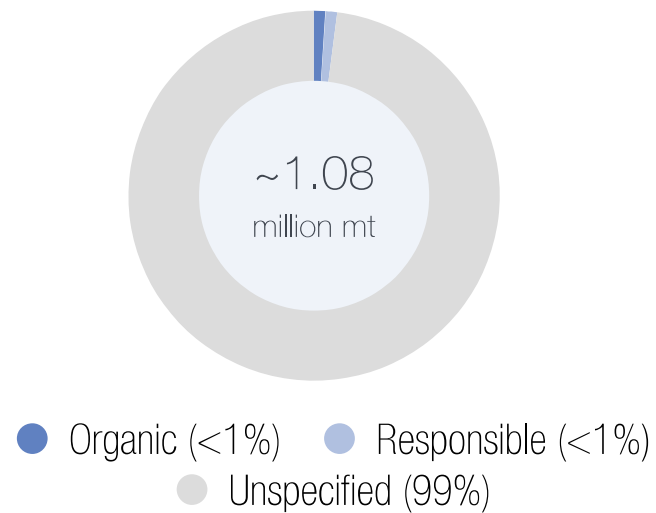


# Down Standards

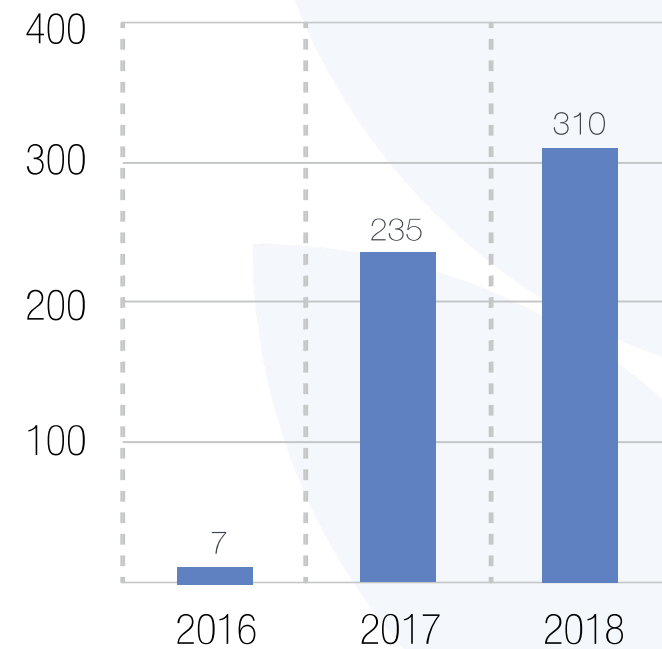


# Wool

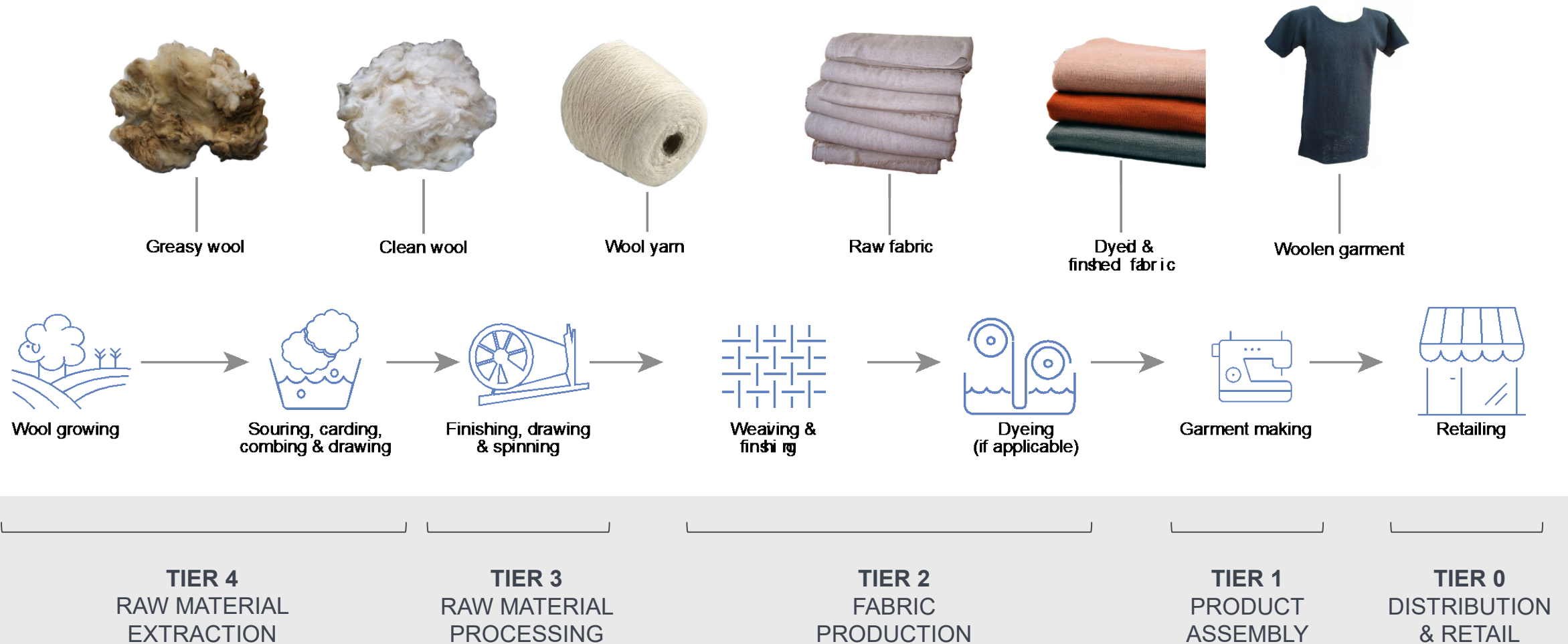
## PREFERRED SHEEP WOOL MARKET SHARE IN 2018



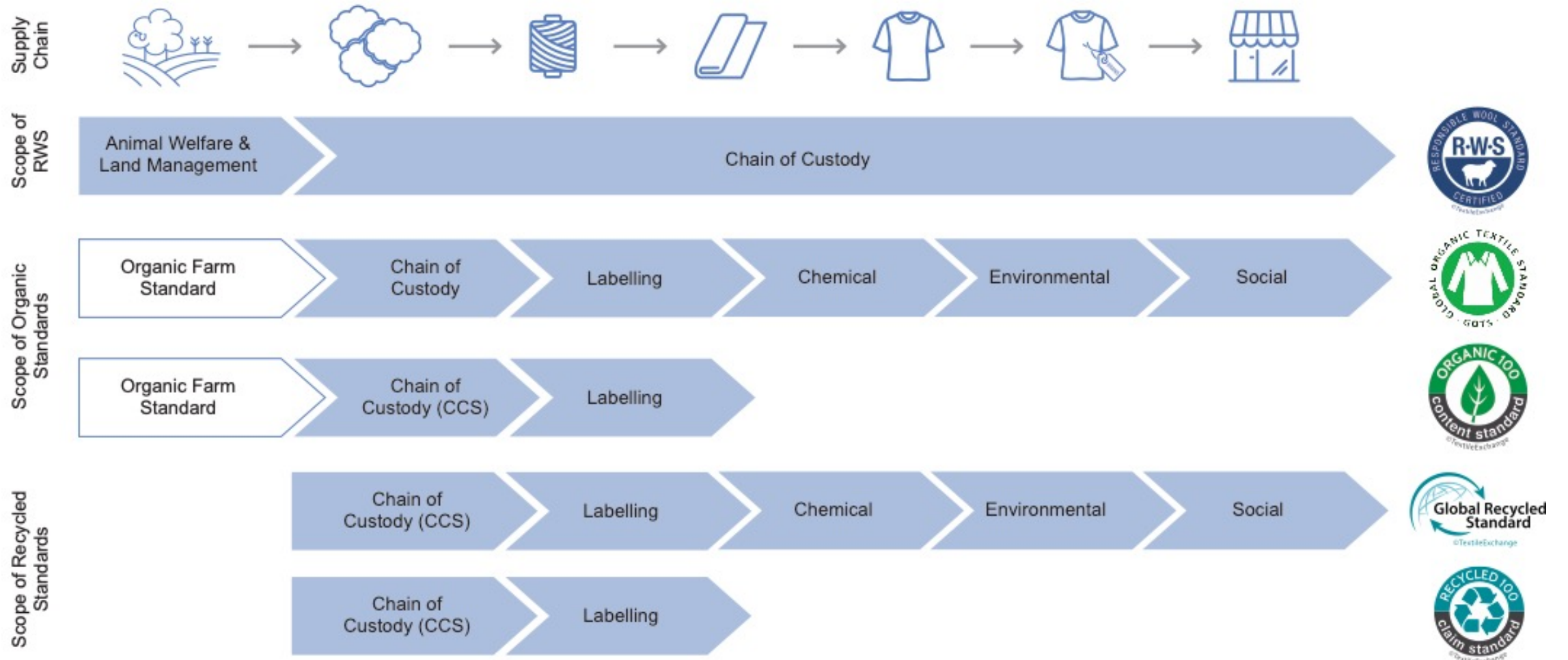
## RESPONSIBLE WOOL STANDARD (NO. OF SITES)



# Wool Value Chain







# Wool Standard



# Challenges

---

## Down

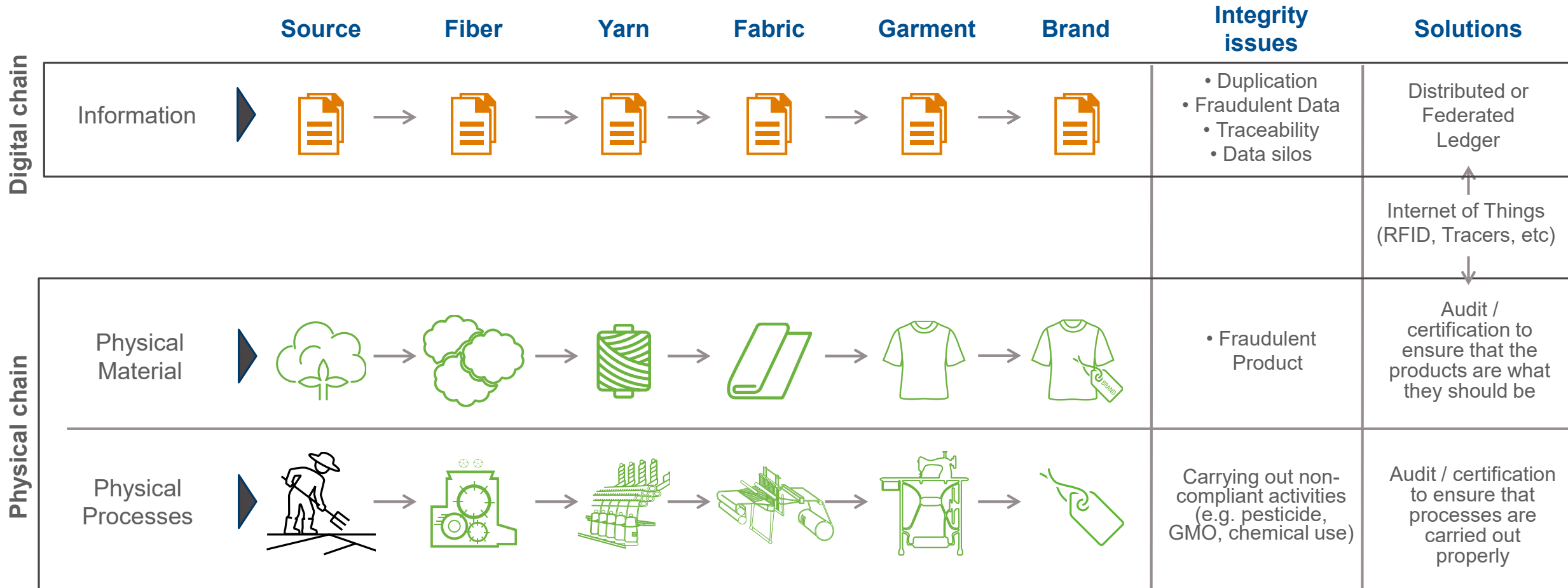
-  Animal welfare
-  Industrial farming
-  Waste and effluent
-  Live-plucking

## Wool

-  Animal welfare
-  Land degradation
-  Breeding / loss of diversity
-  Intensive farming
-  Agrichemical use
-  Mulesing



# Sustainability Standards in Blockchain



# Thank you

---



---

[TextileExchange.org](http://TextileExchange.org)

## © Copyright Notice

This presentation is protected by U.S. and International copyright laws.

Textile Exchange welcomes you to use slides from this collection for your presentations on the condition that:

- The slides are not altered from the way it is presented in its original format, this includes changing colors and style.
  - The Textile Exchange logo should not be removed.
  - Adding logos and/or content is not permitted without written permission from Textile Exchange.
- Any presentation using this content or any form of this content should acknowledge Textile Exchange as the author.