

# Certification and Supply Chain Systems

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# Background

- ▶ Corporate social responsibility (CSR) encompasses an wide array of social and environmental issues.
- ▶ Existing/developing agricultural initiatives are developing supply chain systems to promote and/or track sustainable commodities through the supply chain. Common models include: physical segregation (a.k.a., identity preservation, mass balance, and book-and-claim,
- ▶ Agriculture supply chains are complex and involve many players. Sustainable commodity systems will require participation throughout the supply chain.
- ▶ It is also important to consider marketing and communication vehicles in relation to each supply chain system.

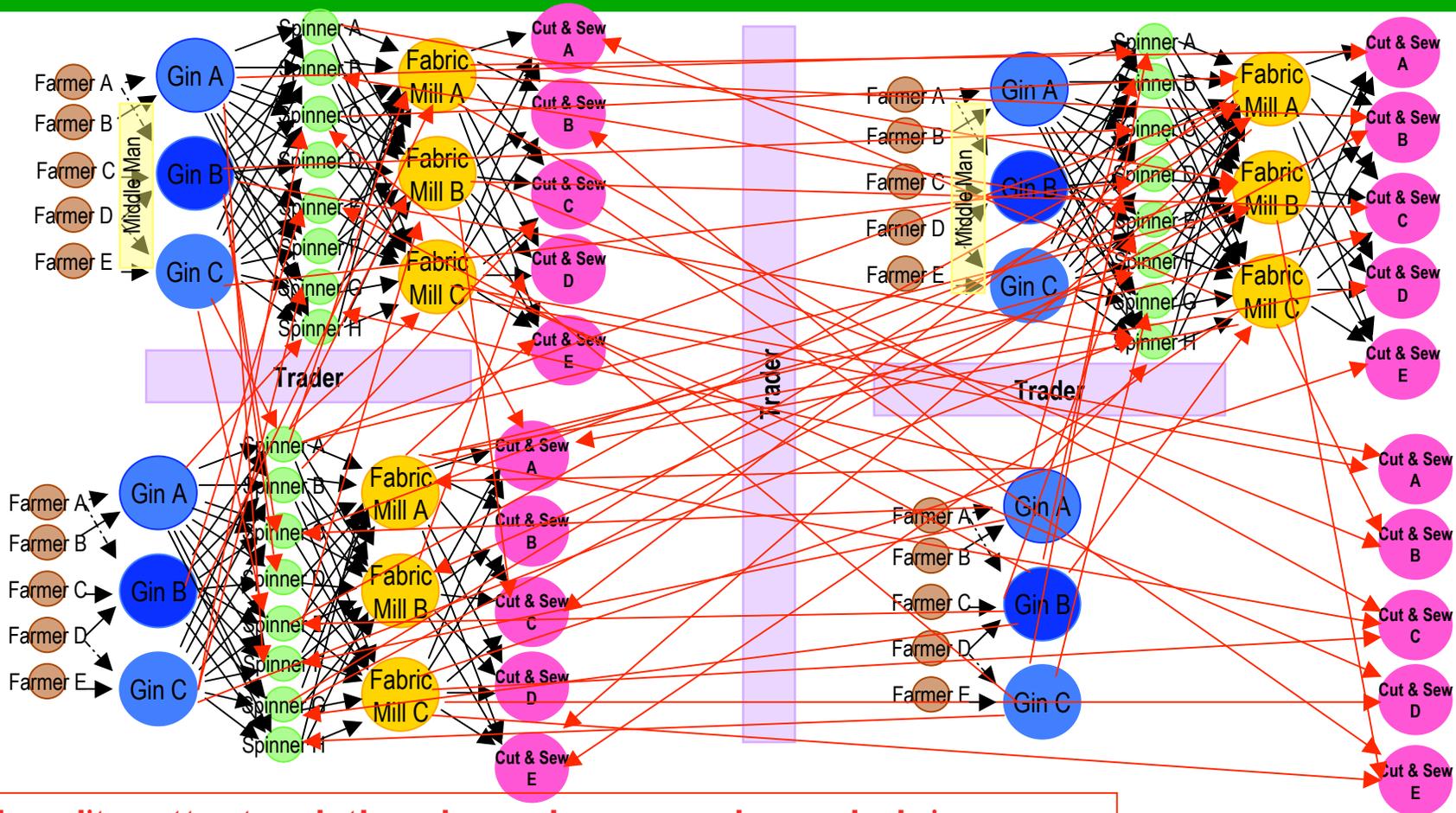
# Understanding a Basic Supply Chain

## Flow of cotton lint



**A product's supply chain is typically thought to be linear - a simple string of transformations of a raw material into a final consumer product. For cotton, this involves 1) growing cotton, 2) picking cotton, 3) separating lint from stems and other materials (ginning), 4) spinning lint into yarn, 5) knitting or weaving yarn into fabric, 6) converting fabric into a final product, 7) distributing and selling the product, and 8) using the product.**

# Global Cotton Supply Chain



## In reality, cotton travels through a much more complex supply chain.

- A gin receives cotton from multiple growers.
- Traders (merchants) buy cotton from far reaches of the world and sell it through global markets.
- Spinners use cotton from a range quality and regions to produce yarn.
- Fabric mills take a similar approach to produce a fabric.
- Garment manufacturers may have subcontractors dye, launder, or embellish their product.
- Retailers may source the same product from a variety of garment manufacturers.

# Communication Vehicles Require Different Supply Chain Systems

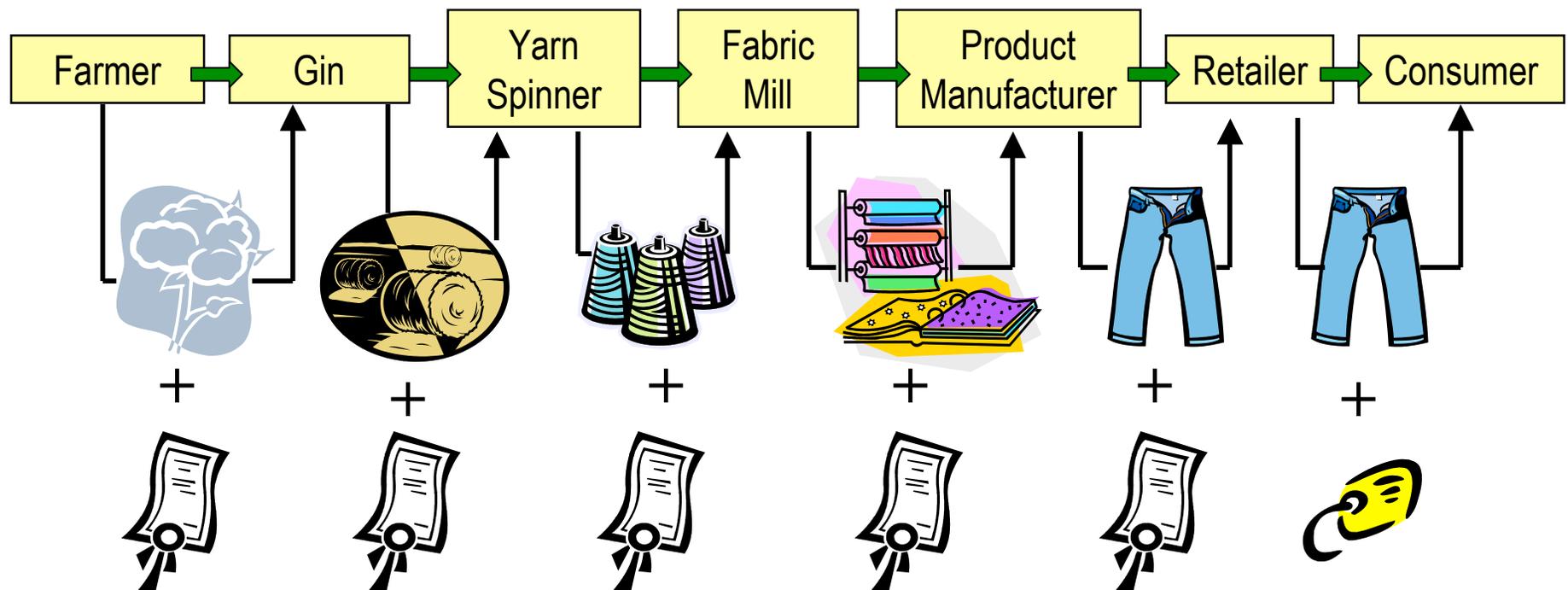
Level of Communication	Key Audience	Potential Vehicles	Supply Chain System
<b>Garment</b>	<ul style="list-style-type: none"> <li>•Consumer</li> </ul>	<ul style="list-style-type: none"> <li>•Garment label</li> </ul>	<ul style="list-style-type: none"> <li>•Chain-of-custody (identity preservation or mass balance)</li> </ul>
<b>Brands</b>	<ul style="list-style-type: none"> <li>•NGOs</li> <li>•Media</li> <li>•Consumer</li> <li>•Employee</li> </ul>	<ul style="list-style-type: none"> <li>•CSR report</li> <li>•Corporate/brand websites</li> <li>•In-store marketing</li> <li>•CSR, retail, cotton forums</li> <li>•Media</li> </ul>	<ul style="list-style-type: none"> <li>•Chain-of-custody (identity preservation or mass balance)</li> <li>•Mass balance</li> <li>•Book and claim</li> </ul>
<b>Partners</b>	<ul style="list-style-type: none"> <li>•NGOs</li> <li>•Media</li> <li>•Consumer</li> <li>•Employee</li> </ul>	<ul style="list-style-type: none"> <li>•CSR report</li> <li>•Corporate/brand websites</li> <li>•In-store marketing</li> <li>•CSR, retail, cotton forums</li> <li>•Media</li> </ul>	<ul style="list-style-type: none"> <li>•Mass balance</li> <li>•Book-and-claim</li> </ul>
<b>Industry</b>	<ul style="list-style-type: none"> <li>•NGOs</li> <li>•Media</li> <li>•Consumer</li> </ul>	<ul style="list-style-type: none"> <li>•Retail, cotton forums</li> <li>•Media</li> </ul>	<ul style="list-style-type: none"> <li>•Mass balance</li> <li>•Book-and-claim</li> </ul>



# **Understanding physical segregation, mass balance, and book and claim systems.**

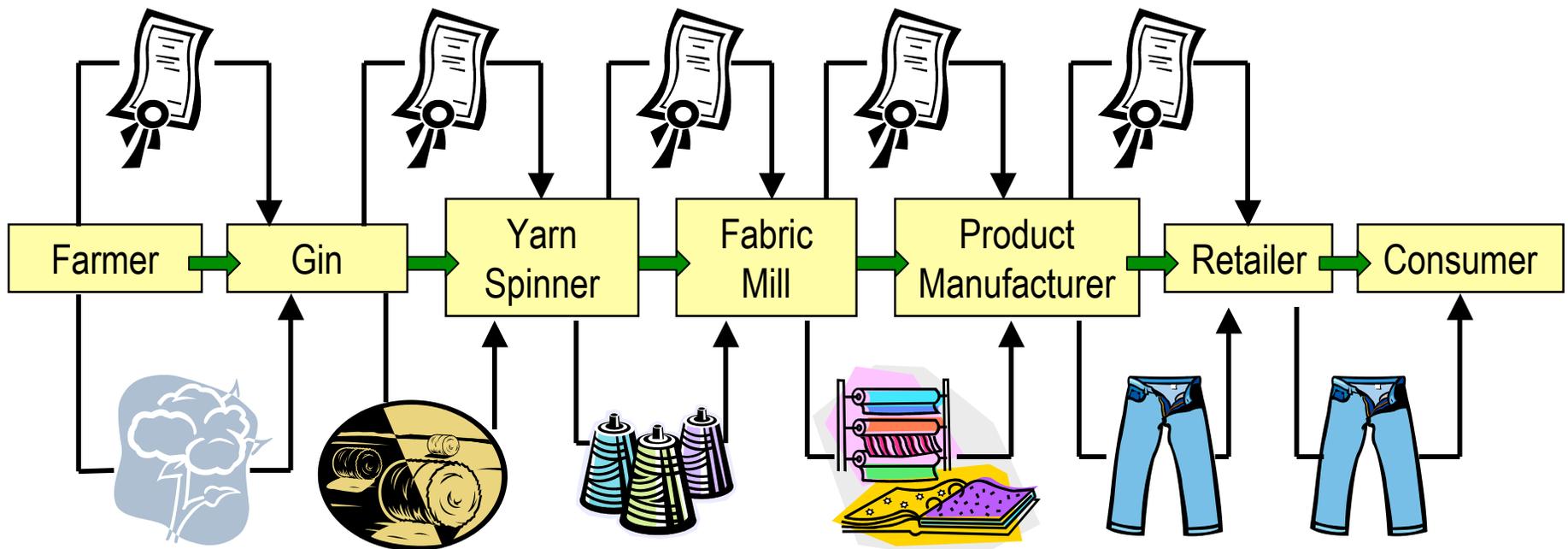
# Chain of Custody Model: Physical Segregation

Products are physically segregated from non-certified products at every facility along the supply chain. Certificate always accompanies the 'sustainable' product. Example: organic products.



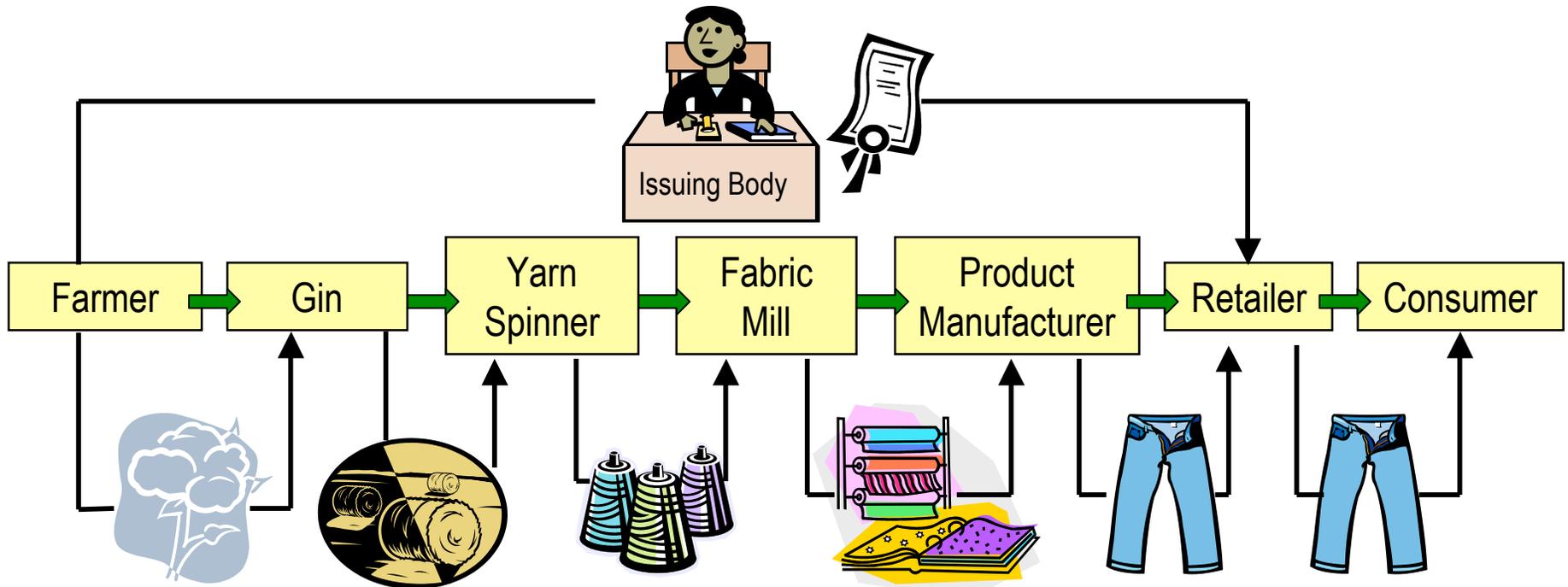
# Chain of Custody Model: Mass Balance

The amount of certified product sourced and sold by each supply chain actor is tracked. However, the certified product and 'sustainable' certificates does not need to be sold together. Example: Forest Stewardship Council's mixed sources.



# Chain of Custody Model: Book and Claim

'Sustainable' certificate is completely decoupled from cotton/product and is traded by a third party Certification Issuing Body. Example: Renewable energy certificates





**Understanding existing  
certification/verification systems.**

# Standards Setting Programs

International Social and Environmental Accreditation and Labelling (ISEAL) Alliance is an association of leading voluntary international standard-setting and conformity assessment organisations.

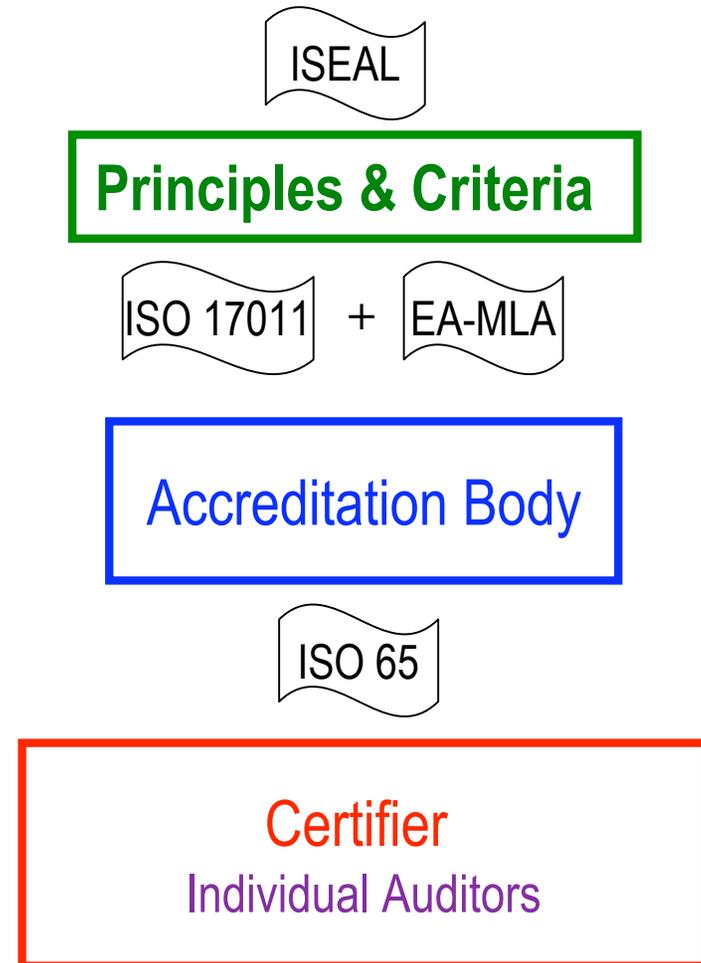
The ISEAL Alliance *Code of Good Practice for Setting Social and Environmental Standards* is an international, normative document that is applicable to all social and environmental standards.

# Accreditation & Certification Programs

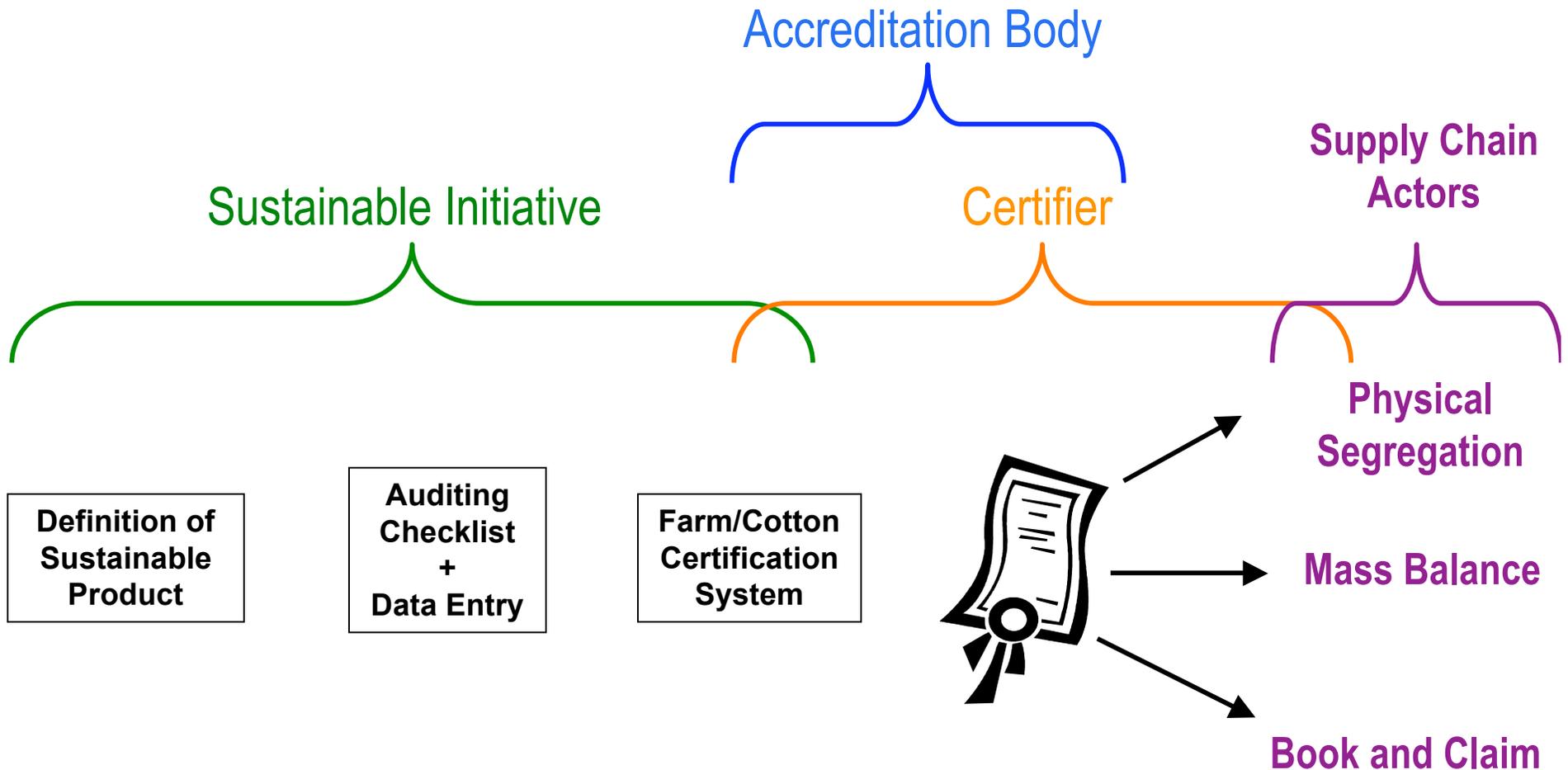
- An accrediting organization should be a member of EA-MLA (European Co-operation for Accreditation - multilateral agreement).
- It is good practice for certifiers to be accredited under ISO 65 / EN45011.
- Individual Auditors inspect product/farm/etc. for Certifiers (Certifying Bodies). Auditors have to undergo training and certification for the program(s) that they inspect.

# Accreditation and Certification Overview

- Accreditation Body accredits Certification Bodies (Certifier) based on systems/records/processes
- European Co-operation for Accreditation - multilateral agreement
- ISO 17011: General requirements for bodies providing assessment and accreditation of conformity assessment bodies
- ISO 65: Code of good practices for conformity assessments
- Certifier must ensure Auditors meet ISO 65



# Certification Process Overview



Thank you

**"We can't solve problems by using the same kind of thinking we used when we created them."**

***Albert Einstein***