
SUBJECT:

Inter- organizational Environmental Management

Venue: Tallinn Technical University

**By: Tareq Emtairah, IIIEE at Lund University,
Documentation by Beatrice Kogg**

Proactive CEM

Concepts	Standards/codes	Tools
PP, CP	ISO series	CP, Waste Minimization audits
Natural Step	Industry Codes: Responsible Care	Environmental Accounting, FCA, TCA
Industrial Ecology	Global Compact	EMS
Dematerialization	GRI	Environmental reporting Environmental Product Declaration
PSS	EMAS	Design for Environment (DfE)
CSR	Eco-labeling	Eco label criteria
Life Cycle Approaches	Energy Star	Environmental Procurement
Sustainability		LCA
TPL, PPP		EIA
Eco-innovation		SEA
'circular Economy'		CTA, Foresight, Scenarios

Inter-Organizational Environmental Management

- To be able *to assume responsibility*
- To be able *to generate improvements*
- To be able *to provide information*

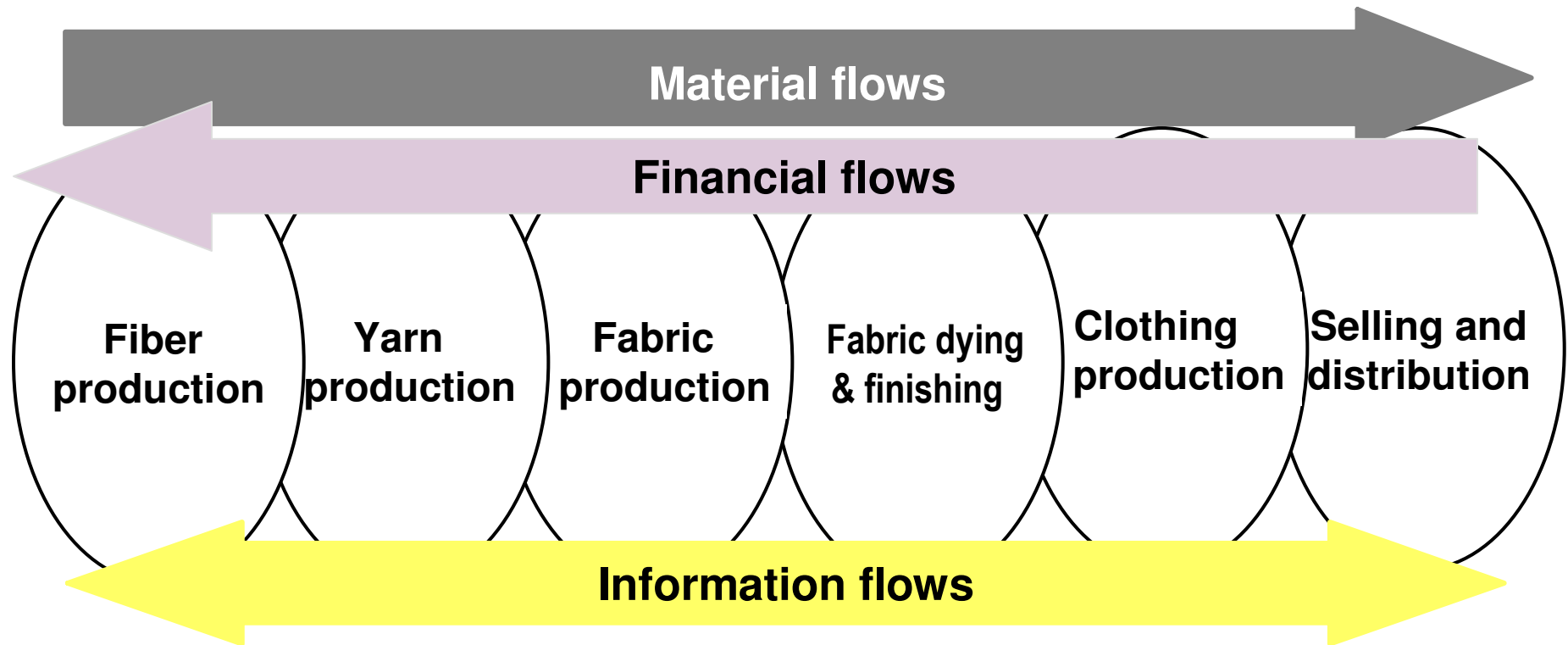
Business Reasons?

- Differentiate your product or your brand as environmentally superior
- Meet stakeholder requirements
- Risk management

Small exercise:

- Draw the product chain of a T-shirt made from cotton.
- Think about what actors are involved in the different stages.

An example of a product chain: textiles/clothing (the production phase)



Source: Seuring, S./Schneidewind, U. (2000), modified

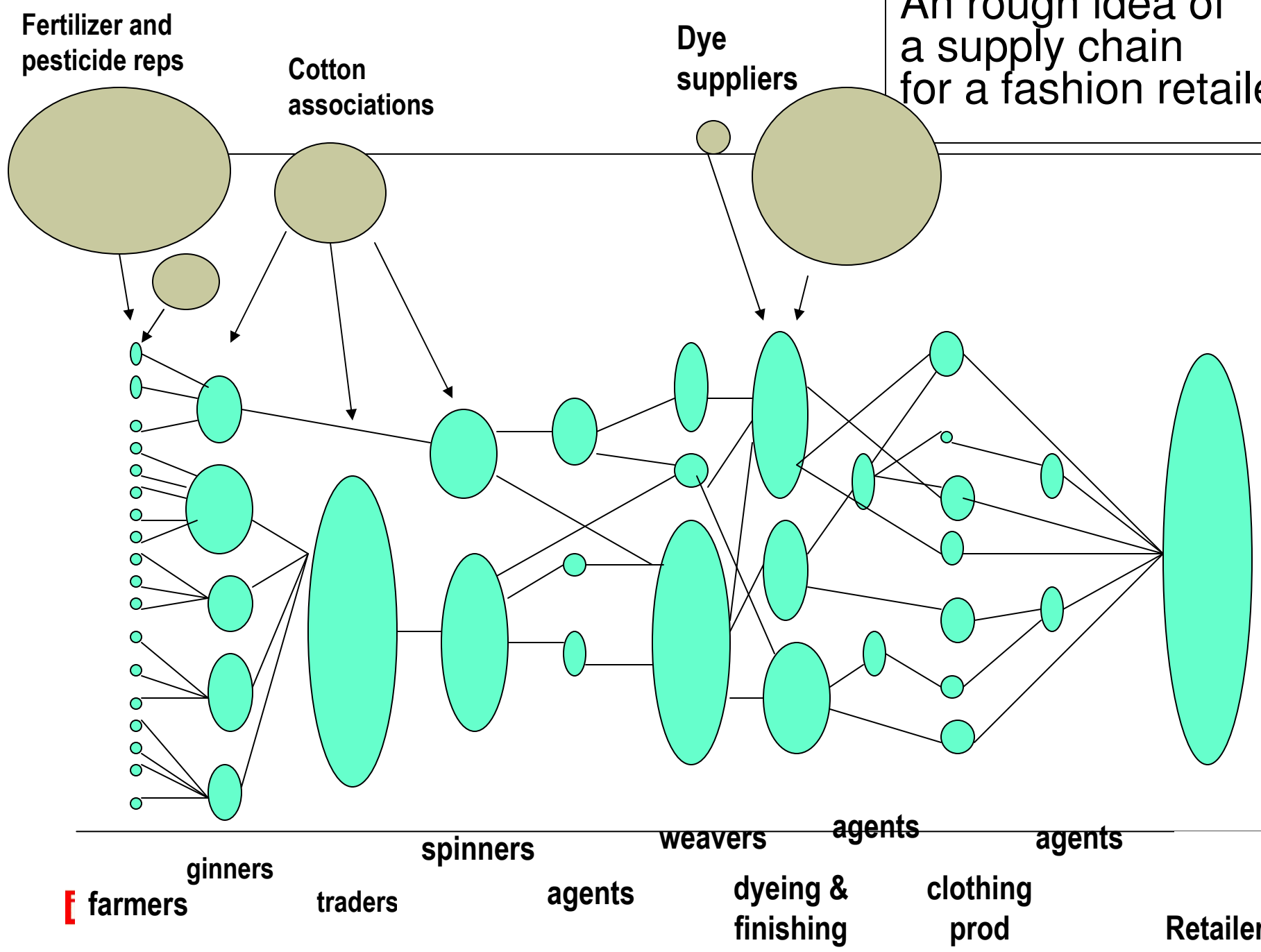
The supply chain

a network of organisations that are involved through upstream and downstream linkages in different processes and activities that produce value in the form of products and services in the hands of the ultimate consumer. (Christopher, 1998)

Supply chain - some key words

- **The focal company** – the company whose perspective we are taking
 - **Upstream** – suppliers and suppliers' suppliers
 - **Downstream** – customers and customers' customers
 - **Tiers** – 1st tier suppliers = the focal company's direct suppliers, 2nd tier suppliers = the direct suppliers' suppliers
-

An rough idea of a supply chain for a fashion retailer



Fertilizer and pesticide reps

Cotton associations

Dye suppliers

ginners

traders

spinners

agents

weavers

dyeing & finishing

clothing prod

Retailer

farmers

agents

agents

When environmental improvements are needed in the product chain, what to do?

- Find suppliers that meet specified needs/requirements
- Convince your current suppliers to do what you need them to do

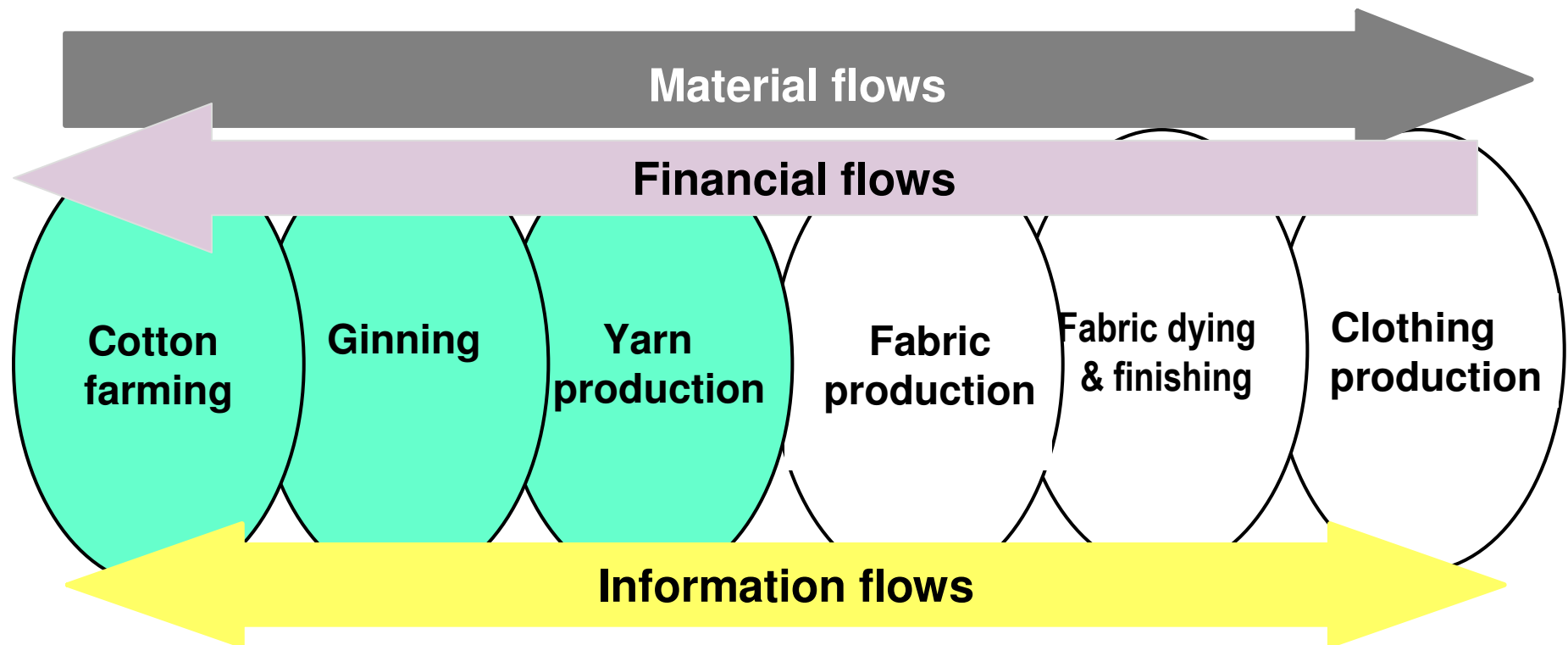
Case Study: Scandinavian Textile AB

- Small trading company founded in the 1950's specialising in high quality cotton yarn.
- Annual turnover 2,5 million Euro
- 5 employees
- New owner mid 80's.

The management decided to:

- Go for *environmental excellence as a way of differentiating our product and motivate a higher price.*
- By going for certified organic cotton, labelled with type one eco-label

The product chain for cotton textiles/ clothing

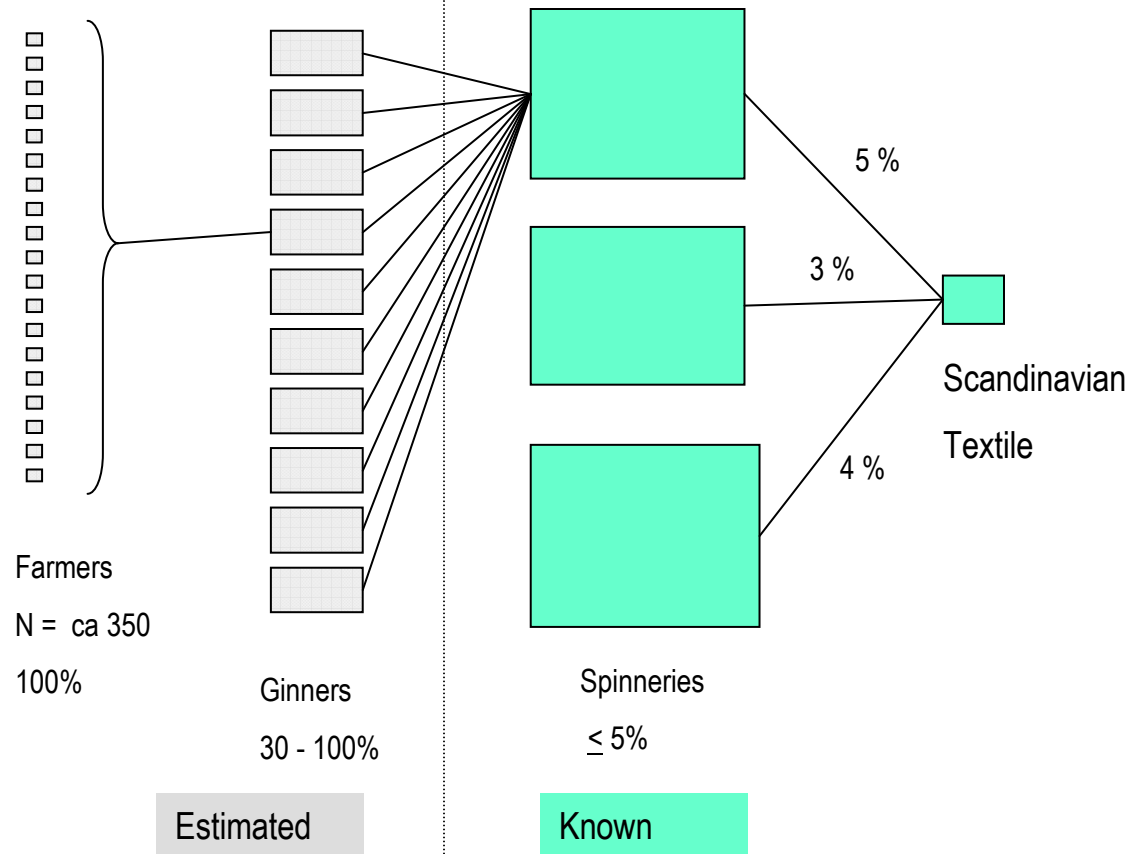


Source: Seuring, S./Schneidewind, U. (2000), modified

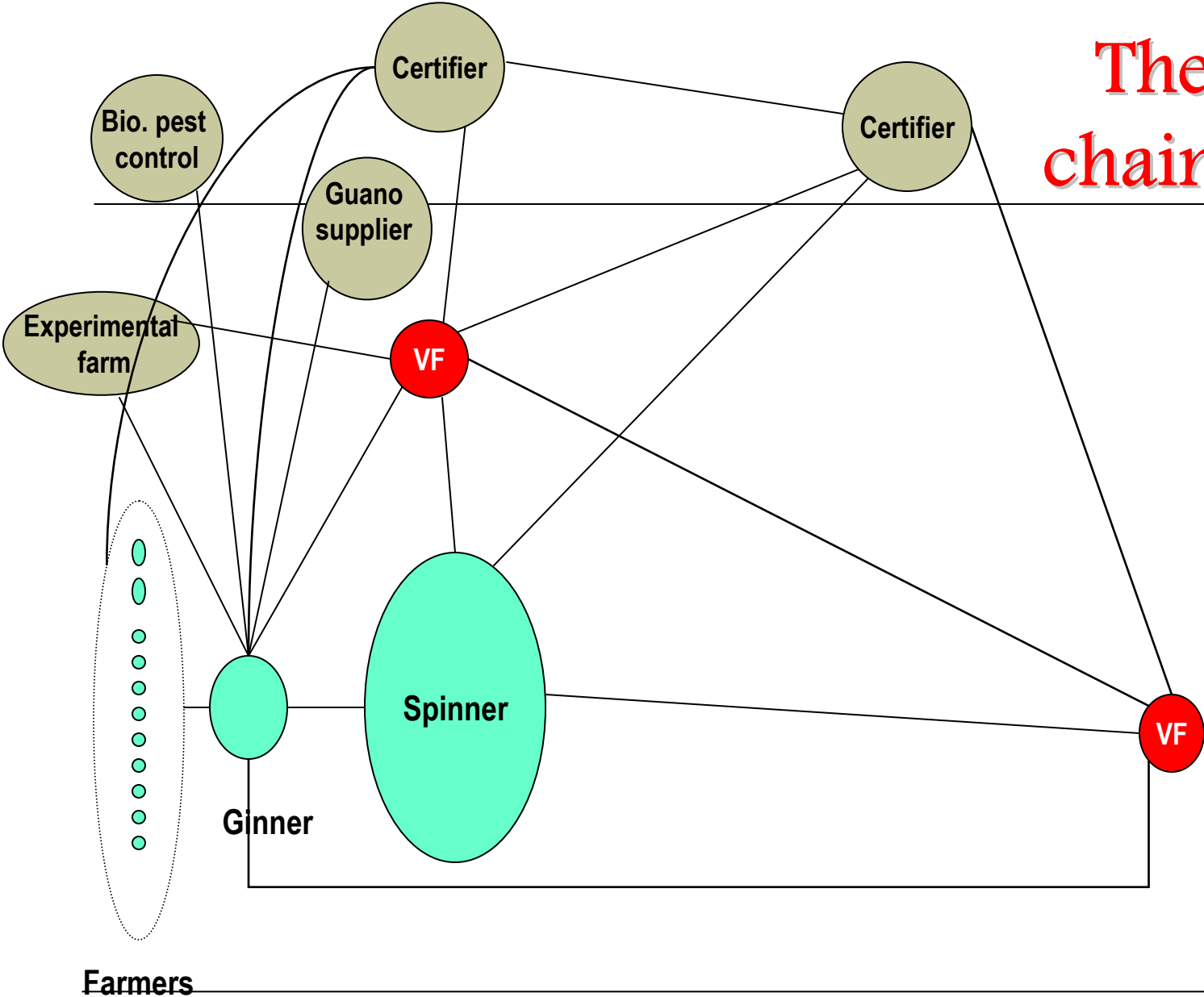
The Problem

- No supply
- Scandinavian Textile is well reputed, but small -very limited power over suppliers
- Organically grown cotton command a price premium - cost build up through the chain

The supply chain in 1990



The supply chain in 2000



Consequences

- For Scandinavian Textile:
 - Dramatic change in SCM practices, increased dependency on suppliers, increased costs
 - For other actors in the chain:
 - Major changes for farming and ginning mill, minor for the spinning mill. Increased costs compensated by higher price
 - For the environment:
 - Process improvements in farming, spinning. Final product - less harmful for people and environment.
-

Key features in this case

- Green differentiation
 - The need to be unique
 - The scope of desired improvements
 - Major changes required beyond the first tier
 - The level of flexibility
 - High strategic importance
 - Full top management commitment
 - The size of the focal company
 - The relative power of the focal company
-

Management Concerns:

- Purchasing
 - the right product at the right price
- Logistics
 - the right product at the right time
- Quality management
 - the right product without flaws

Management Decisions:

- Deciding on sustainability **objectives**
 - **Upstream Communication** of requirements
 - **Downstream communication** of product and process related information
 - **Motivating** relevant actors to ensure they will cooperate in achieving the determined objectives
 - **Controlling** that requirements/ambitions are being met
-

Two concepts of relevance

- Relative dependency:
 - The relative dependency between buyer and supplier is dependent on
 - The transaction costs associated with switching supplier/customer
 - The number of potential/suitable alternative suppliers/customers
 - Supply risk:
 - The probability of supply related incidents such as e.g. supply disruption, cost increases, quality problems etc.
-

Communication

- Perceptions: Our conceptions about what is environmentally or socially acceptable standards/behaviour is highly influenced by the society that we live in, thus these conceptions will differ in different countries.
 - How to effectively communicate requirements, objectives, possible solutions etc.? Some issues to consider:
 - Conflicting messages
 - Message distortion
 - Cross cultural communication
 - Imperialism
-

Motivation

- How to motivate a supplier or customer to do what the focal company wants them to do:
 - Provide information
 - Provide incentives
 - Threaten them with sanctions
- Key variables to consider:
 - Power relations = a key concept for understanding supply chain interaction
 - Power a function of relative size and relative dependence
 - Potential for horizontal collaboration
 - Needs and priorities of the organisation you are trying to motivate

Control

- Control mechanisms
 - The contract
 - Inspection
 - Outcome
 - Process
- Control for whom?
 - Internal – convince yourself
 - External – convince others
- Key variables to consider:
 - Trust: More trust → less control
 - Dependency: More dependency → higher risk if not complying → less control

When can we expect companies to green products?

- When:
 - Total cost associated with *information* + identification + communication + motivation + control < total benefits of greening
- Or when:
 - Total cost of *information* + identification + communication + motivation + control < total costs of not greening