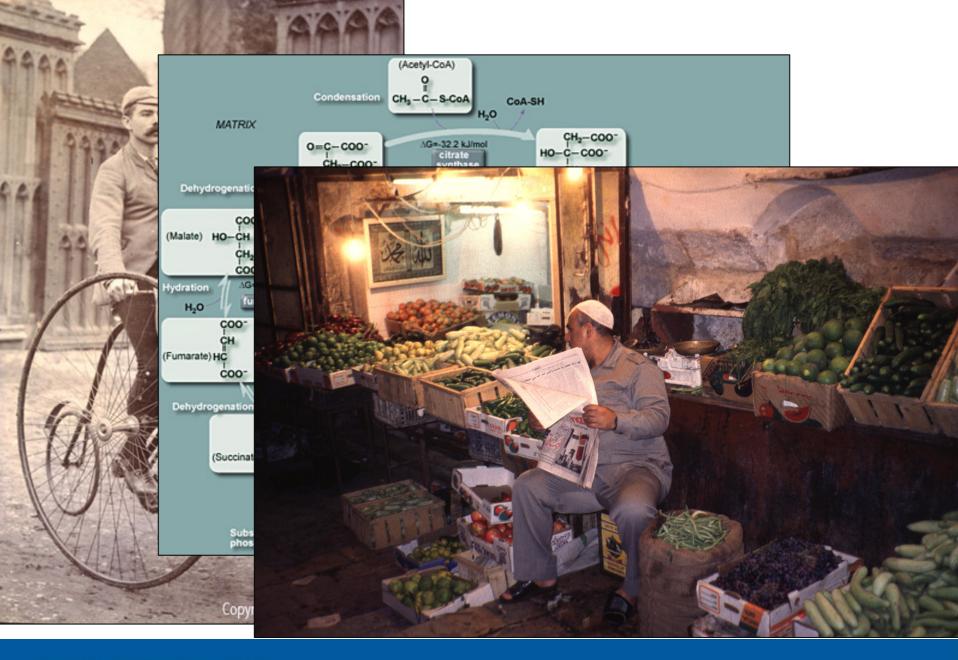
Cycles and Chains

Mark Tatchell Department of Biological Sciences

THE UNIVERSITY OF WARVICK





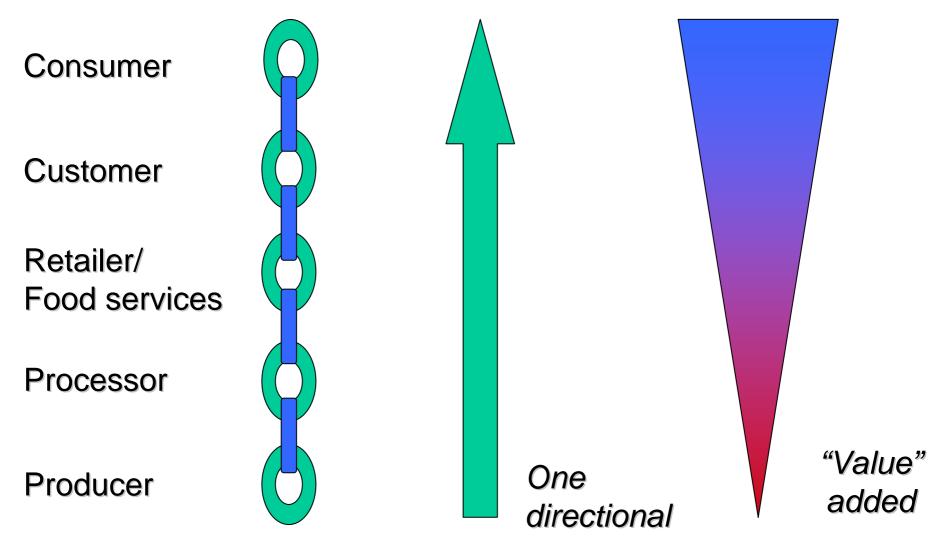
Some definitions:

Chains

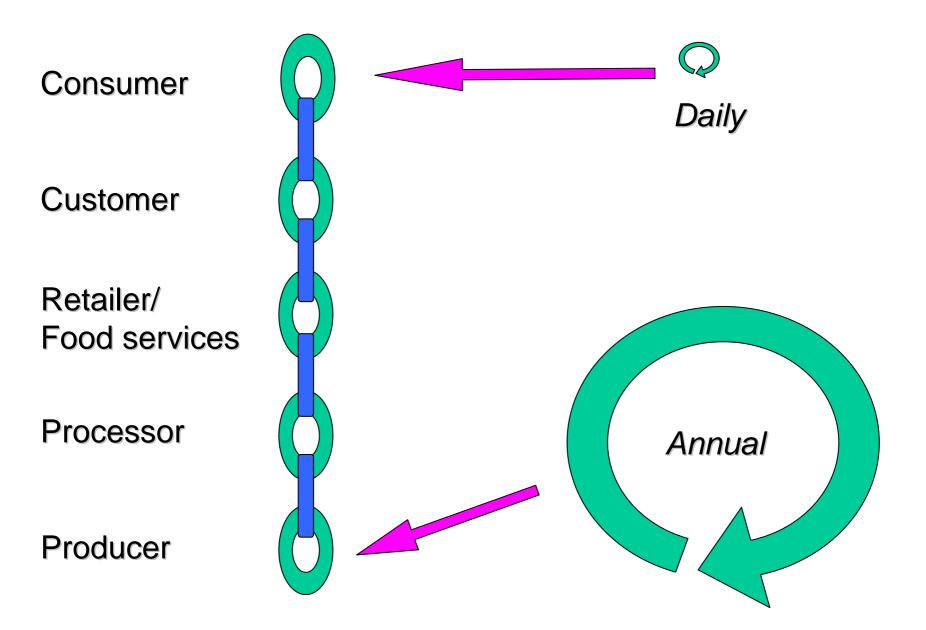
- Sequence of events or processes
- Food supply or value chain
- Cycles
 - Processes that are repeated at intervals



The "Food Chain"



WARWICK



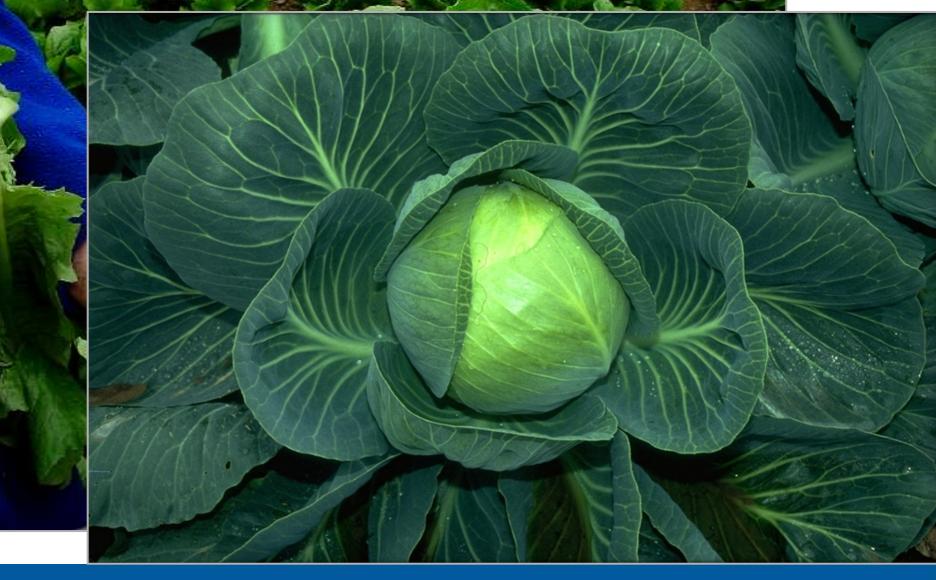


Industrial-scale production





Individual perfection





Convert a fresh product from the field







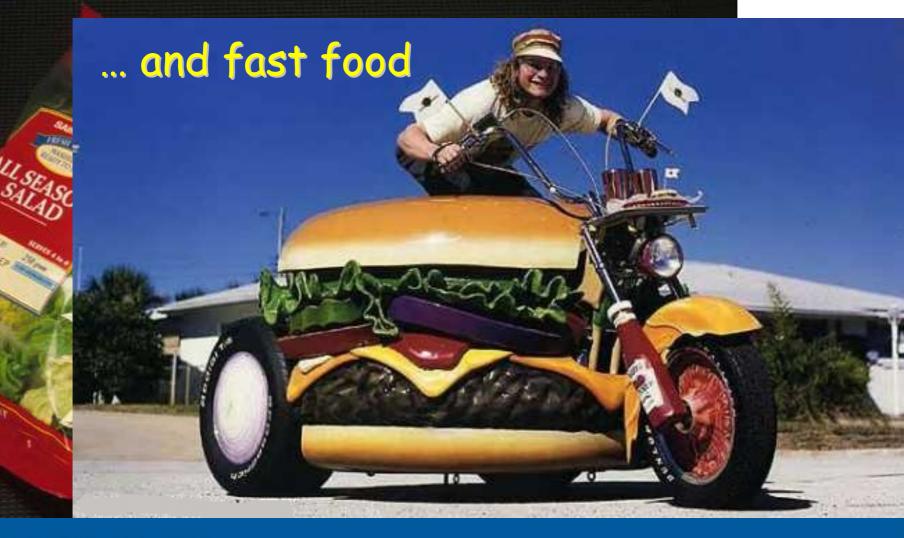


High quality and continuity of supply



12112

Washed and ready to eat ...



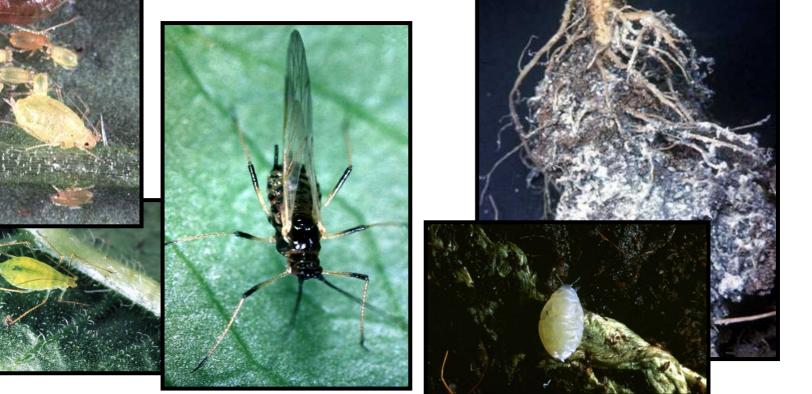


Foliage



Aphid pests of lettuce Myzus persicae

Roots



Macrosiphum euphorbiae

WARWICK

Nasonovia ribisnigri

Pemphigus bursarius

Examples of cycles 1:

<u>Decades</u>

- Environmental (soil, nitrogen, carbon, etc)
- CAP reforms

Several years

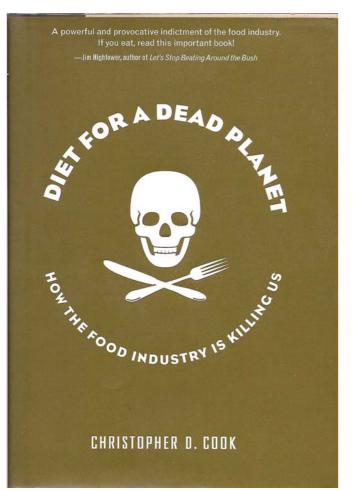
- WTO negotiations
- Food and farming policy
- Biodiversity

<u>Annual</u>

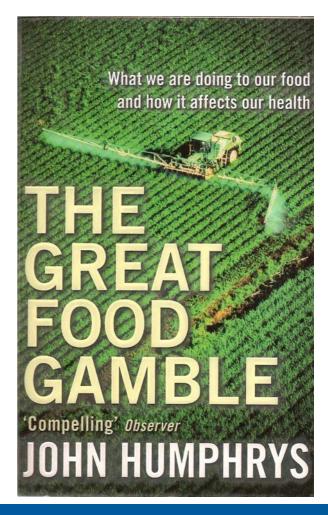
- Agricultural production
- Ecosystem services
- Supply contracts to processors/retailers



Examples of cycles 2:



<u>Months</u> Issue attention and media involvement

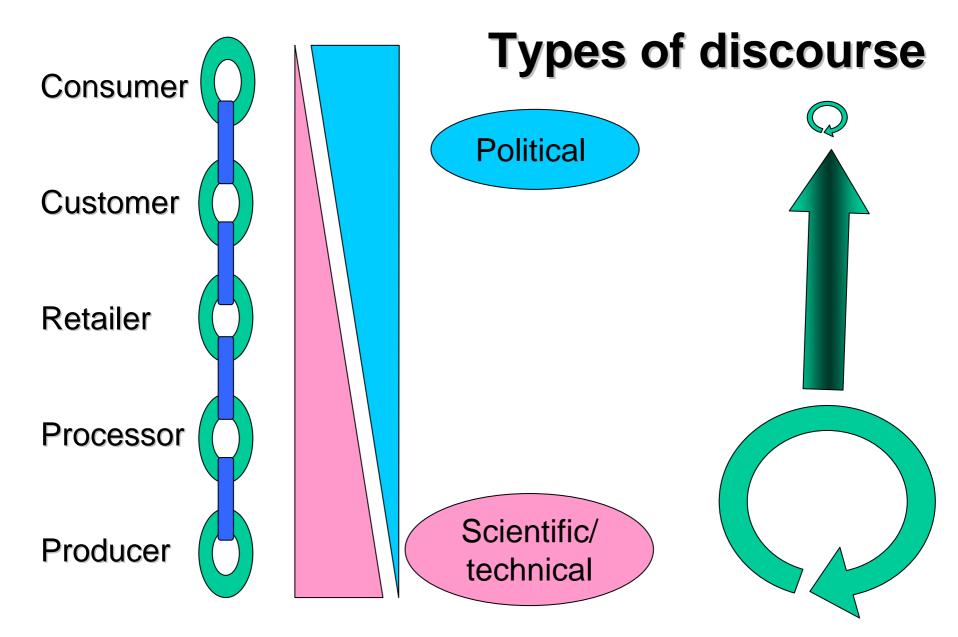




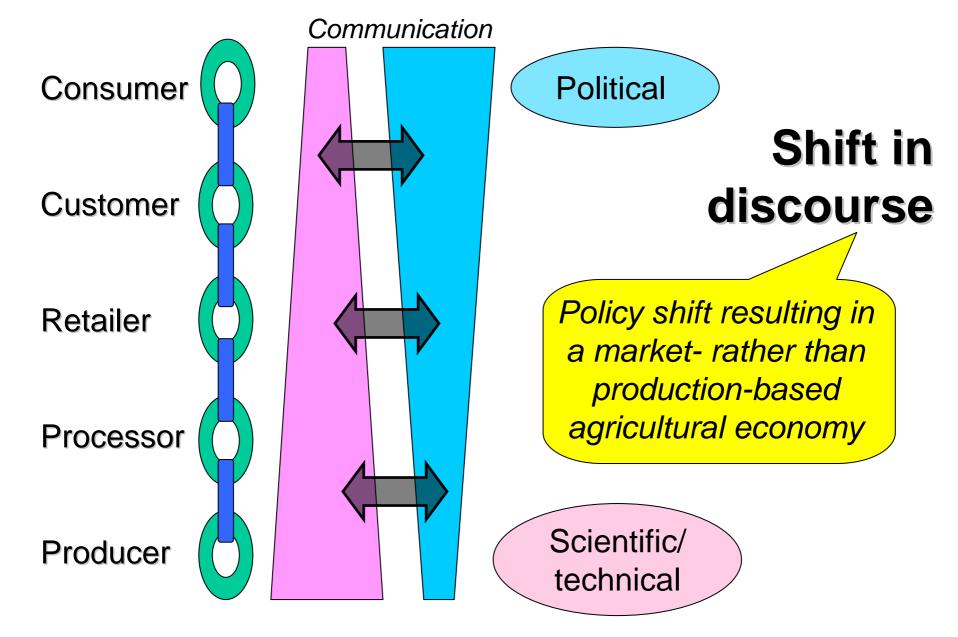
Examples of cycles 2:

- Months
 - Issue attention
- <u>Weeks</u>
 - Customer purchases
- <u>Days</u>
 - Consumption

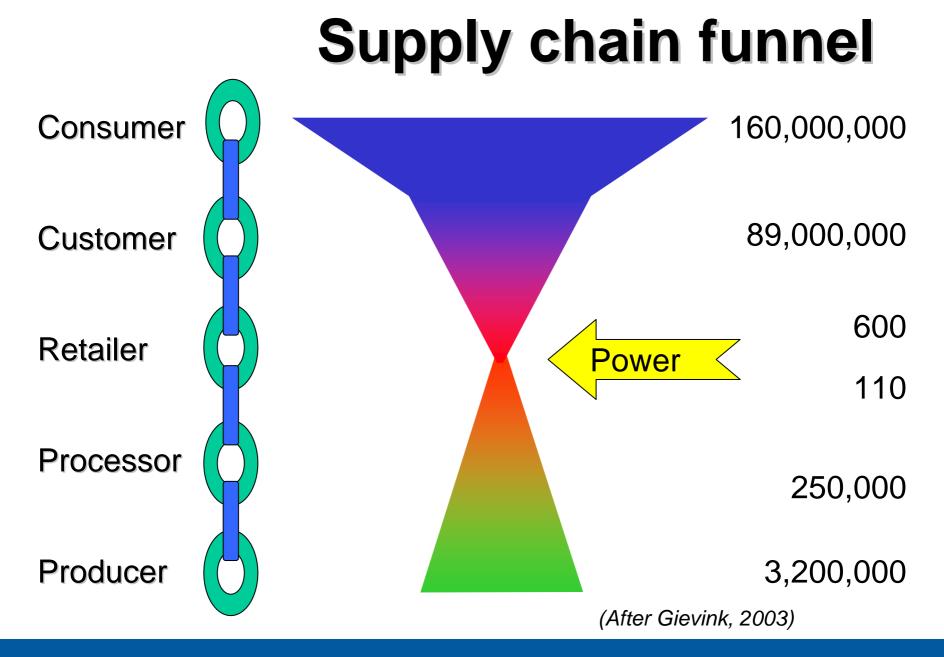






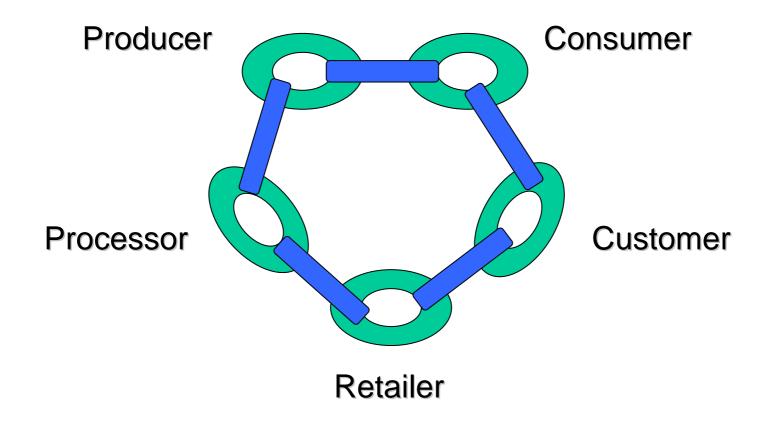






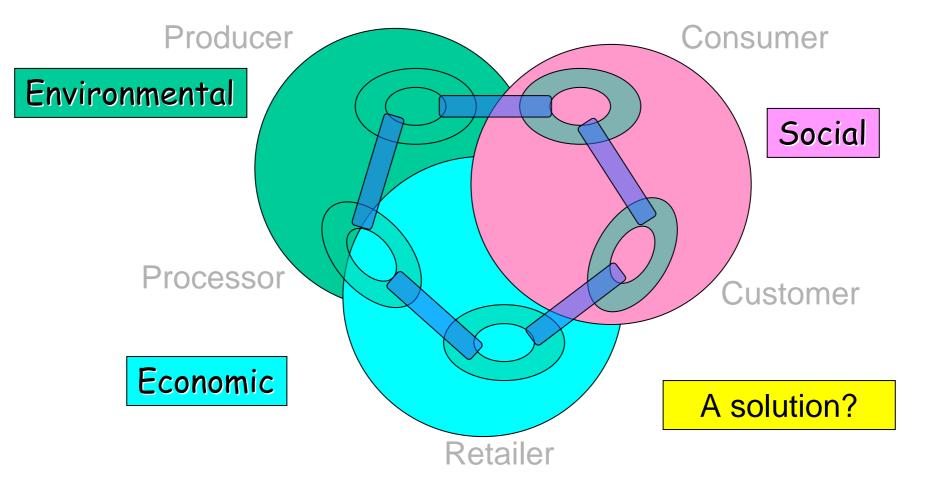


The "Circular Agri-food Chain"





The Circular Agri-food Chain ... in a sustainability context.





Summary

- The food supply chain is influenced by a diversity of cycles of different durations.
- The cycles and discourse of production were primarily scientific and technical, but of consumption were primarily social and political. These differences are being eroded.
- Better cross disciplinary communication and understanding of links and cycles along the agrifood chain are required to achieve credibility and sustainability.

