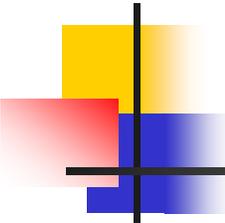


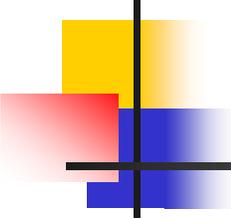
China's Livestock Industry Developments

USDA Agricultural Outlook Forum
February 17, 2005



Brief Overview

- Recent growth patterns and facilitating factors.
- Small-holder production: China's greatest challenge.
- One Solution: An example from the dairy sector.
- Other major challenges.

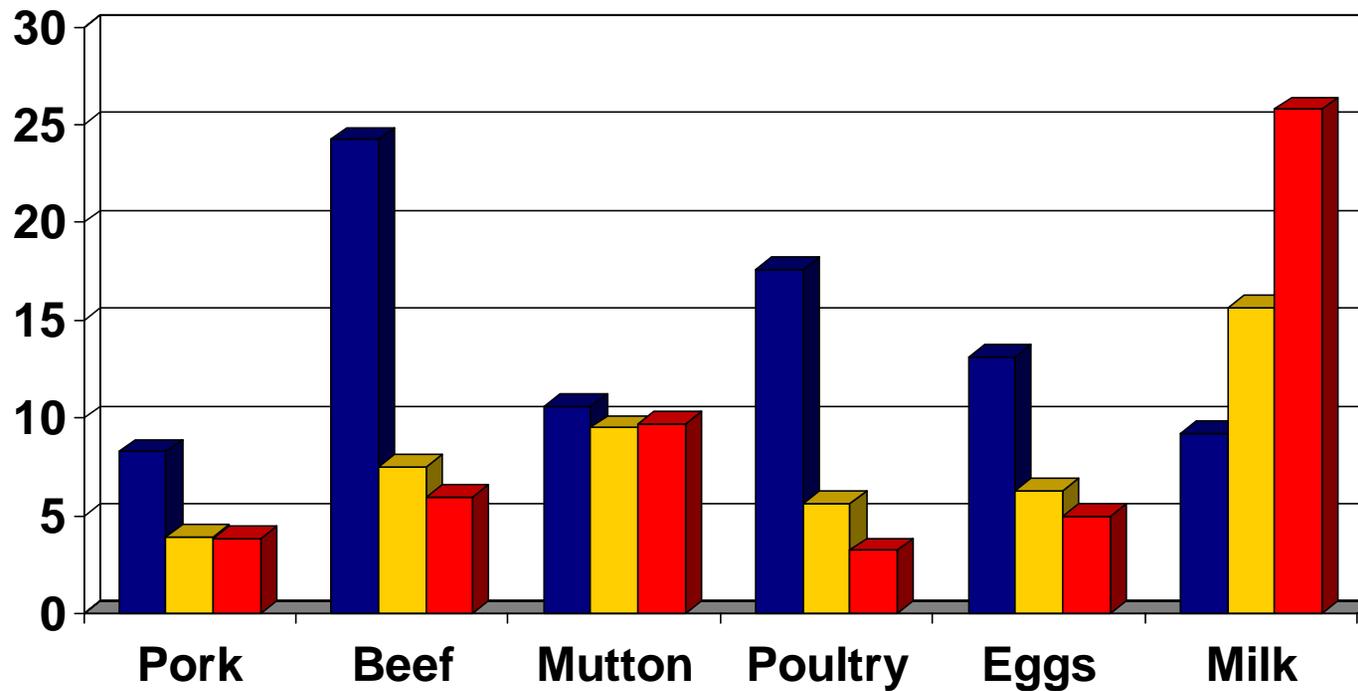


China's Livestock Production Systems

- Commercial firms—Former state-owned enterprises and collectives.
- Specialized Households—Market-oriented small and medium scale producers.
- Backyard Producers—Farm households with diversified production and a few animals.

Annual Production Growth

Percent

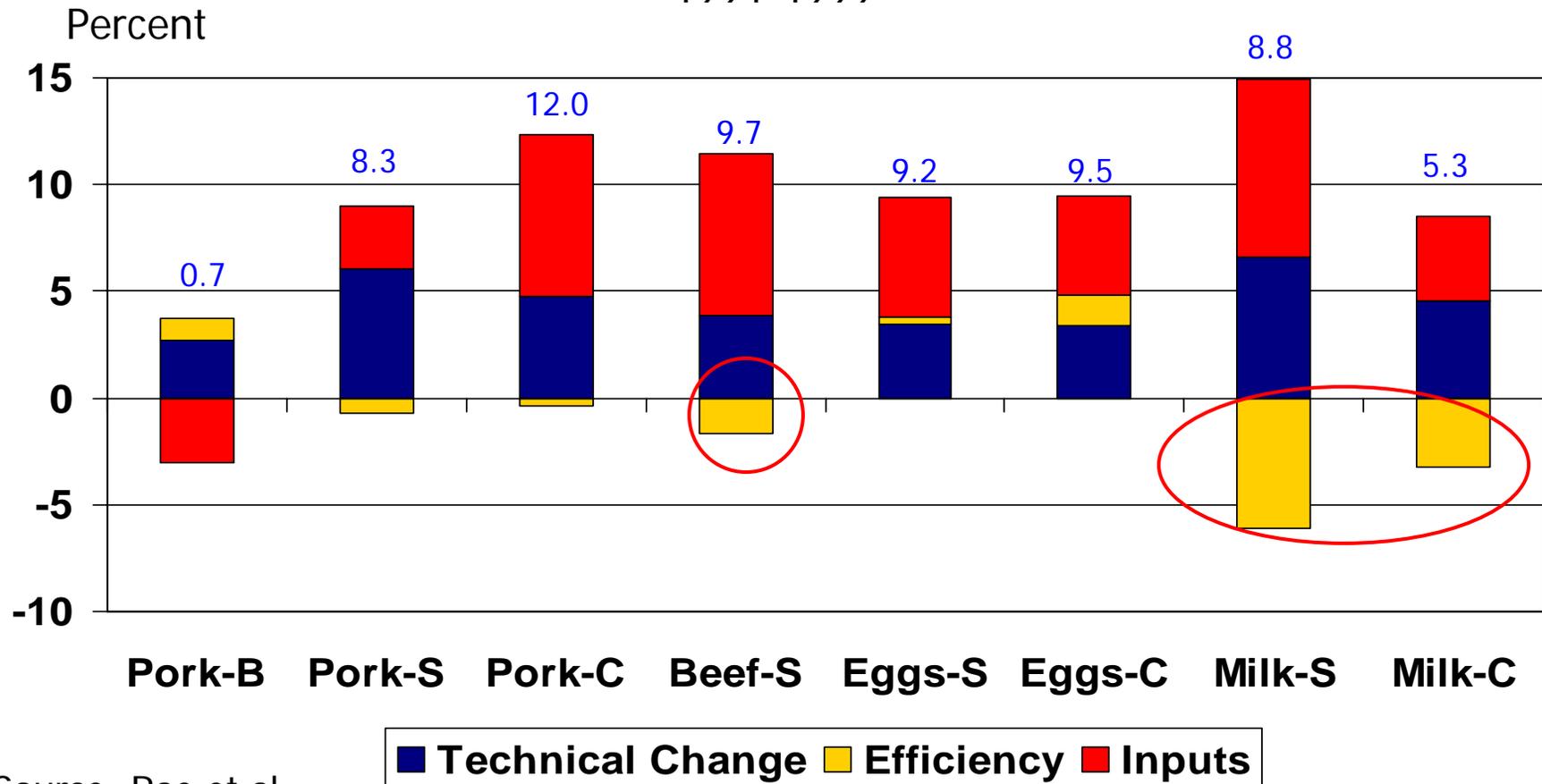


Source: CNBS/USDA

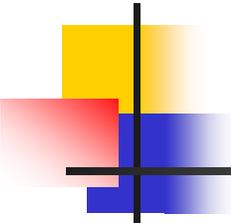
■ 1984-1994 ■ 1994-2004 ■ 1999-2004

Average Annual Productivity Growth by Livestock Type

1991-1999



Source: Rae et al.



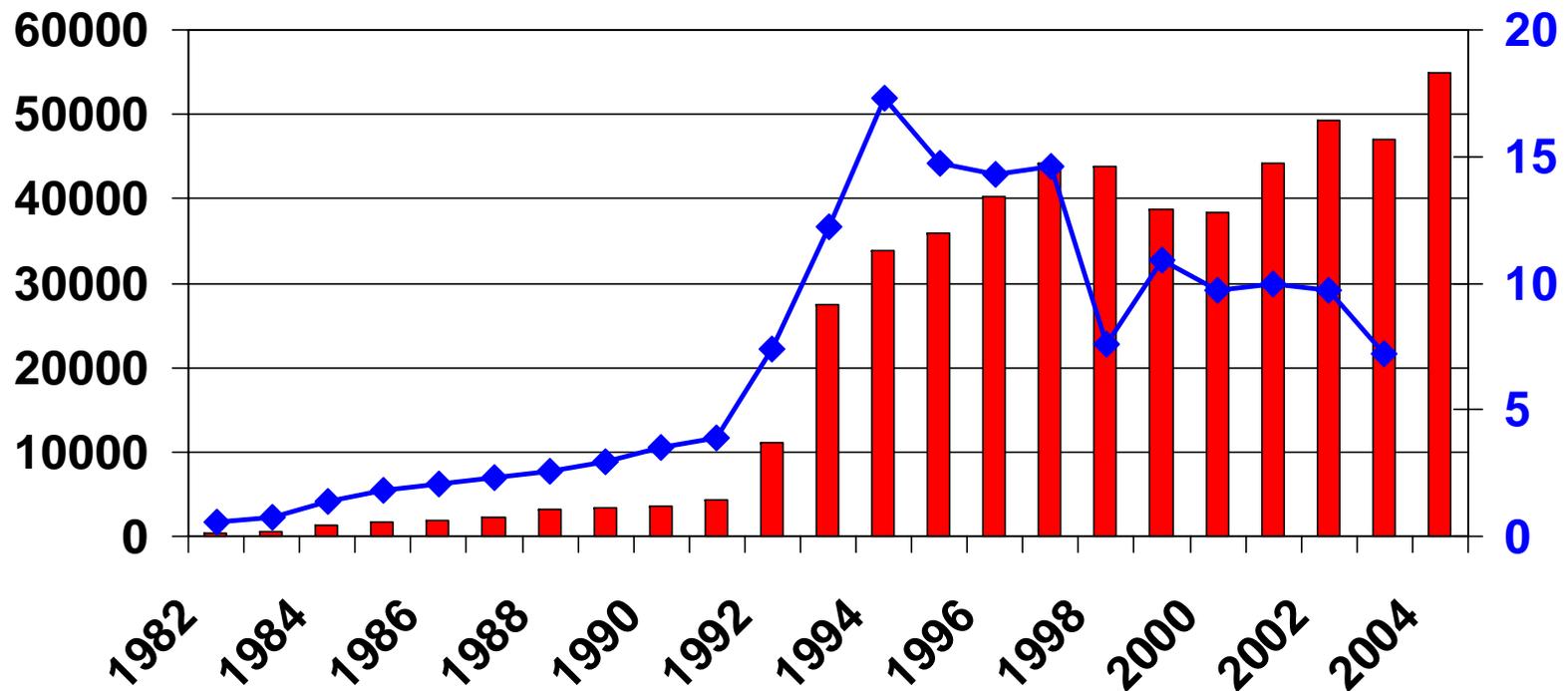
Factors Facilitating Growth

- Development of the manufactured feed sector.
- Improvements in transportation between population centers.
- Targeted government programs to stimulate development.
- Substantial foreign investment in processing/privatization of many SOEs.
- Improvements in retail formats and distribution infrastructure.

Foreign Direct Investment

Million USD

Percent



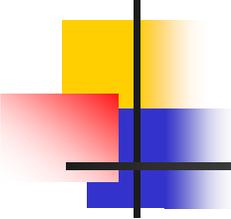
Source: IMF

■ FDI ◆ FDI/GDCF

Primary Development Challenge

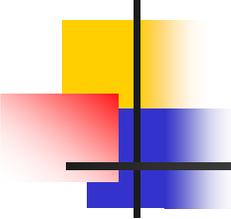
- To creatively transition from dispersed, small-holder production to more concentrated, commercially-oriented, and controlled production systems





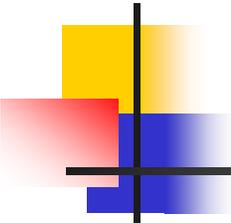
Centrality of Household Production

- Technology transfer and adoption
 - Training
 - Monitoring
 - Capital investment/economies of scale
- Raw product quality improvement
- Disease control
- Rural income enhancement



Leading Companies

- Primary source of commercial production growth.
- Rural development component to activities.
- Often integrate production and processing.
- Can be a customer and/or a resource to specialized HH and backyard producers
 - Source for genetic stock and manufactured feeds
 - Source for veterinary services and supplies
 - Source for training in new technologies



Farmer Professional Associations

- Only 2-3% of farm households are involved in FPAs.
- Less than half of FPAs are associated with the livestock sector.
- Provide a combination of technology, information, and marketing services.
- May help offset the dominant bargaining position of leading companies

Uniqueness of the Dairy Sector

- Greater “foreign” influence
 - Product development
 - Production and processing technology
- Constant production
- Capital intensity of collection
 - Mechanized milking
 - On-site cooling tanks



Dairy Concentration Centers

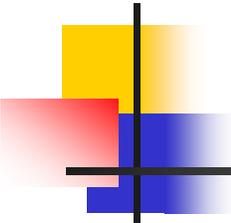
- Modern housing facilities
- Modern milking equipment
- Household ownership of cattle
- Vet services and training



Processing Sector Challenges

- Competition from local butchers.
- Underutilization of capacity.
- Improving sanitary standards and food safety.
- Greater enforcement of existing regulations.





Disease Control Measures

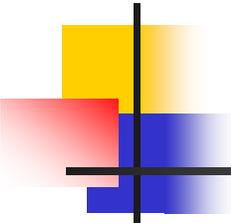
- Proposed legislation mandating:
 - Farm registration
 - Traceable breeding and vet records
 - Disease outbreak reporting
 - Compensation for culled animals
 - Promotion of increased production scale
- Rapid response to disease outbreaks
- Negotiated resolutions to trade disputes over disease-related import bans

Modern Retailing

- Greater demand for convenience foods
- Waning acceptance of “hot” meat.



- Rapid development of supermarkets.
- Greater demands for quality and safety



Concluding Observations

- Tremendous potential for increased productivity and further growth.
- High priority on establishing livestock product chains that ensure food safety and quality.
- Successful transformation of China's livestock sector could enable China to be a major exporter in certain livestock products