

100% Organic feed: supply and demand in Europe

Susanne Padel

Presentation at BIOFACH
25/02/2005

Outline

- Current situation
- Key questions
- Data sources and assumptions
- Stock numbers and feed availability
- Calculation of feed balance
- Summary and conclusions

Current situation

- Current EU derogations to use conventional feed expire in August 2005
- Annex II C (Feed stuffs) was revised in 2003
- Preamble to regulation 2277/2003

"Most of the conventional feed materials and in particular protein crops are still indispensable, at least in some Member States...."

Meeting the challenge: Ruminants

- Denmark and two German certification bodies have introduced 100% organic diets already
- Did this lead to higher imports of high quality protein sources into the EU?

Meeting the challenge: Pigs and poultry

- Reduction to 10% non-organic in France
- Modified rations have been proposed
- Some ongoing experiments with pig production in Denmark and broiler production in the UK conclude that it is possible

Key questions for this project

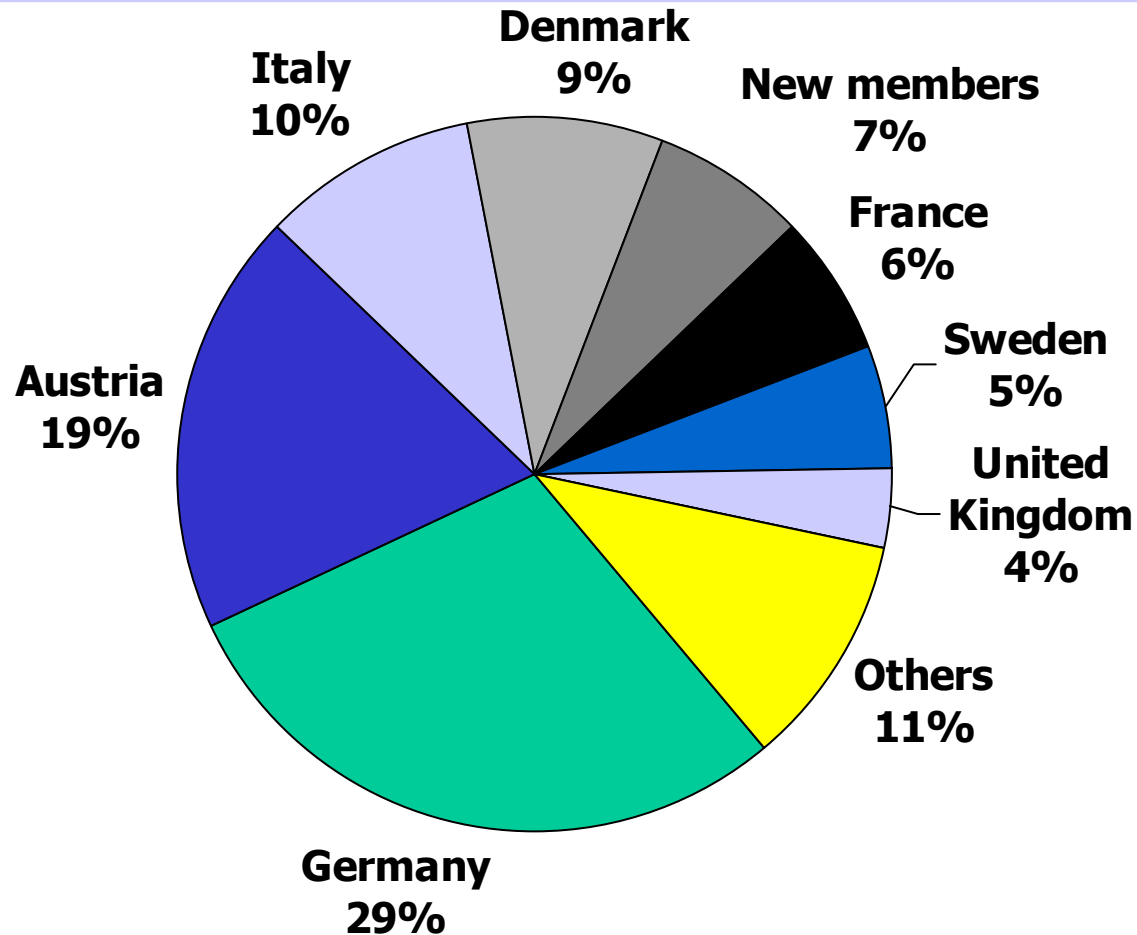
Focus on pigs & poultry

- 1. Do we grow enough organic feed (cereals, home grown pulses, high quality protein) for 100% organic diets in Europe?**
2. Are conventional feed requirements appropriate for organic animals?
3. What implications have 100% organic diets for health, welfare and product quality?
4. What is the likely economic impact of changing to 100% organic diets?

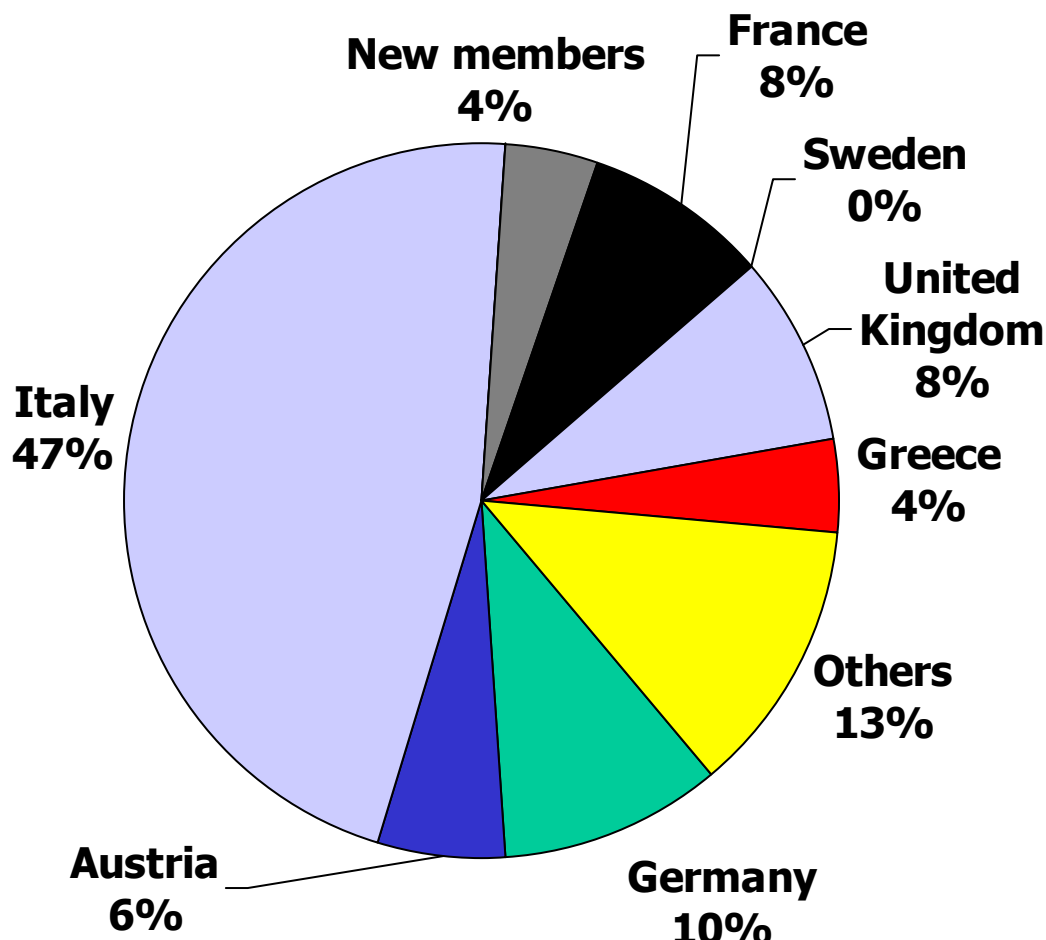
Data sources and assumptions

- 2002 statistical data from EU-CEE-OFP for livestock numbers and cropping area for most of EU 25 member states
- Expert estimates for UK & Spain; no data for Poland, Malta & Cyprus
- Literature and expert survey for typical and modified rations
- Feed imports not considered

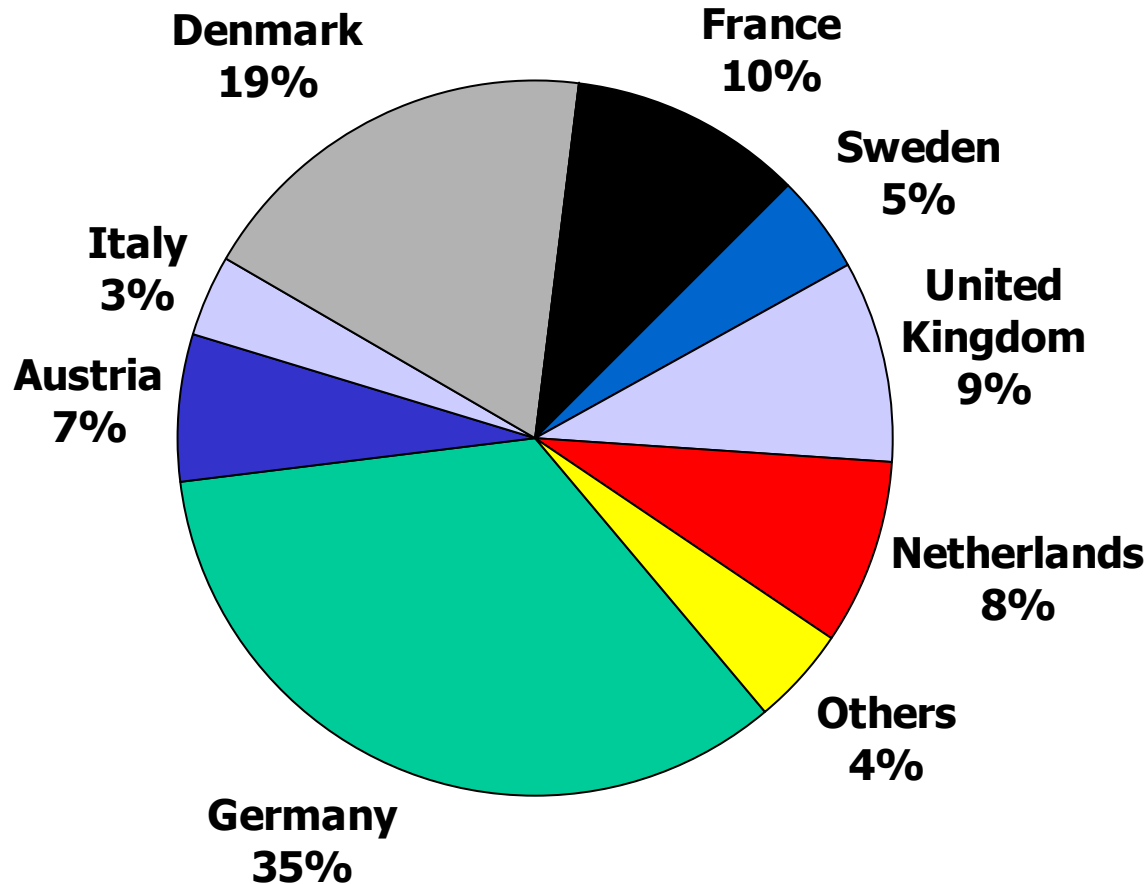
1.65 million organic cattle, 2002



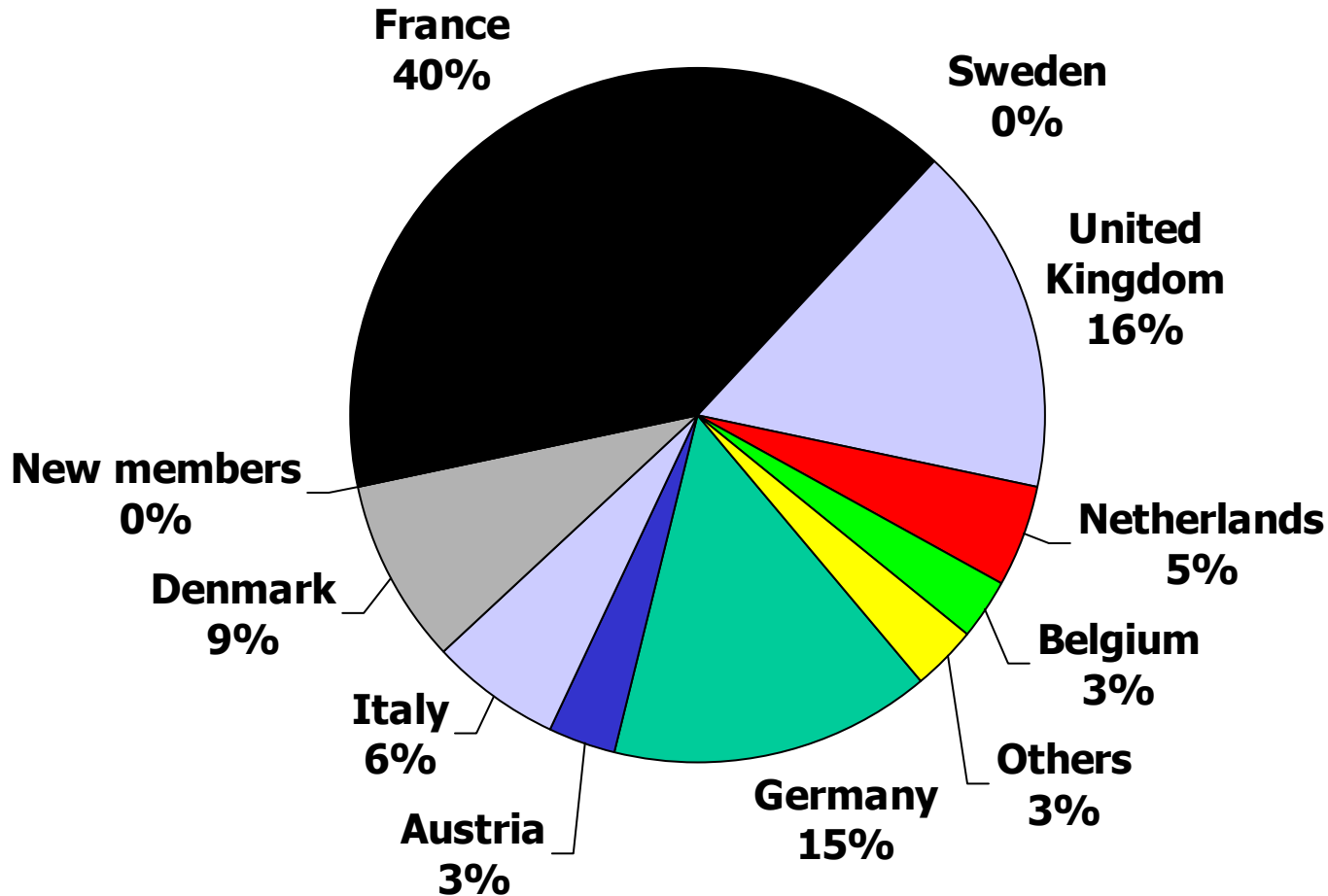
1.47 million organic sheep, 2002



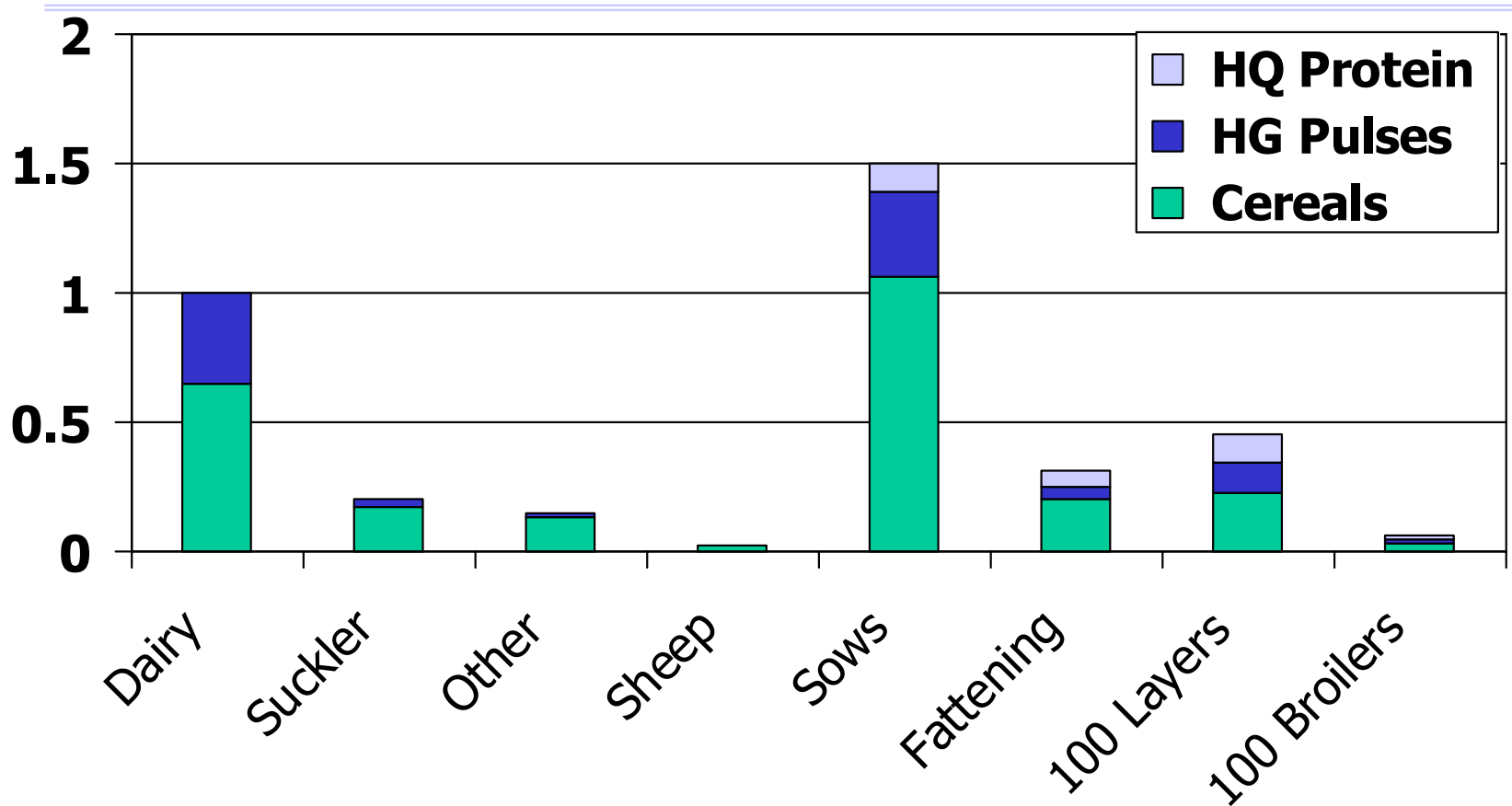
575,000 organic pigs, 2002



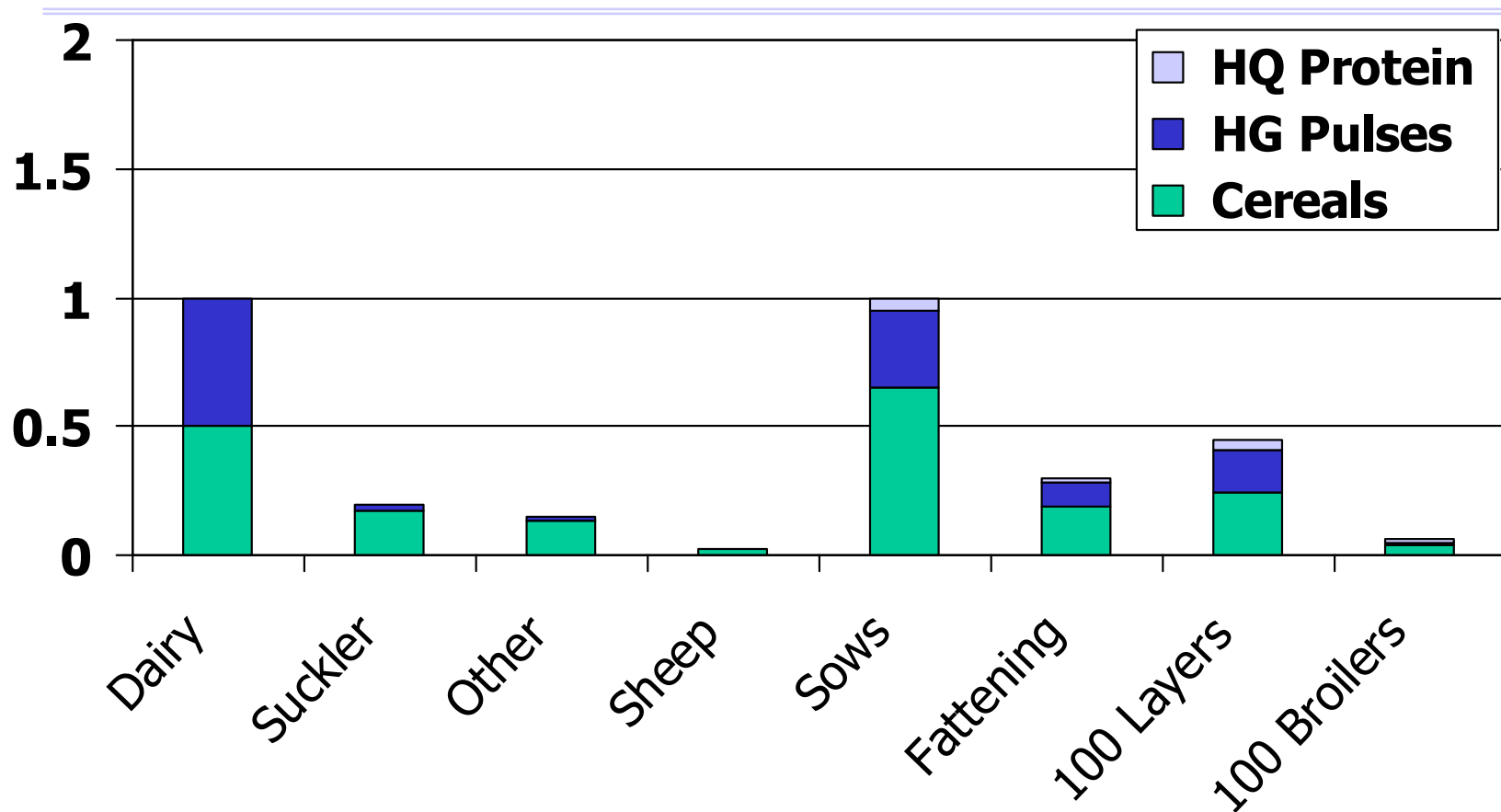
15.3 million organic chicken, 2002



Feed assumptions (t/hd)



Modified rations (t/hd)



Organic feed availability (EU 25)

	Cereals	Pulses
Organic Area (ha)	883,000	112,000
Production <i>3.0 t/ha</i> (mt)	2.65	0.34
For animals	55%	90%
Total supply (mt)	1.46	0.3
Supply with higher yield 3.5t/ha (mt)	1.70	0.36

Organic feed production

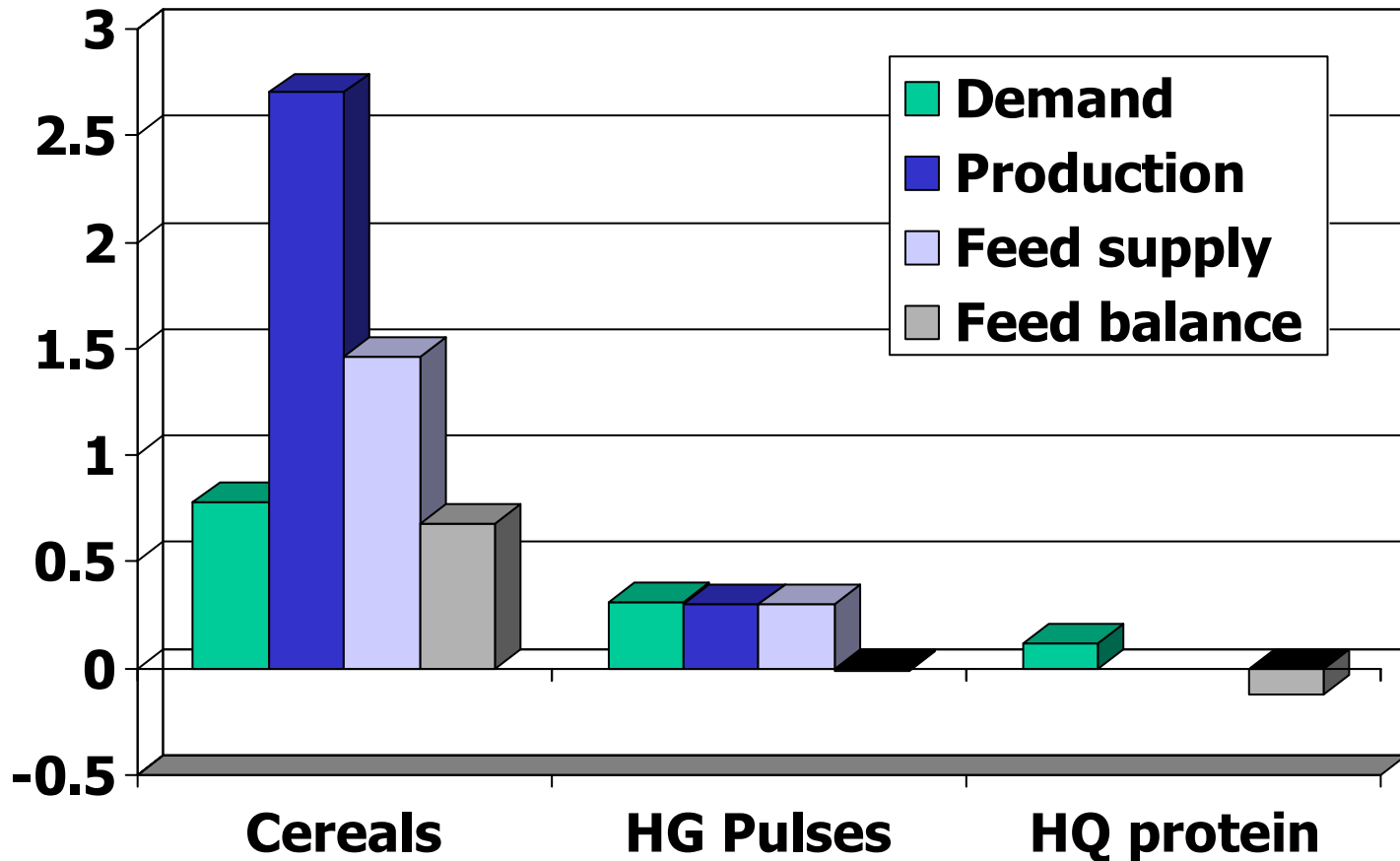
Cereals

- Main producing countries:
 - Italy
 - Germany
 - Spain
 - France
- No change likely 2003

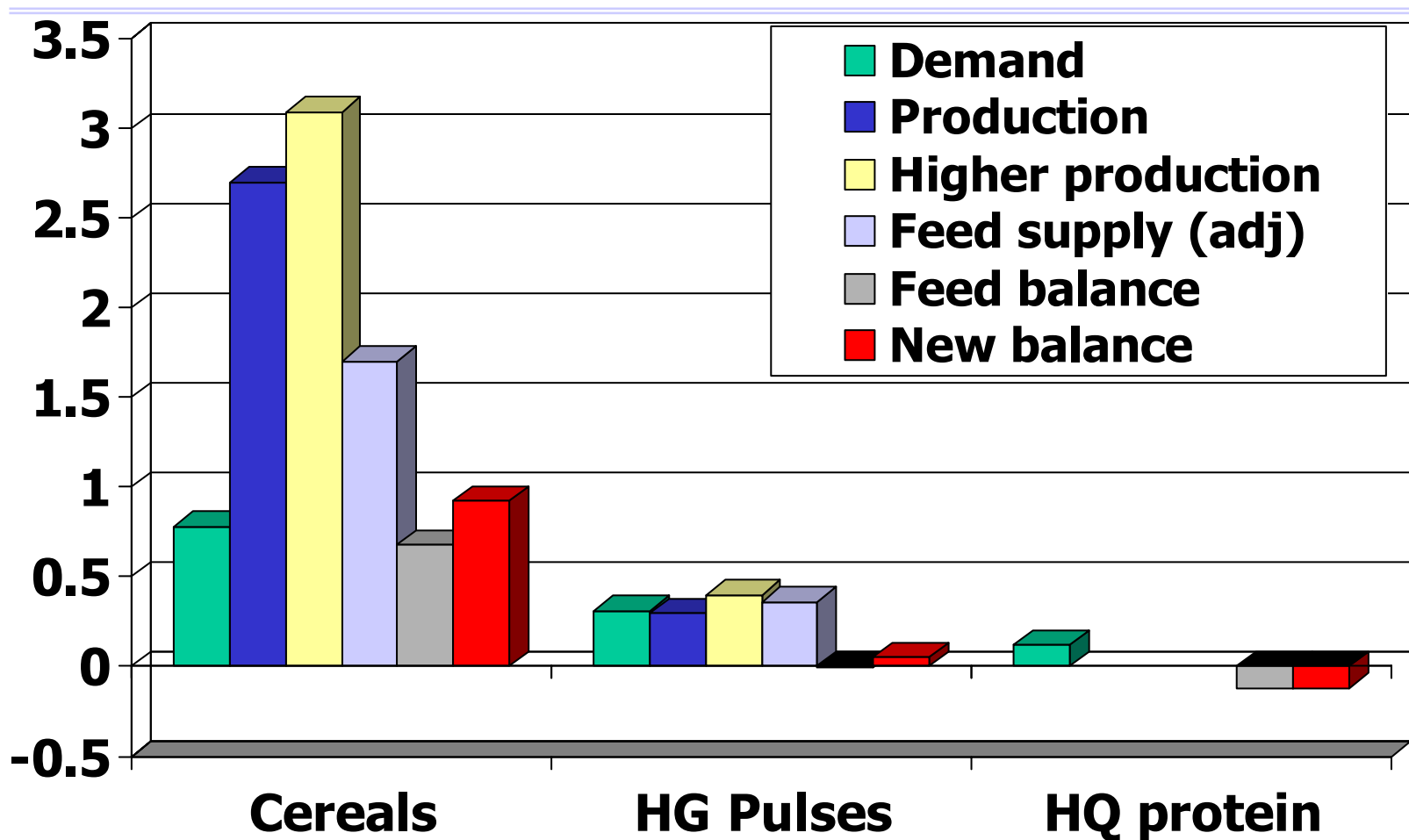
Pulses (Peas & Beans)

- Main producing countries
 - Italy
 - Germany
 - France
 - Austria
- Area may have declined in 2003
- Lupines could become more important

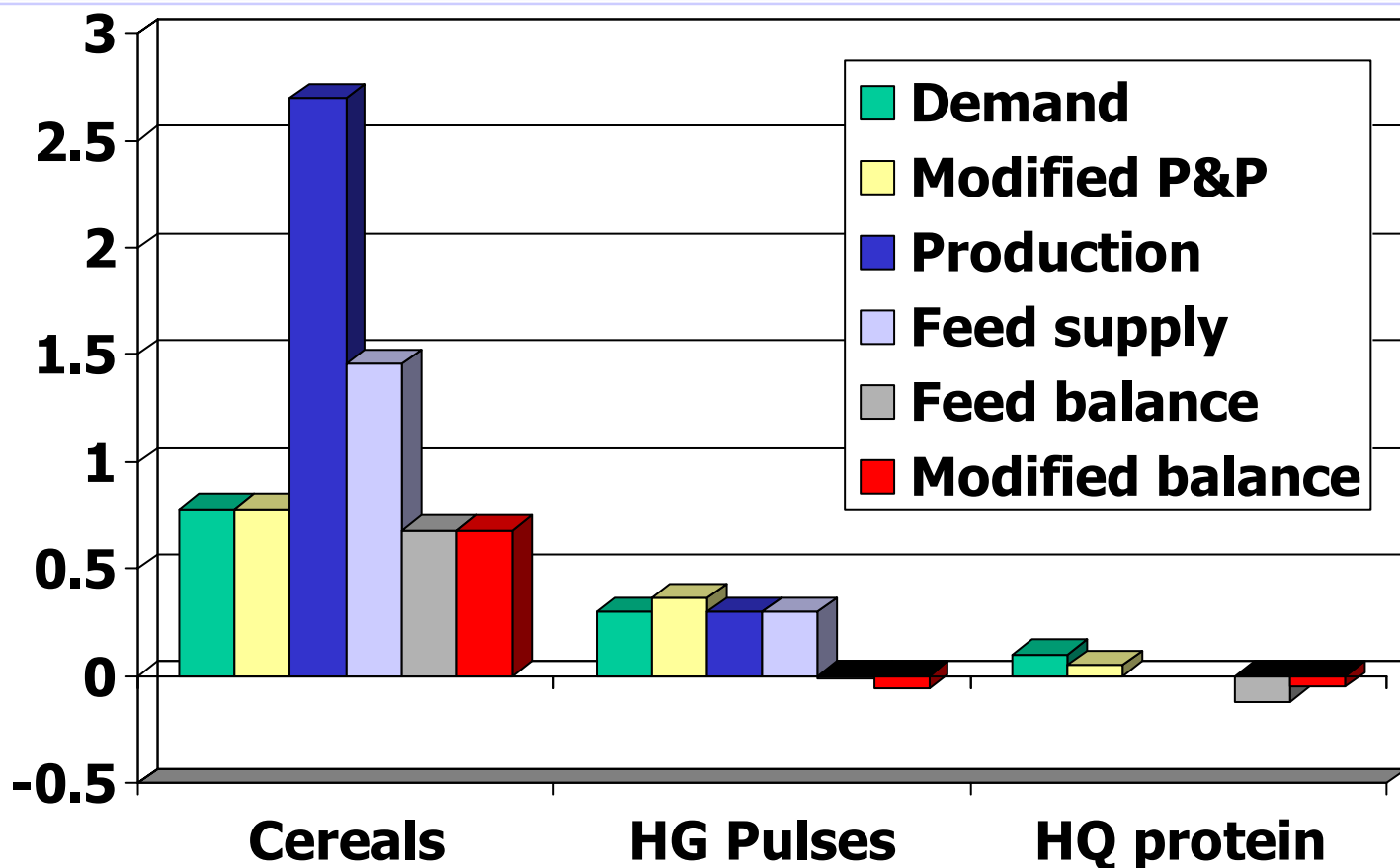
Organic feed balance (m/t)



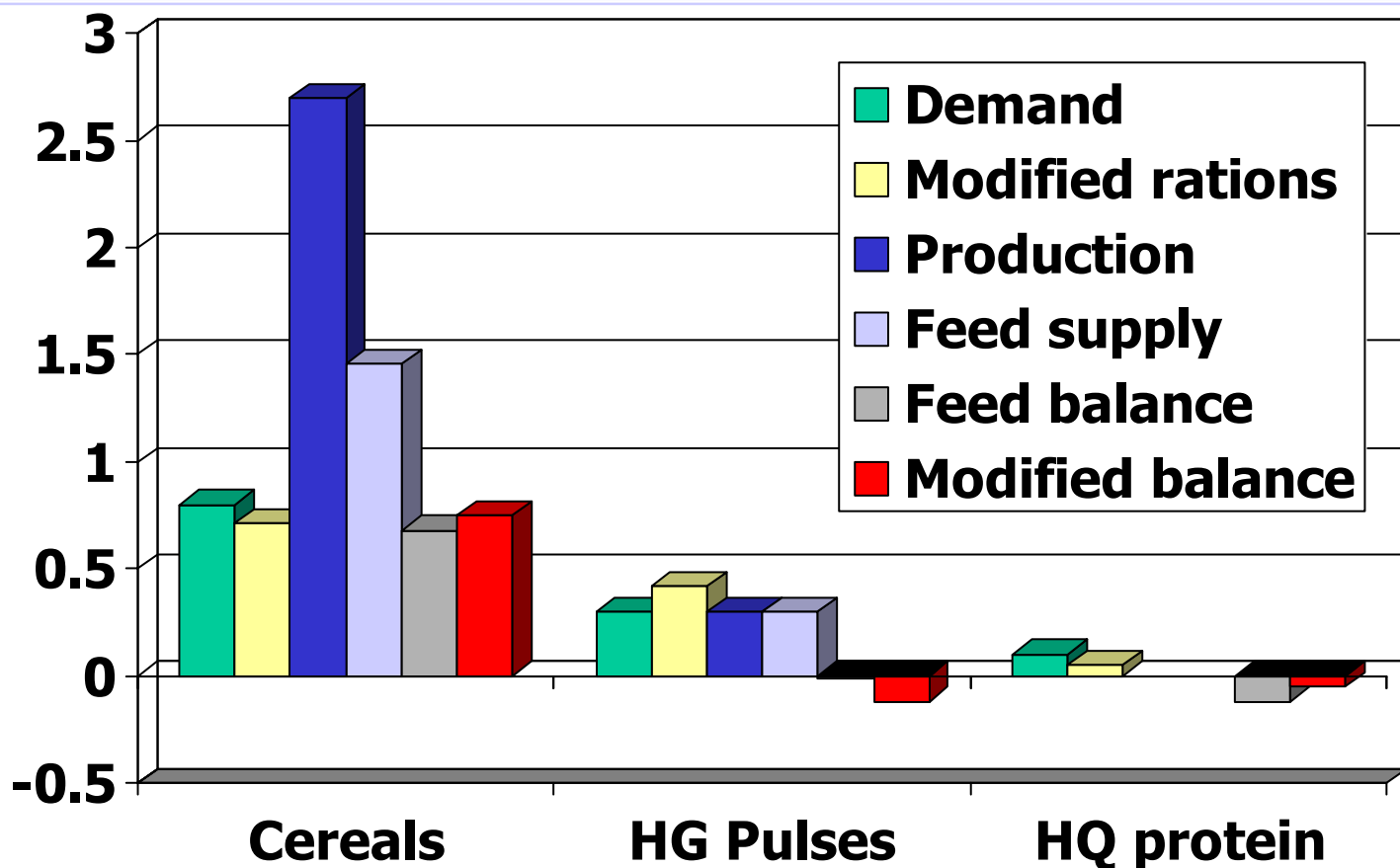
Higher yield (3.5t/ha) balance (m/t)



Modified pigs and poultry rations (m/t)



Balance modified rations (m/t)



Summary

- Total **feed demand** in 2002
1.2 million tonnes of concentrate feeds
 - 65% Cereals
 - 25% Home grown pulses (peas & beans)
 - 09% High quality protein
- 58% Ruminants, 15% Poultry, 7% Pigs
- Sufficient **cereals** and **home grown pulses** to feed all organic livestock

Conclusions

- Assumed deficit of high quality protein sources
 - 103,000 tonnes; \approx 34,500 ha; 9%
 - Until now mainly from conventional sources
- Using modified rations for pigs & poultry
 - Lower deficit for high quality protein
 - 49,500 t; \approx 16,500 ha; 4%
 - 15% increased demand for home grown pulses leading to a deficit of 52,500 tonnes or 17,500 ha

Conclusion continued

- Overall balance is influenced by
 - Cereal and pulses: yield and production area
 - Diet composition all species (for example protein content in ruminant rations would influence protein balance)
- Other organic sources of high quality protein?
 - Role of pulses with better protein quality (e.g. lupines, soya)?
 - Other protein sources (from milk, fish)?
- Up-to-date statistics
- Organic Revision will carry out a more detailed survey during 2005

Acknowledgements

- Thanks to the EU Commission for funding of the project (Contract NO FP6-502397). The views expressed are those of the author, not of the commission.
- Thanks to all experts that have contributed data and time
- **Thank you for your attention!**