

# Economic perspective for the egg industry

**Peter van Horne**  
**Poultry Economist**

Agricultural Economics Research institute (LEI)  
Wageningen- University and Research Center (WUR)  
The Netherlands

Utrecht, april 2010



# Content

- Part 1:  
International trade in eggs / egg products
- Part 2:  
International comparison production cost  
Position of EU in 2012
- Part 3:  
Projection for 2015
- Conclusions and Discussion

# Part 1: international trade

I.



## Global and regional development of egg trade

# Main trade flows in hen eggs

## Main trade flow (> 100.000 ton):

Netherlands → Germany

Malaysia → Singapore

## Minor trade flows (20-50.000 ton):

Spain → France / Germany

Netherlands → Belgium / UK

Poland → Germany

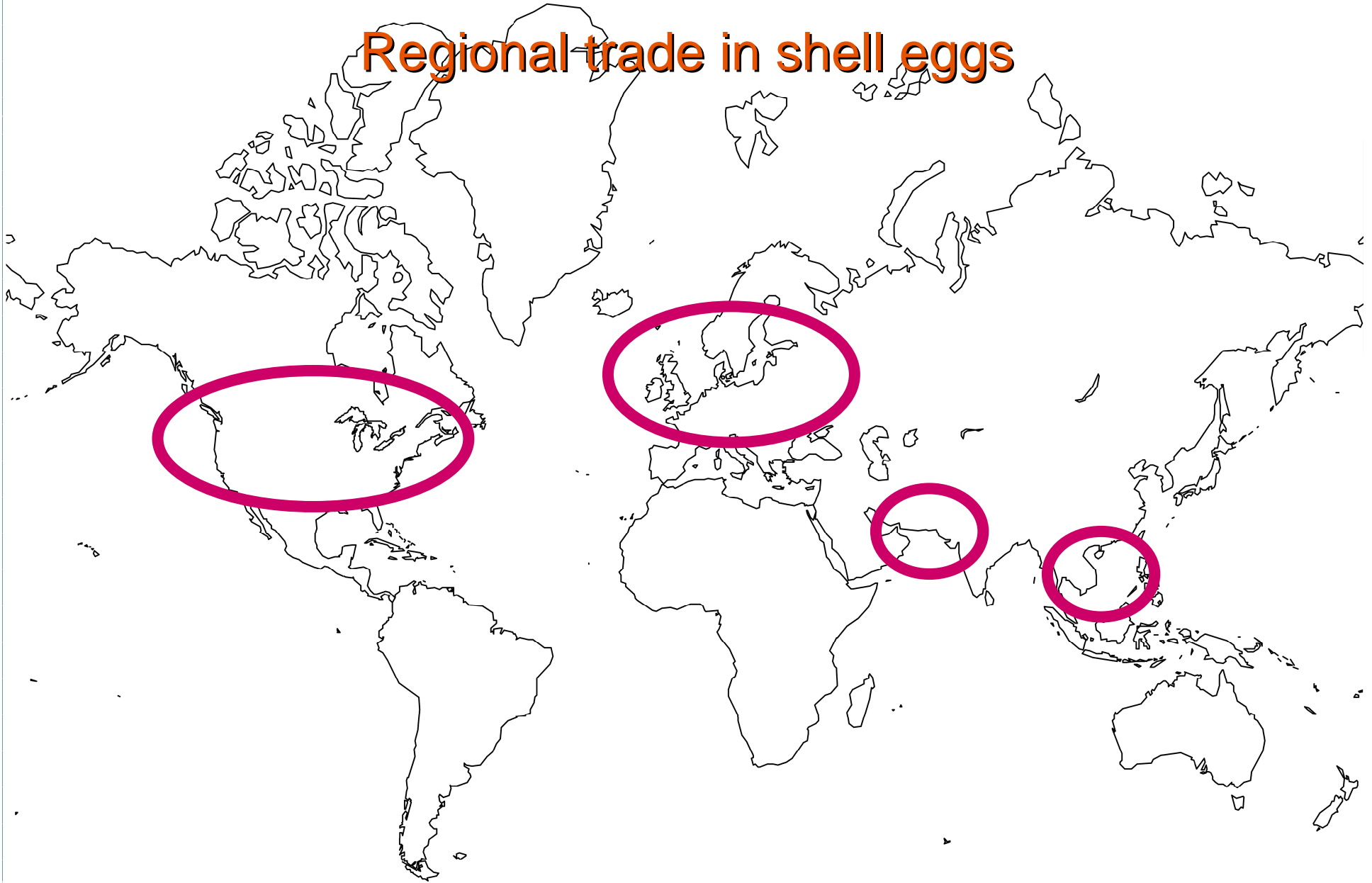
India → UAE

USA → China / Hong Kong

Belarus → Russia

GENERAL CONCLUSION: mainly neighbour to neighbour

# Regional trade in shell eggs

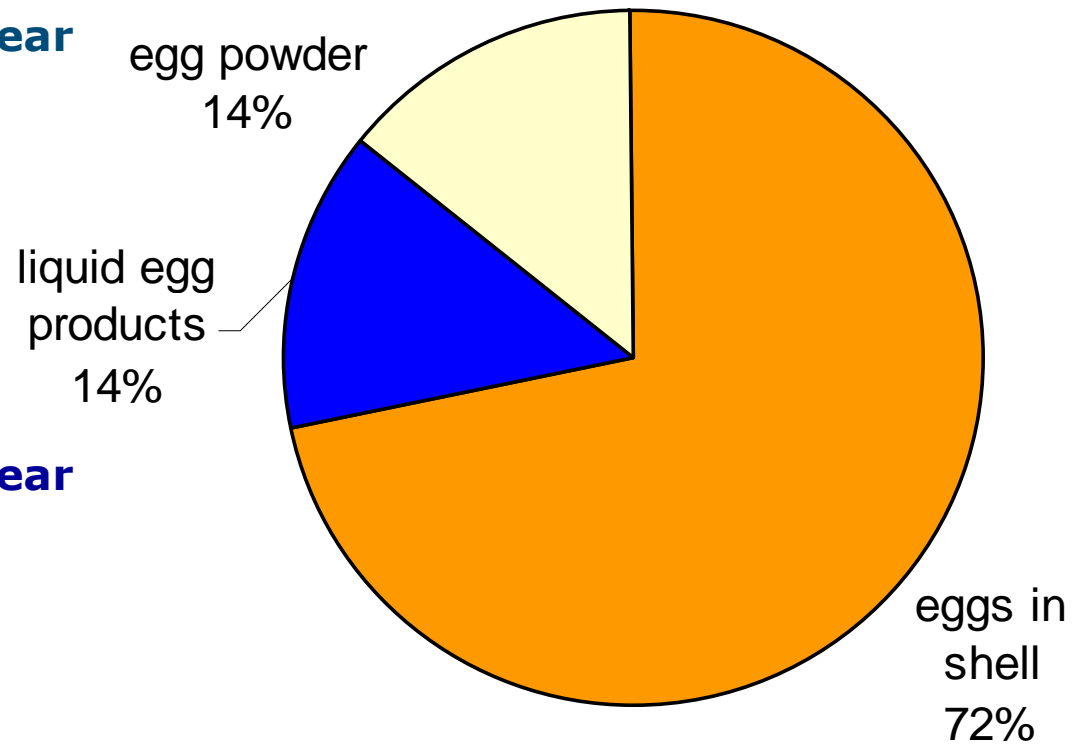


LEI

WAGENINGEN UR

# International trade : 1.7 MT egg equivalent (3% of the world production)

**+6.2 % per year**



**+6.2 % per year**

**+3.7 % per year**

# Conclusions 1: production and trade

- About 3% of eggs reaches the world market. To compare: in poultry meat 12%
- Production and trade in eggs is much more regional concentrated (compared to poultry meat with global trade flows from Brazil and USA).
- Main exporters are EU, China, USA, Malaysia and India
- End 2008 and beginning 2009 fluctuations in exchange rate → impact on international trade

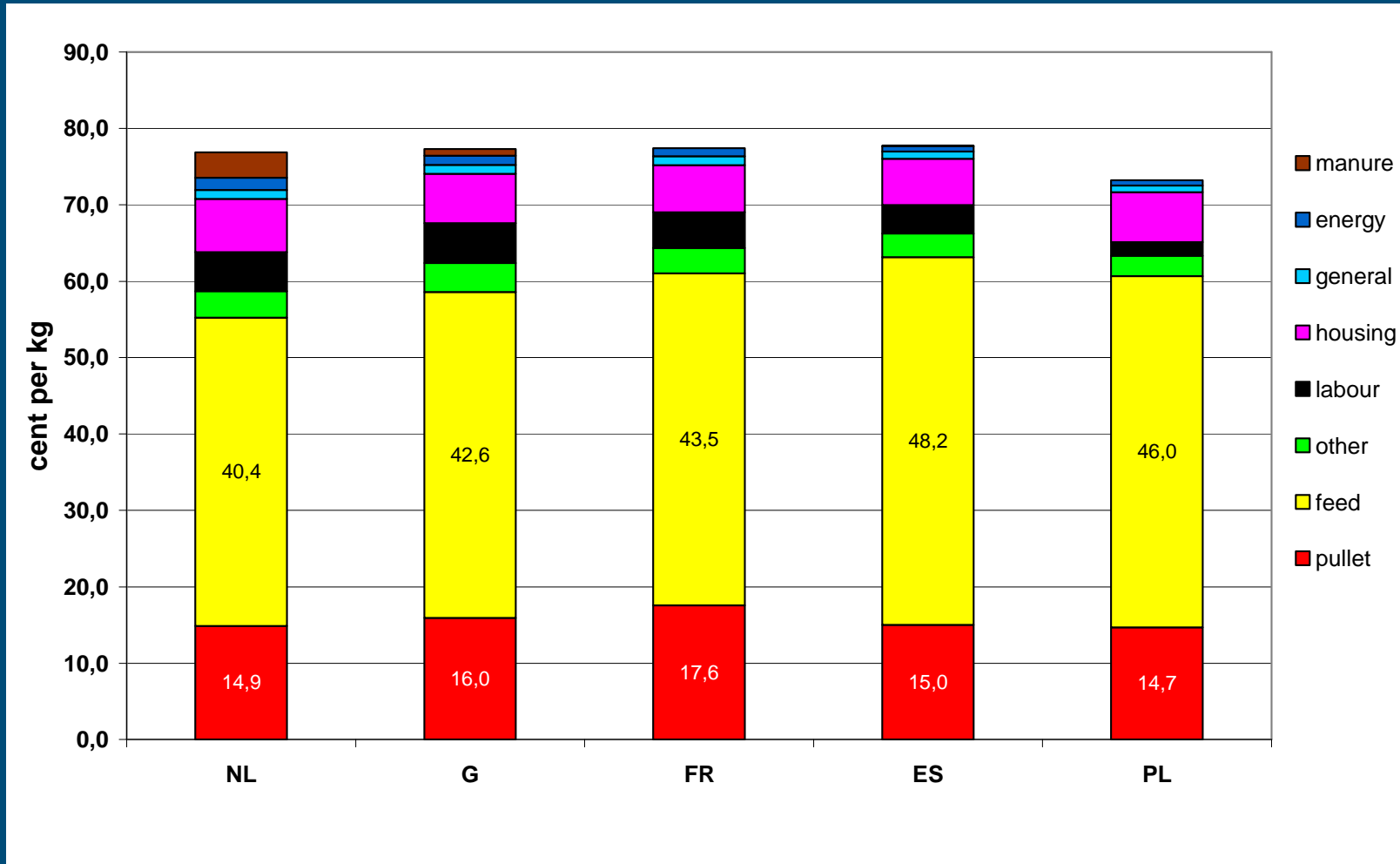
# Part 2: International Competition



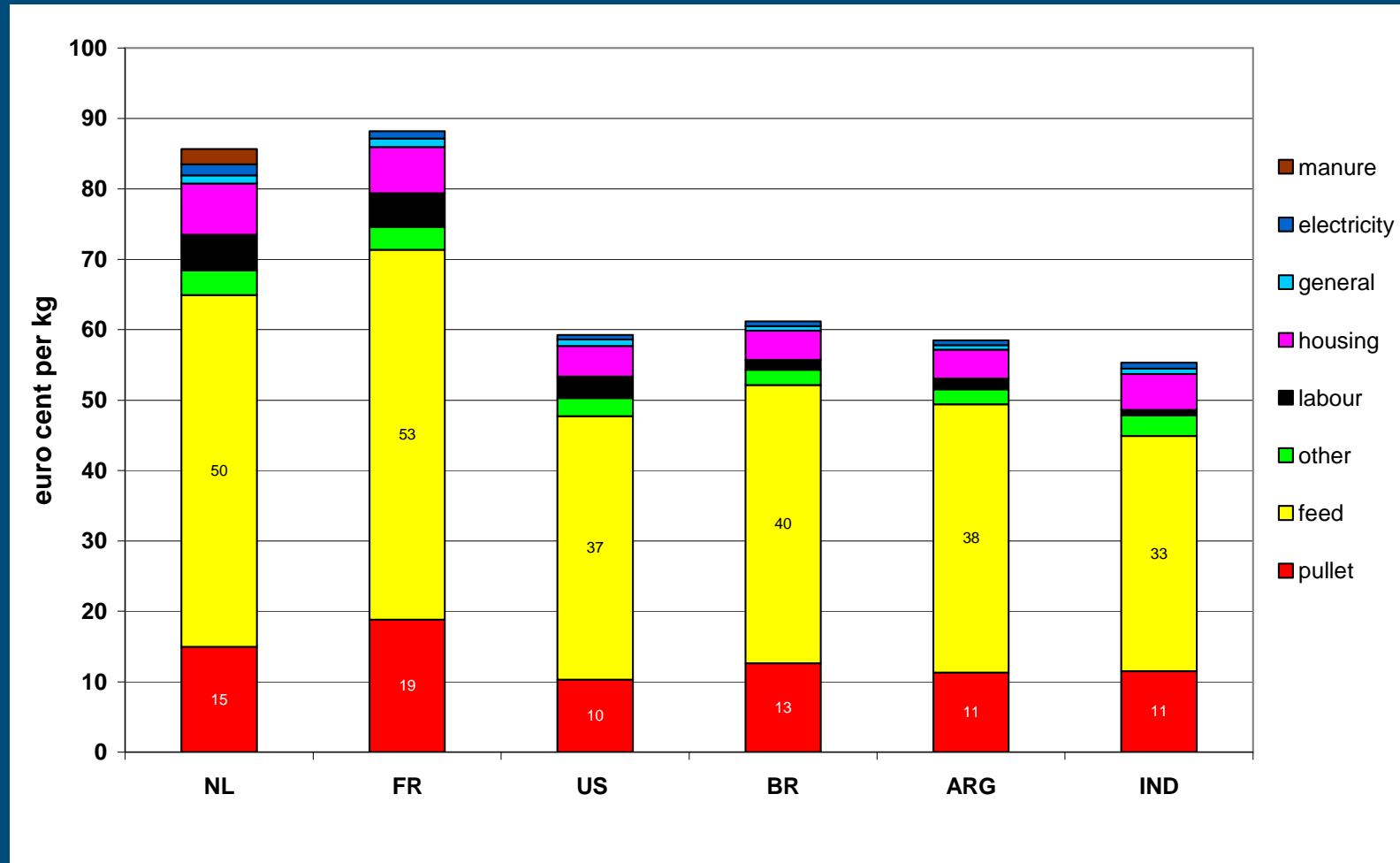
LEI

WAGENINGEN UR

# Production cost Eggs in 2007 EU countries, Farm level (Ect/kg)



# Production cost Eggs in 2008 outside EU, Farm level (Ect/kg)



## EU Imports Eggs 2005 – 2009 (egg equivalent, DG Agri, 2010)

### EU Imports of Eggs : Trade figures (COMEXT – tonnes egg equiv.)

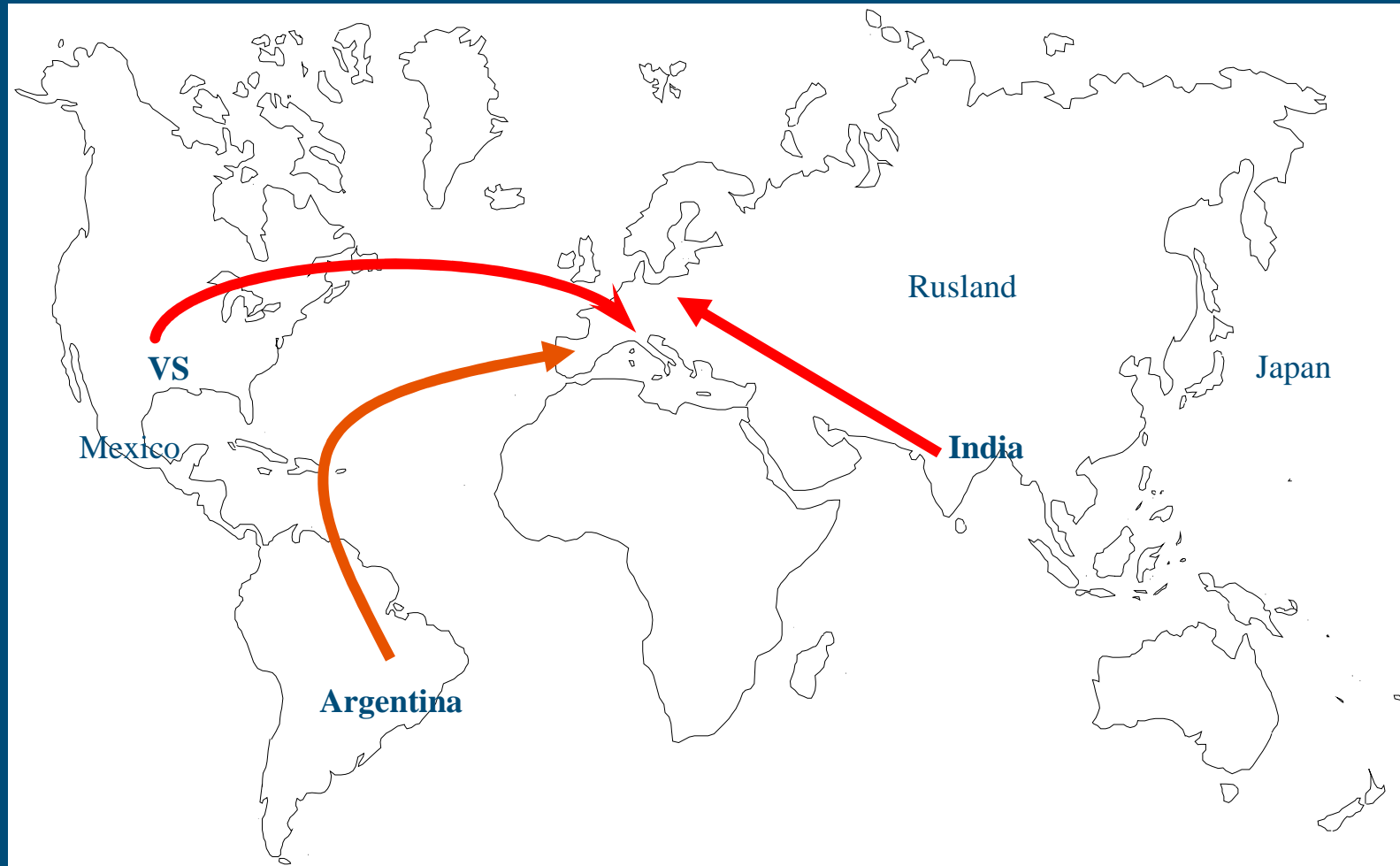
Origins	2005		2006		2007		2008		Jan-Dec 09	
	tonnes	%	tonnes	%	tonnes	%	tonnes	%	tonnes	%
USA	4 768	16.0%	8 505	21.8%	17 032	39.2%	4 245	21.7%	11 165	36.7%
Argentina	7 595	25.5%	8 008	20.6%	8 318	17.4%	6 552	27.8%	7 899	26.0%
India	9 453	31.8%	12 730	32.7%	12 012	25.1%	6 617	25.9%	5 776	19.0%
Mexico	2 168	7.3%	1 378	3.5%	1 762	3.7%	2 002	7.8%	1 893	6.2%
Albania		0.0%	95	0.2%	2 077	4.4%	2 209	8.6%	1 659	5.5%
Israel	178	0.6%	898	2.3%	911	2.0%	655	2.7%	711	2.3%
Brazil	1 140	3.8%	770	2.0%	30	1.4%	64	0.7%	67	0.2%
Canada	2 091	7.0%	1 540	4.0%	786	2.6%	1	2.2%	33	0.1%
EXTRA EU 25/27	29 742		38 950		44 724		23 271		30 409	
% change			+ 31%		+ 15%		- 48%		+ 33.1%	



LEI

WAGENINGEN UR

# International trade towards EU in eggs / egg products



# Regulations in the EU

- Animal Welfare
- Environment
- Food safety

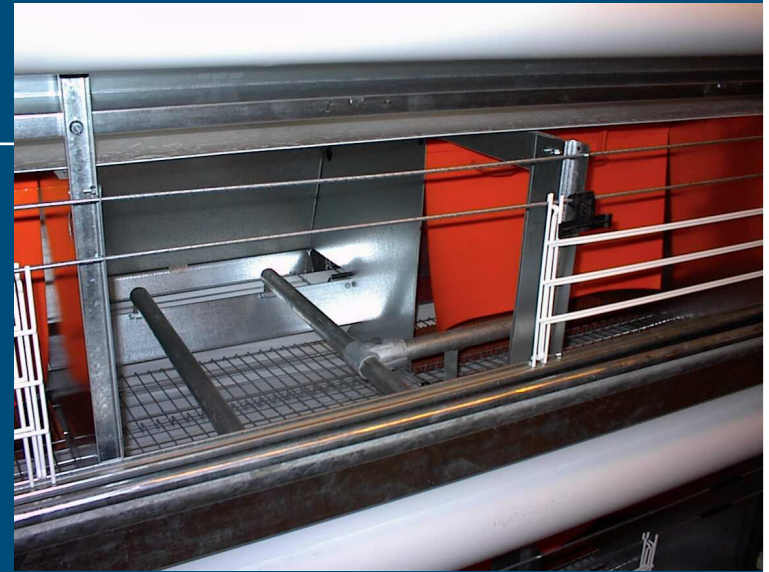


# Towards 2012 within EU

## 1. EU Directive welfare for laying hens

2003: Space allowance 550 cm<sup>2</sup>/hen

2012: Enriched cages with 750 cm<sup>2</sup>,  
laying nest, perch, litter



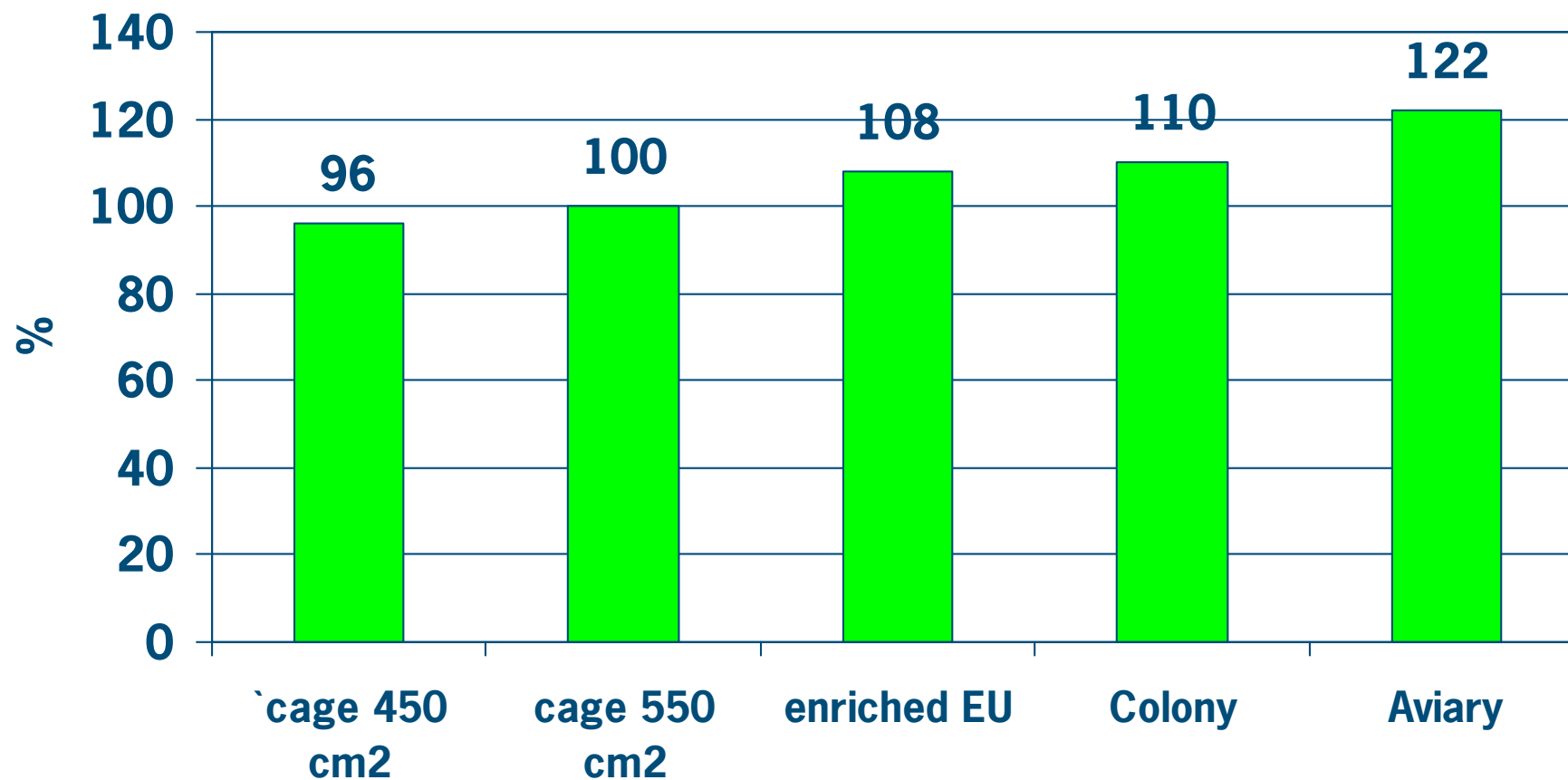
2. EU: Beaktrimming before 10 days (ban in NL, G)

3. Netherlands and Germany: colony cage with 890 cm<sup>2</sup> per hen.

# Deep litter / Aviary system



# Meer space per hen, increase in production cost ....



# Free trade: WTO agreement ?

- \* Doha:  
EU proposal to reduce import levies
- \* No agreement WTO

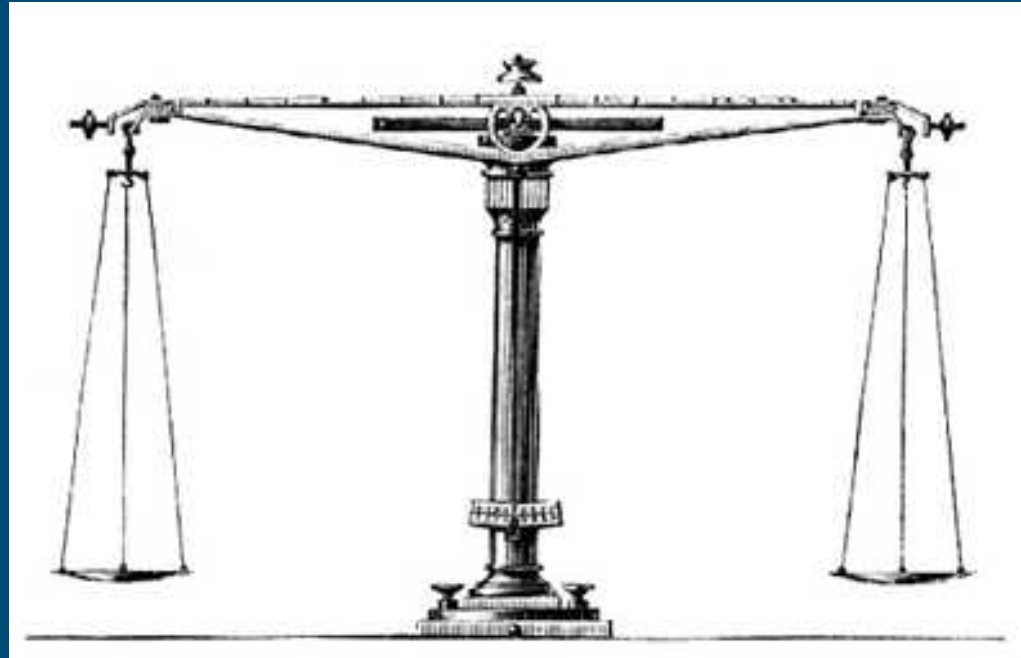


# Eggs: breaking and drying: whole egg powder



Free trade

Fair trade



Increase in production  
cost in EU due to  
public concern

Lower import  
levies

# Conclusions: comparison production cost

- Within EU small differences in production cost
- Low production cost for USA, Brazil, Argentina and India ( 60 to 65% of EU level)
- Difference in animal welfare and foodsafety standards with non EU countries; especially for eggs.
- Cost increase eggs in EU towards 2012: + 10%
- WTO: lower import levies on eggs and eggproducts will weaken EU egg sector.

# Part 3: Projections 2015

A projection of the regional Development of Egg  
production until 2015

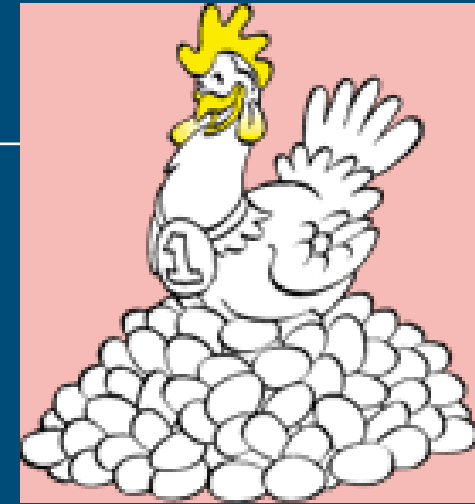
Hans Wilhelm Windhorst  
ISPA Institute, Vechta in Germany

IEC Statistical Analyst

London, 2008

# Factors

- Natural population
- Age structure of the population
- Urbanisation of a society
- Development of the gross national income
  
- These parameters + development 1995-2005



## Projected population development between 2005 and 2015 in the ten largest countries (in million)

country	2005	2015	Change	Change (%)
China	1313	1389	76	5.8
India	1134	1306	172	15.2
USA	300	329	29	9.7
Indonesia	226	252	26	11.5
Brazil	187	210	23	12.3
Pakistan	158	191	33	20.9
Bangladesh	153	180	27	17.6
Nigeria	141	176	35	24.8
Russia	144	136	-8	-5.6
Japan	128	127	-1	-0.8
10 countries	3884	4296	412	10.6

## Projected additional egg demand in 2015 (1,000 ton)

continent	Population change (mill.) 2005-2015
Africa	227
Asia	451
Europe	-4
N.America	32
S.America	70
Oceania	4
World	780

## Projected development of egg consumption (kg/person/year)

<u>continent</u>	<u>2005</u>	<u>2015</u>	<u>Change</u>
Africa	2.4	3.2	0.8
Asia	9.1	10.0	0.9
Europe	13.4	13.9	0.5
N.America	15.0	15.3	0.3
S.America	10.2	11.2	1.0
Oceania	7.0	7.9	0.9
World	9.1	9.8	0.7

## Projected development of global hen egg production between 2005 and 2015

continent	Production (1000 t) <u>2005</u>	Production (1000 t) <u>2015</u>	Additional demand (1000 t)
Africa	2,203	3,683	1,480
Asia	35,917	43,992	8,075
Europe	9,823	10,135	312
N.America	4,985	5,751	766
S.America	5,711	7,024	1,314
Oceania	232	292	60
World	58,871	70.877	12,007

# Conclusions projections 2015

- Egg production will increase from 58.8 to 70.9 million ton between 2005 and 2015 (+20% is 650 mln layers)
- Egg demand will increase faster in less developed than in more developed countries
- 67% of the additional demand of 12 million ton in 2015 will arise in Asia
- The highest additional demand show China ( 6 mill. t.), India (1.2m), USA (0.6 m), Brazil (0.4 m) and Indonesia (0.4 m).
- Egg demand will decrease only in very few countries (Hungary, Greece, Japan).

# Discussion projections 2015

- Introduction and dissemination of HPAI
  - Increasing feed cost (supported boom in bio energy) and impact on egg prices
  - Impact of government policy (e.g Ban on conventional cages in EU).
  - WTO agreement: free trade on egg products with shift to low cost countries.
- In EU: High governmental impact on future developments in eggs sector (housing systems vs import tariffs).

Thanks for your attention



[peter.vanhorne@wur.nl](mailto:peter.vanhorne@wur.nl)