

Impact of Economic and Political Drivers on Grassland Use in the EU

B. Osterburg, F. Isermeyer, B. Lassen, N. Röder

**Johann Heinrich von Thünen-Institute (vTI),
Federal Research Institute for Rural Areas, Forestry and Fisheries (vTI)**

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Content

- 1 Grassland in the EU-27: Spatial Distribution, Development over Time, Grassland Use**
- 2 Dairy and Beef Production in a Liberalized World: Will EU Regions Stay Competitive?**
- 3 The Role of Politics: How Grassland is affected by the CAP and by other Policies**
- 4 Summary**

Content

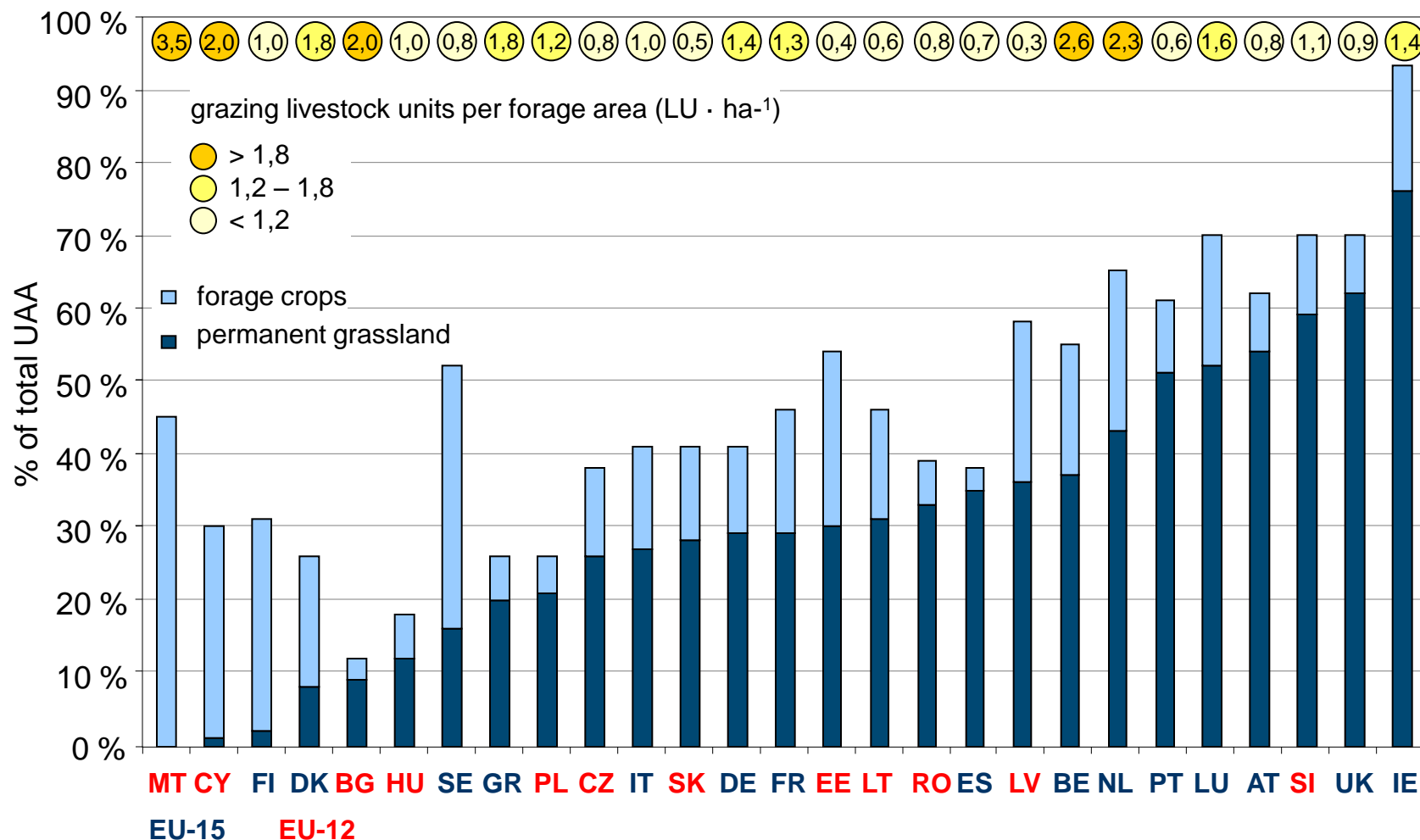
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Economic Importance of Grassland and Forage Crops (EU-27, 2007)

- **33% of UAA covered with permanent grassland**
- **Another 11% covered with forage crops (e.g. temporary grass, green maize)**
- **25% of agricultural production value comes from dairy, beef, veal, sheep & goat meat**
- **21% of agricultural labor force occupied in farms specialized in dairy, cattle or other grazing livestock**

→ Grassland & Forage Crops are important !

Grassland, Forage Crops, and Grazing Livestock Density in EU-27 Member States



Development of Permanent Grassland over time - a thin data base and a few tentative statements

Difficulties in statistical surveys: *definition of „farm“ (cut-off limits), rough grazings, permanent grassland, ...*

→ Fully reliable, long-term time series for EU-27 not yet available

Development of permanent grassland:

- EU-15, 1975 – 2001: **- 0,7% p.a.** (to urban, forests, arable)
- DE, 1990 – 2006: **- 0,8% p.a.** (arable: - 0,05% p.a.)
- EU-27, 2003 – 2007: **+0,2% p.a.** (different regional trends)

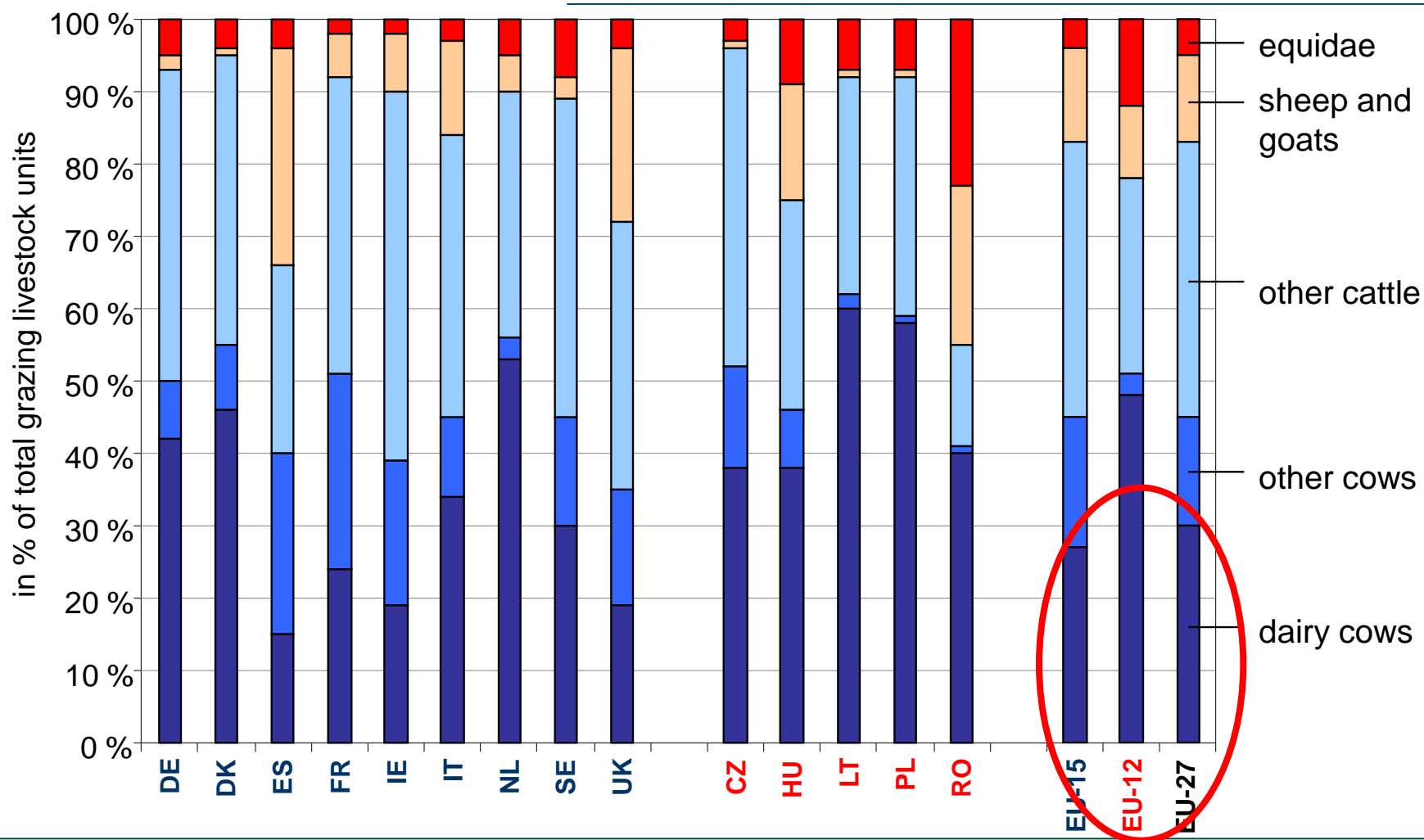
Lowlands: arable land expanding at the expense of pasture

Hilly and mountainous regions: pasture expanding

Marginal land, mountains: forests expanding (pasture = transition)

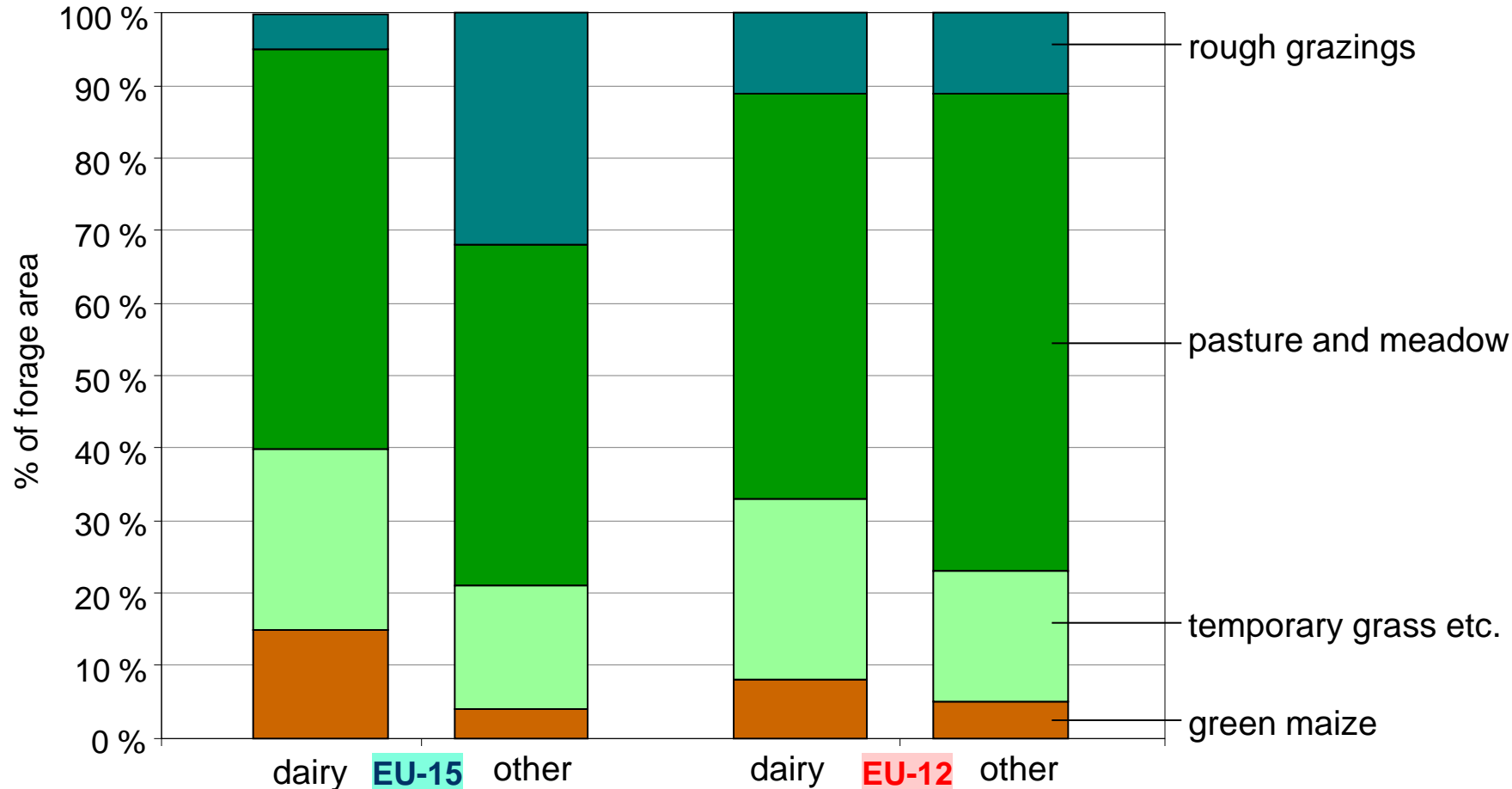
Who is Using the Forage?

Grazing Livestock Herds in EU Member States, 2007



Who is Using what Type of Forage?

Specialized dairy farms vs. other farms with grazing livestock

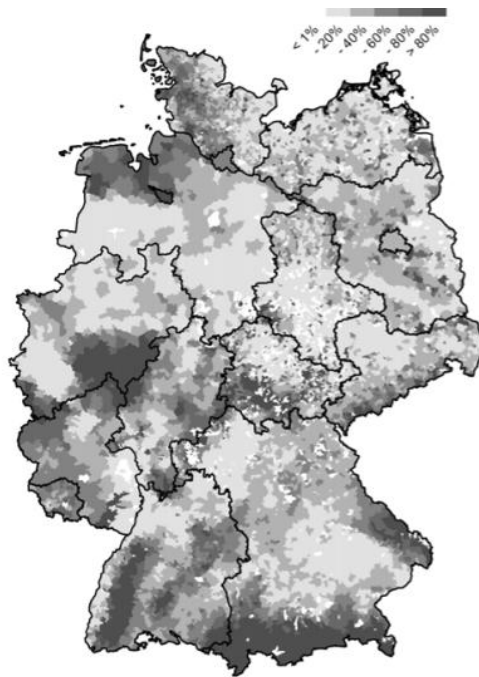


Specialized dairy farms have 66% of EU-27 dairy cows, but only 16% of EU-27 permanent grassland

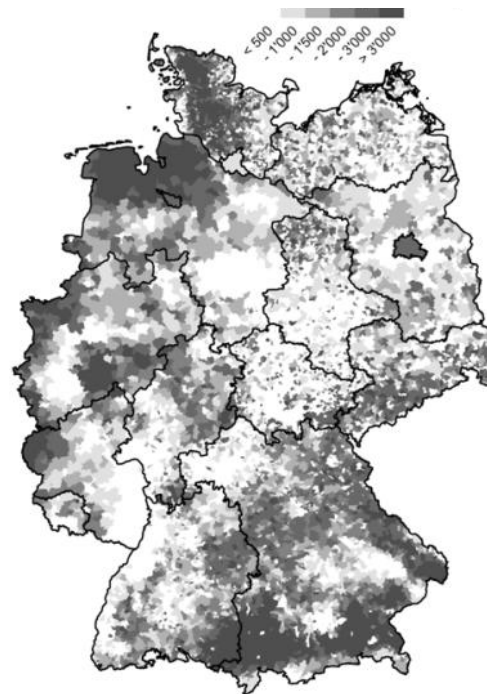


DE: Spatial Distribution of Milk Production, Grassland and Change of Grassland Area

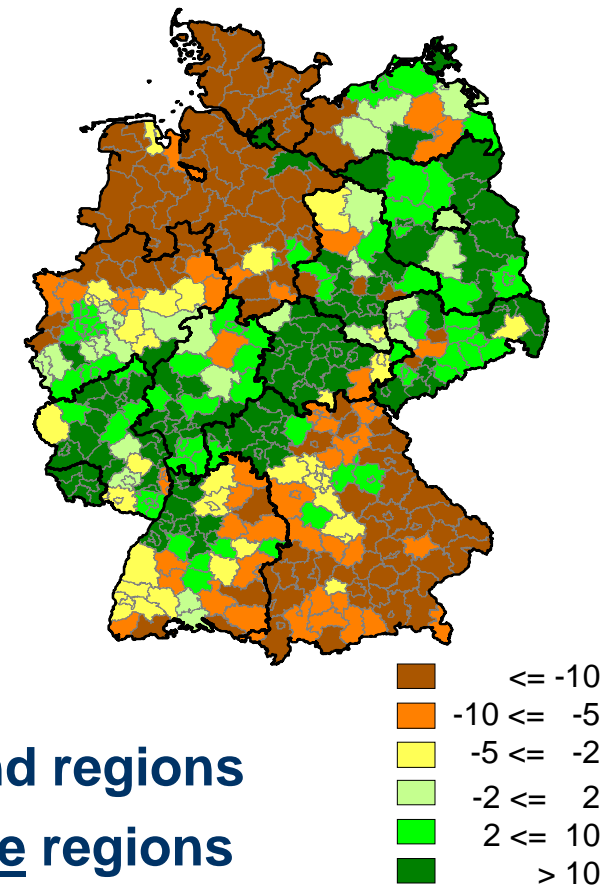
Share of Grassland on UAA



Milk quota in kg per ha UAA (2005)



Change of grassland area between 1991 and 2003 (%)

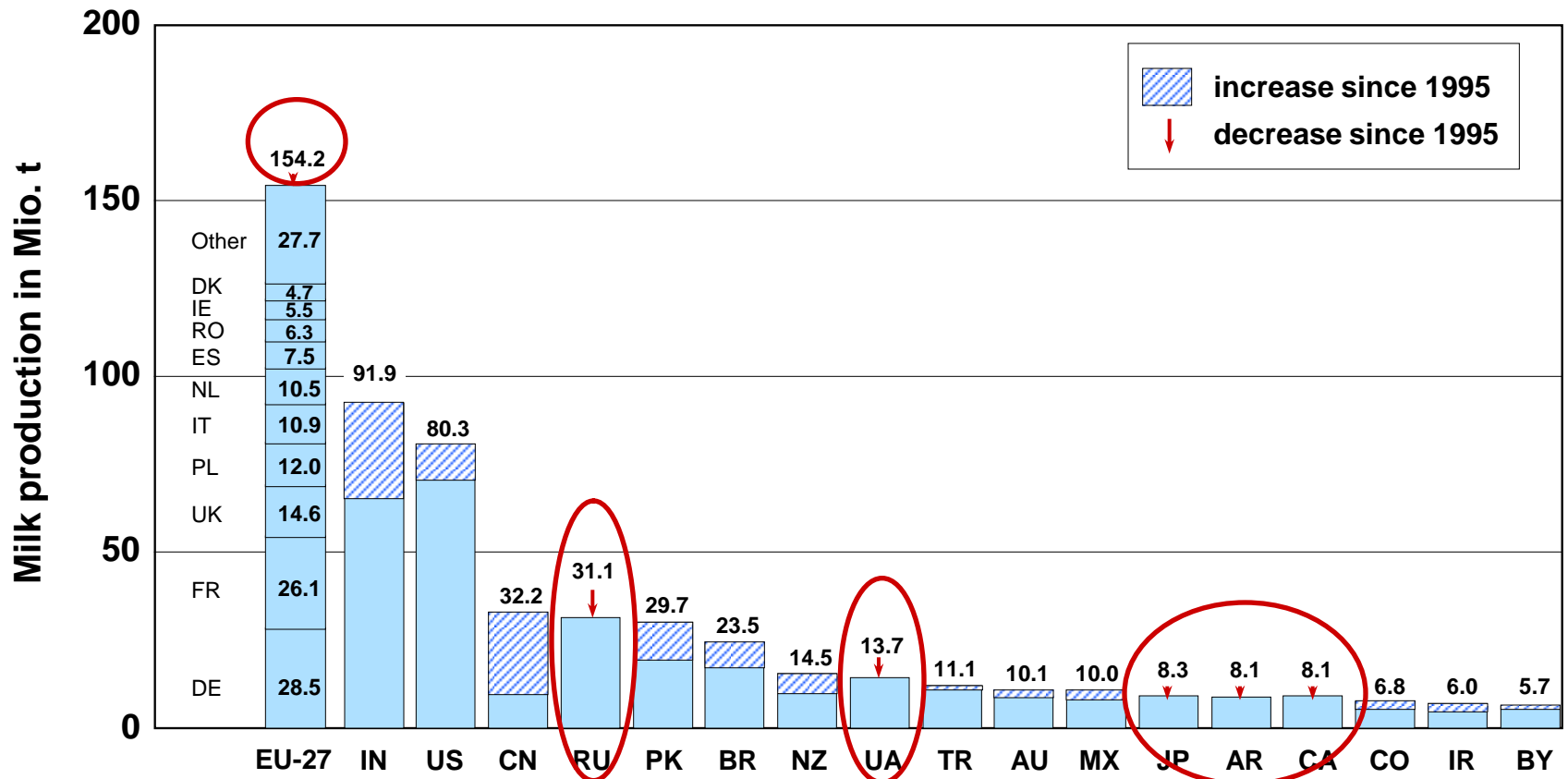


- Milk production moved to typical grassland regions
- Highest loss of grassland occurred in these regions

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The Biggest Milk Producing Countries in 2005, and Development Since 1995



Milk production increased strongly in other world regions, not in EU. Quota policy impact?



Liberalization: Who could take EU Market shares?



India, China, Thailand etc.:

- Production cost 50% lower than in Europe
- But : small farms, strong increase in consumption
- For the time being, no serious competitors for EU

New Zealand, Australia, Argentina:

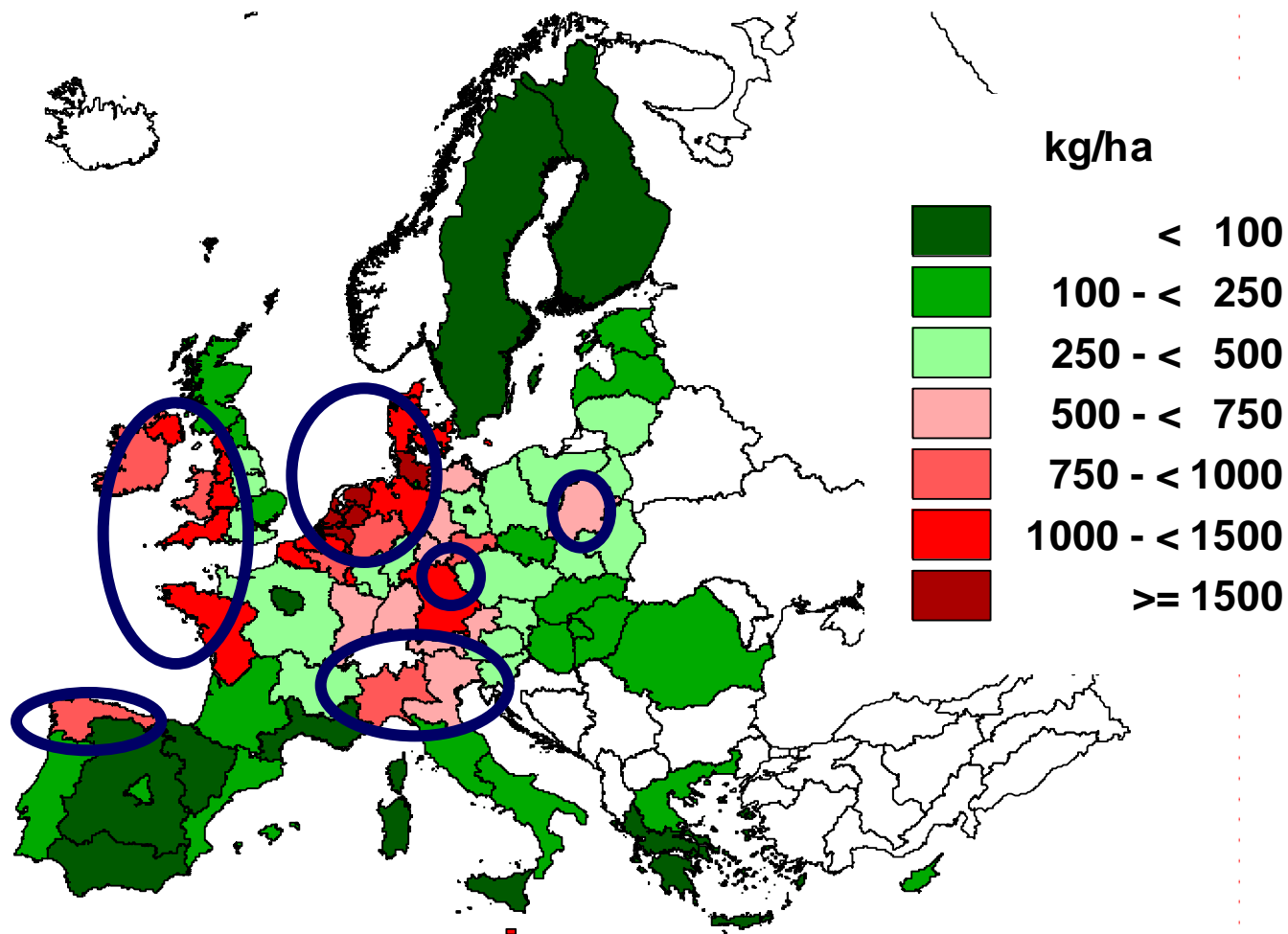
- Production cost 50% below EU, exporters
- But: AU draught problems, AR policy problems, NZ limited expansion potential
- Only NZ expanding, absorbed by Asian market



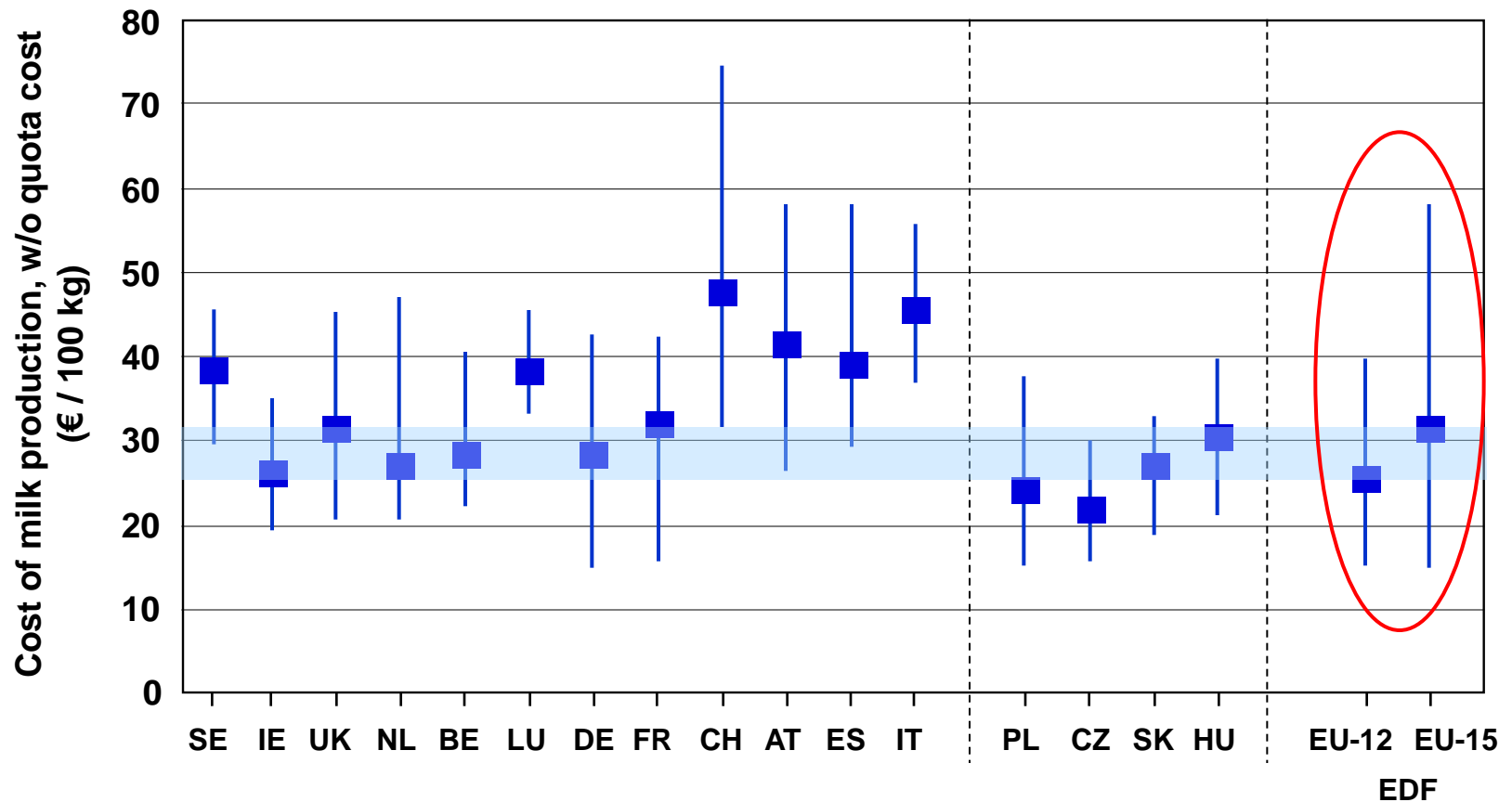
USA:

- Costs like in big EU farms
- Industrialization - No quota
- But: Challenged by bioenergy
- Observe carefully!

Spatial Distribution of Milk Production in the EU (milk sold (kg/ha) 2004)

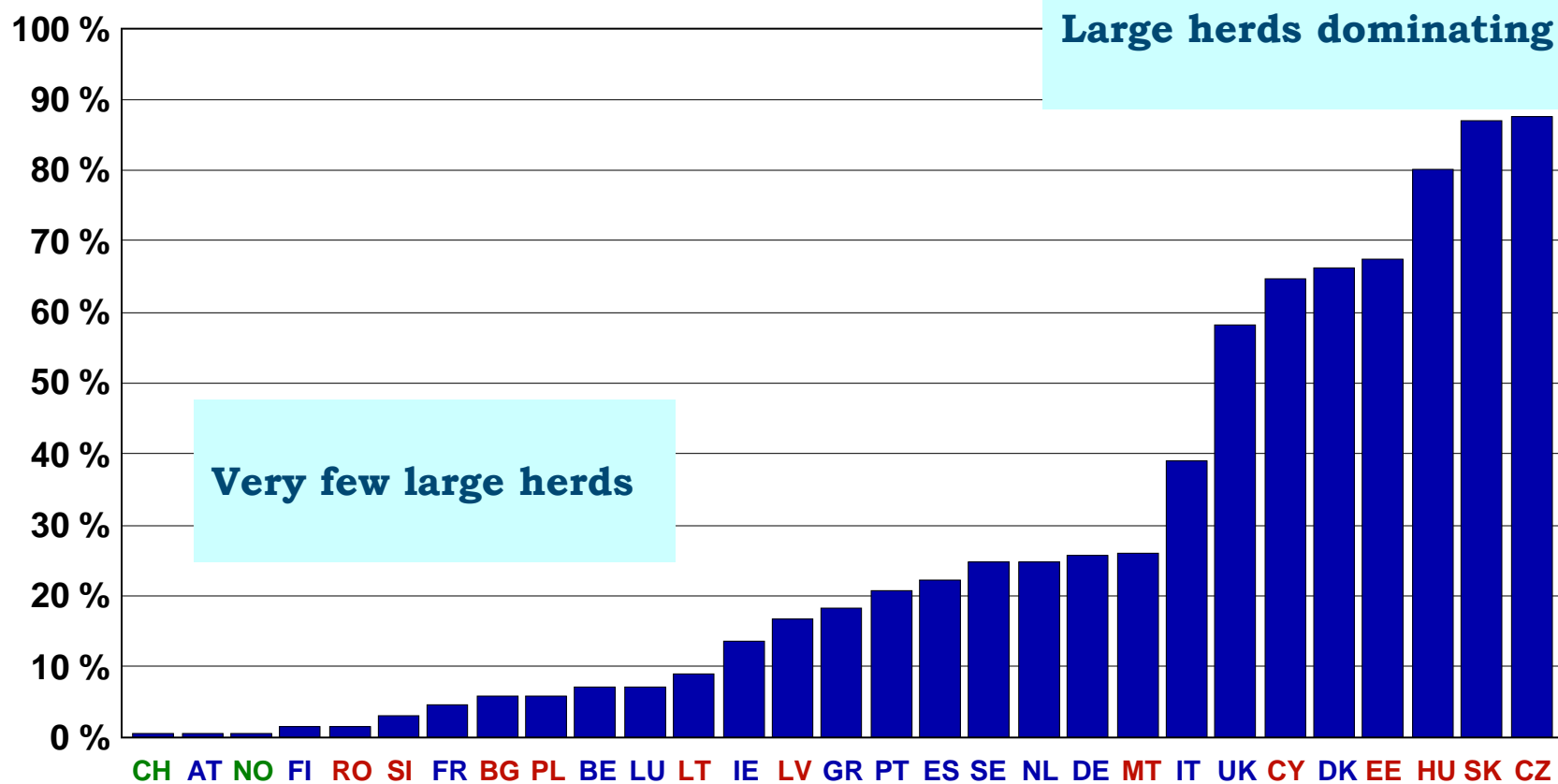


Cost of Milk Production in EDF Farms, 2008 (European Dairy Farmers)



Farm Size: Huge Differences within Europe

(Share of dairy cows in large herds (>100 dairy cows), 2005)



Global Analysis of Beef Production Systems (agri benchmark)

I. Pasture



Pasture based systems
Southern hemisphere, partly IE, UK

II. Silage



Silage / grain / soy systems
Intensive production in Europe
+ China, indoor housing of bulls

III. Feedlot



Maize / grain / hay in feedlots
esp. in USA, CAN, AUS, Spain,
feedstuffs from external sources

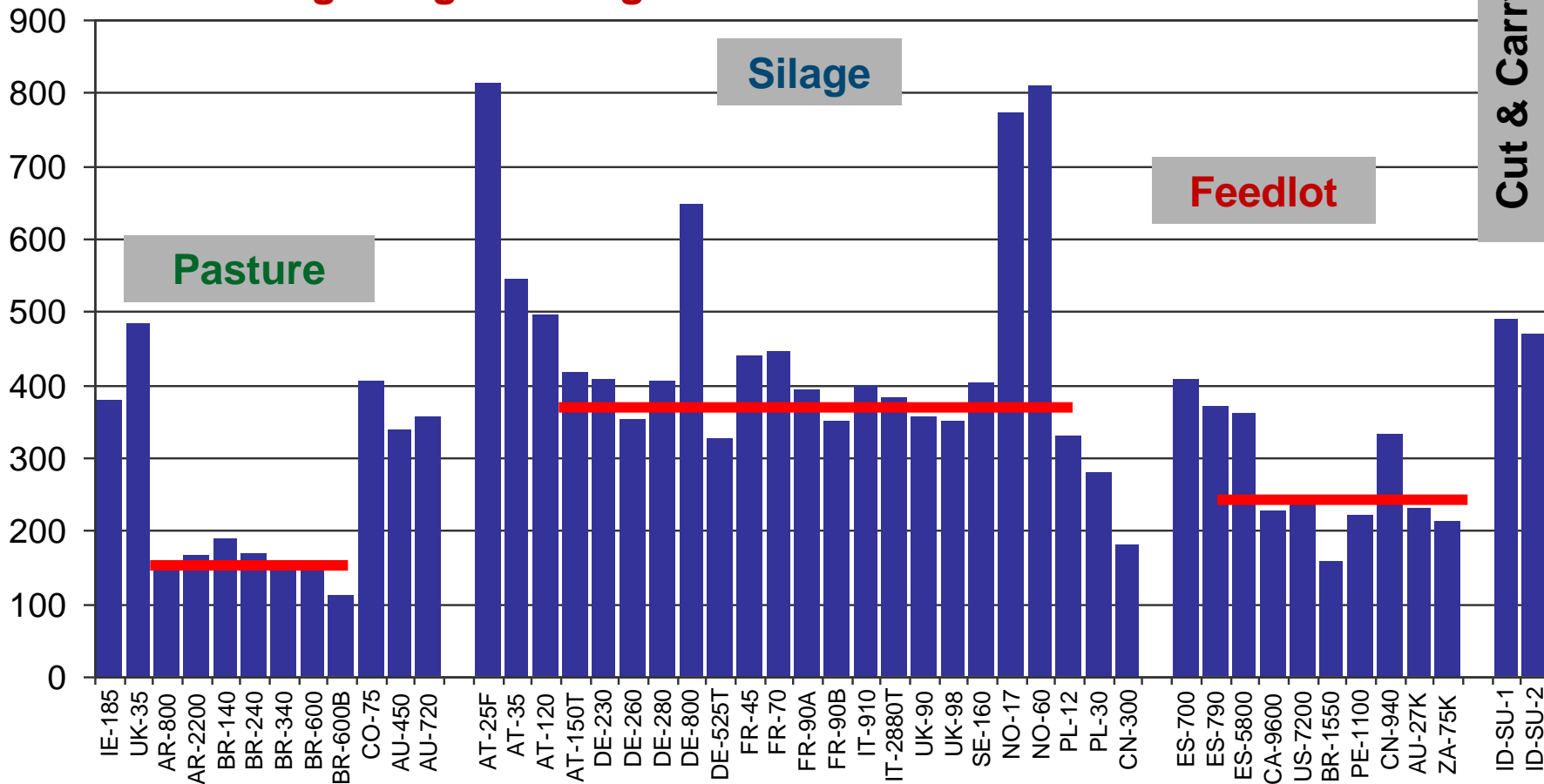
IV. Cut & Carry



Green-grass + hay feeding
small households in developing
countries (e.g. IN, ID, partly CN)

Agri benchmark: Turn Pictures & Stories into Figures (Beef Production Costs by Location and Production System)

EUR / 100 kg slaughter-weight



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Evolution of the CAP („the big picture“, 1990-2020)

- **Stepwise reduction of price support**
(regards: intervention prices, import tariffs, export subsidies)
- **Compensation through direct payments**
(at first coupled; then gradually decoupled and shifted from farm-specific to regional flat-rate; with cross compliance requirements)
- **Continuation of targeted policies in 2nd pillar of CAP**
(investment aid, agri-environmental measures, payments for farms in less favored areas, rural development policies)

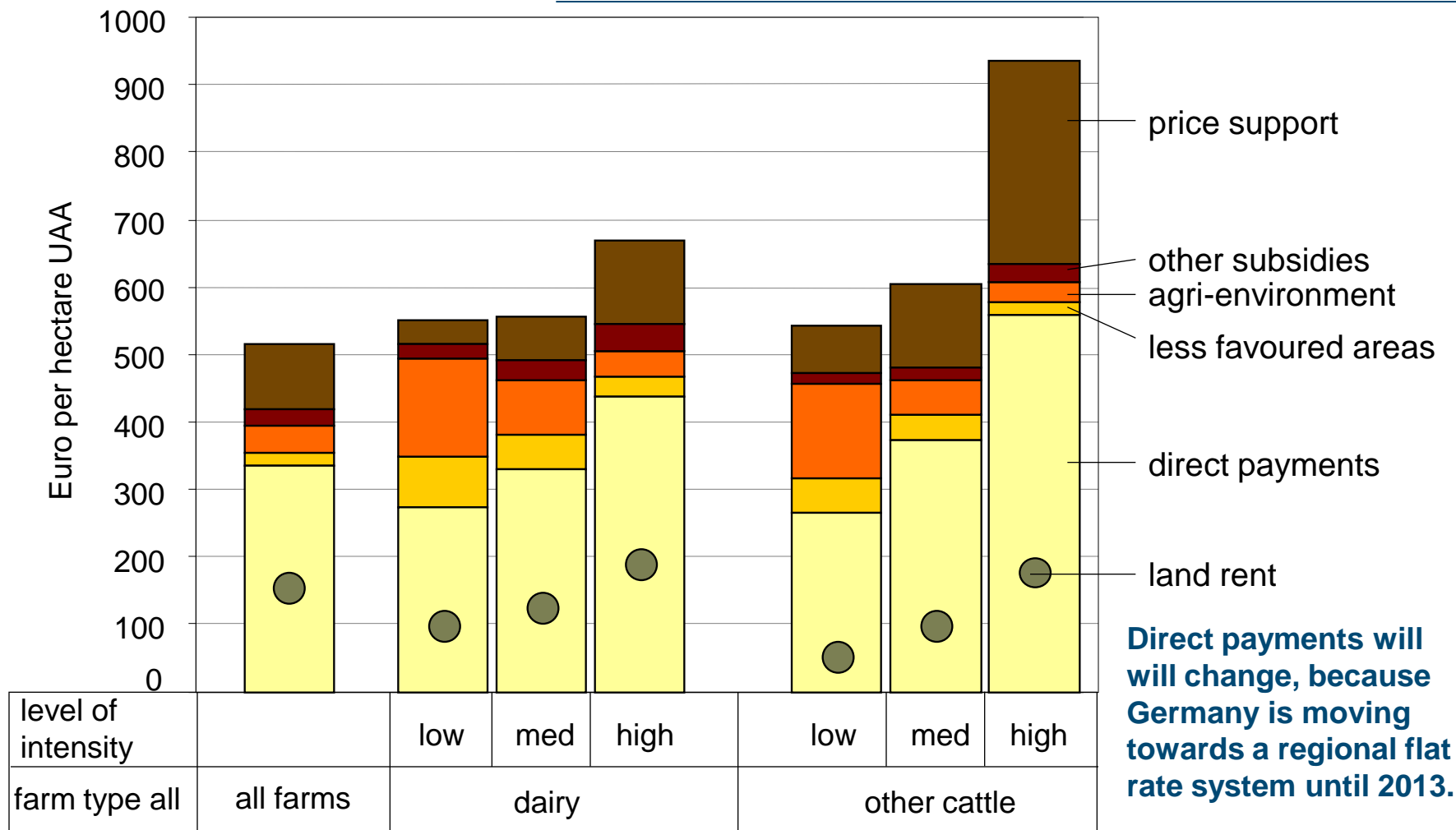
CAP: Direct Payments and Grassland Use (I)

- Member States may still **opt for coupled payments**, but only for suckler cows, sheep and goats (currently relevant for about 60% of EU suckler cows)
- Member States may **„re-couple“ via Cross Compliance**
 - *High CC requirements (e.g.: removal of forage; minimum stocking rates):* mulching is not solution
 - farms are **„forced“ to use grassland with livestock**
 - *Little CC requirements:* farms can get payments with low costs („easy mulching“)
 - **perspective for „zero stocking“ grassland systems?**

CAP: Direct Payments and Grassland Use (II)

- **Since 2005, payments are decoupled. Entitlements can be activated on any land (also on former grassland converted to arable land)**
- **However, Member States (MS) are obliged to prevent a significant decrease of the share of permanent pasture (compared to 2003)**
- **Most MS introduced a need for authorization before the maximum reduction (10%) is reached (different handling in MS)**
- **In some MS, these rules may have pushed rapid conversion of grassland (before restrictions on farm level are implemented)**
- **Example Germany (2005-2007):**
 - 1.3% p.a. grassland loss (conversion to arable land),**
 - 0,5% p.a. grassland gain (conversion from arable land)**
- **In 3 German Laender, grassland share dropped by >5% since 2003**

Support Payments in Dairy and Cattle Farms, Germany 2006



Other Policies and Grassland Use

- **CAP 2nd pillar:** In principle, high potential to „purchase“ public goods in agriculture (but: much lower budget than in 1st pillar)
- **Nature conservation policy:** Partly included in Cross Compliance, can prevent conversion of grassland to arable land
- **Policies to support bioenergy:** Lead to more intensive agriculture, conversion of grassland, but keep marginal locations in production
- **Climate protection policy:** Grassland/livestock systems with pros and cons; many discussions but little political action
- ...

Summary

- Grassland and forage crops are **important** for EU agriculture
- Specialized **dairy farms**: high stocking rate, more maize
- For grassland, “**other cattle**” is more important than “dairy”
- Long-term **downward trend** of grassland shares in most regions
- All figures show strong **interregional differences** within EU-27
- Liberalization: probably no severe threat to **EU dairy** production
- More doubts regarding competitiveness of **EU beef** production
- Most **CAP payments** are decoupled, but partly re-coupled via CC
- **CAP 2nd pillar**: big potential to support grassland, but hardly used
- **Bioenergy**: more grassland ploughed, but marginal land conserved

Thank you for your interest

Contact:

Prof. Dr. Folkhard Isermeyer

Johann Heinrich von Thünen-Institut

Federal Research Institute for Rural Areas, Forestry and Fisheries

Bundesallee 50

D-38116 Braunschweig

Tel. +49 531 / 596 - 1002

Fax +49 531 / 596 - 1099

praesident@vti.bund.de

www.vti.bund.de

