



## Consequences of the CAP reform for the Bavarian Agriculture

Helmut Hoffmann and Alois Heißenhuber Institute of Farm Management Technical University Munich

session code: L2.4

hoffmann@wzw.tum.de



## Reasons for the German way of implementing the CAP reform



### Strengthening the competitiveness

- stronger market orientation
- increasing rate of structural changes (e.g. lower milk quota prices)

### Positive impact on natural resources

- low intensive production methods (e.g. less cultivation of maize)
- support of grassland regions

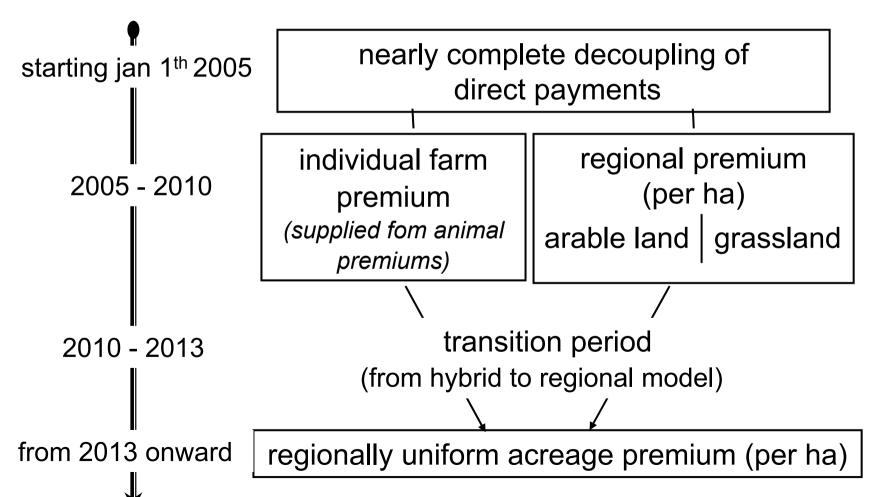
### **Consequences:**

full decoupling + hybrid model with transition to regional model



## Implementation of the CAP Reform in Germany

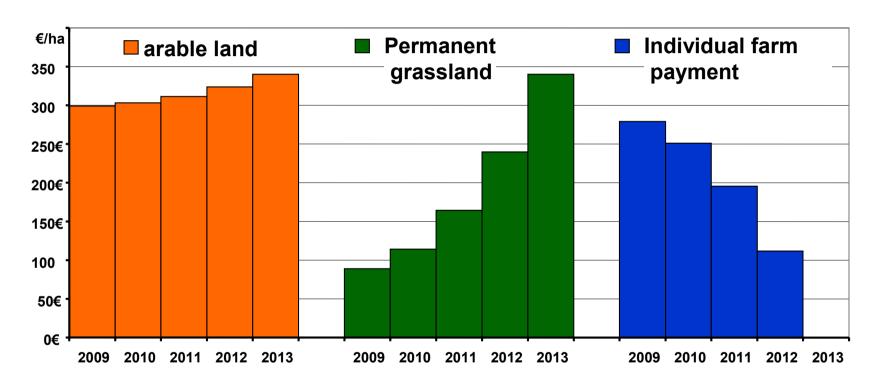






## Development of premiums during the transition period (example)





source: Spreidler, 2004



### Winners and losers of the CAP reform



### Winners:

- farms with high endowment of grassland
- farms with a high share of root crops in the rotation

#### Losers:

- farms with bull fattening
- farms with a high milk yield per ha
- farms where silage maize is an important forage base



## Development of milk price and selected premiums in Bavaria



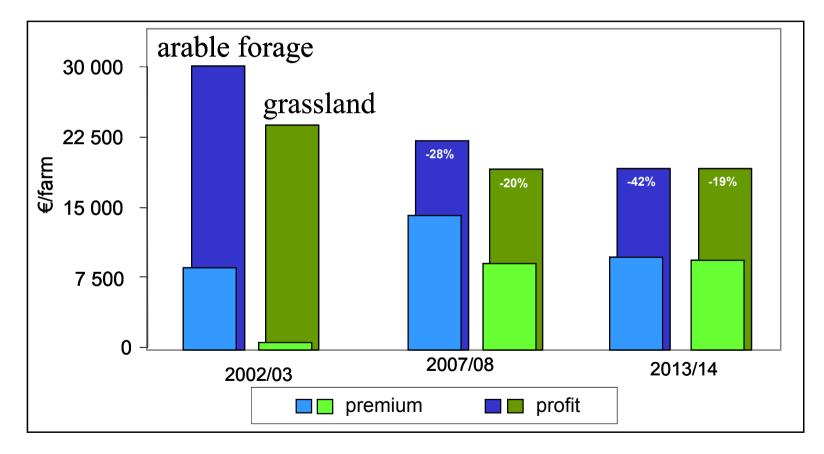
|   | 2002/03             | 2007/08                             | 2013/14                                     |
|---|---------------------|-------------------------------------|---|
| milk price (estimate) (ct./kg)  | 32.2                | 25.5                                | 25.5  |
| grassland premium (€/ha) maize premium (€/ha) slaughter premium cattle (€/St.) dairy premium (ct./kg) | -<br>474<br>88<br>- | 89<br>299<br>-<br>3.5 <sup>2)</sup> | 340 <sup>1)</sup><br>340 <sup>1)</sup><br>- |

<sup>1)</sup> uniform acreage premium 2) from 2006/07 onward



# Possible impact of the CAP reform on premiums and profits of dairy farms in dependence of the main fodder resource



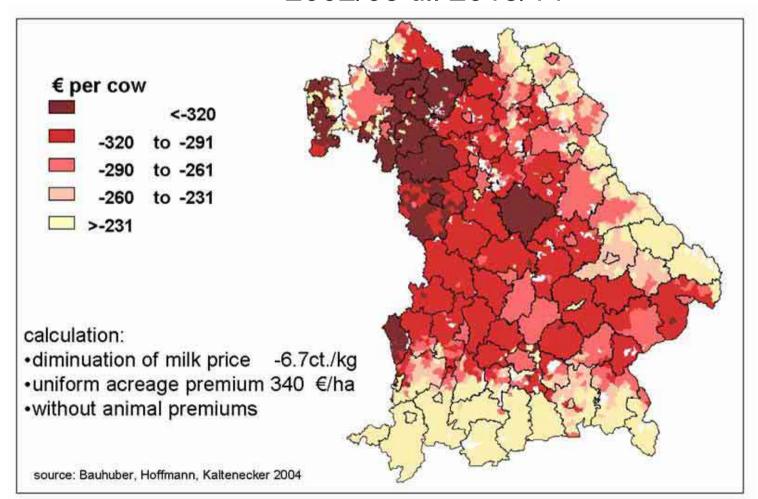


1) 35 dairy cows, milk yield 6 000 kg/cow/year; breeding progress and modulation not considered, endowment in acreage: 30 ha TAL



## Influence of milk prices and premiums on the economic performance (€/dairy cow) from 2002/03 till 2013/14







## Changes of production, farms and milk yield from 2002 till 2014 (expert survey))



|                 | Milk production | number of dairy<br>farms | milk yield <sup>2)</sup><br>(kg/cow/year) |
|-----------------|-----------------|--------------------------|---|
| Saxony          | decreasing      | - 32%                    | + 1 800                                   |
| Lower<br>Saxony | constant        | - 44%                    | + 1 400                                   |
| Bavaria         | constant        | -45%                     | +1 700                                    |

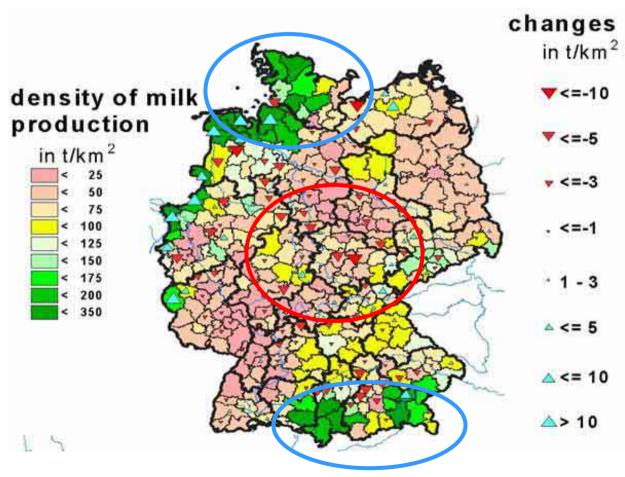
source: Kress, Hoffmann 2004

<sup>1)</sup> research institutes, administration, organisation, milk processor (n=28/26/49)



### Density of milk production 2002 and changes TUII from 1998 till 2002





source: Weindlmaier 2004



## Expected trends of milk production (expert survey<sup>I)</sup>)



### high-yield grassland regions with arable land (silage maize)

- further concentration of milk production and intensification of farming (but see: nitrate directive)
- increasing land rent

### marginal grassland regions

- further decline of milk production
- mulching or abandonment
- hardly any changes in farm organisation (suckler cows) or afforestation

### arable farming regions

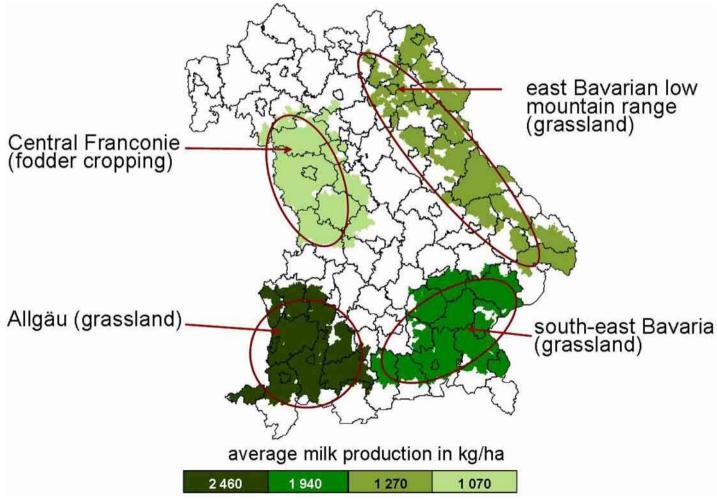
- cessation of milk production
- enlargement of cash cropping

<sup>&</sup>lt;sup>1)</sup> Research institutes, administration, organisation, milk processor (n=103) source: Kress, Hoffmann 2004,



### Important sites of Bavarian milk production (75 % of total Bavarian milk production)





source: Bauhuber, Hoffmann, Kaltenecker 2004



## Strategies of 10 Bavarian dairy farms to face the CAP reform



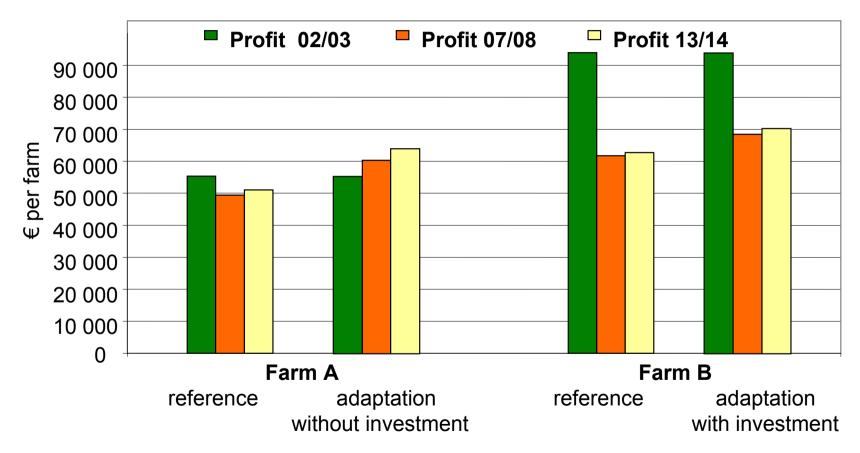
| Strategy                               | number of farms | potential increase<br>of milk production<br>per farm (in %) |
|--|-----------------|---|
| Increase of milk production per cow    | 9               | 7 (0-10)  |
| Use of free space in existing cowsheds | 5               | 11 (0-28)   |
| Enlargement of cowsheds                | 4               | 15 (0-58)   |
| Investment in new cowsheds             | 3               | 17 (0-70)   |
| Total                                  | -               | 50  |

source: Bauhuber, Hoffmann 2004



## Economic effects of different strategies for two Bavarian dairy farms





source: Bauhuber, Hoffmann 2004



### Summary



Germany opted for full decoupling and a hybrid model with transition to a regional model.

In general the profits will decrease in consequence of the CAP reform. The main losers are farms with bull fattening and dairy farms with a high milk yield per ha and a high share of maize silage in the ration.

An increasing rate of structural changes is expected.

Milk production will migrate from arable farming and marginal grassland regions to high yielding grassland regions.

Strategies to face the Cap reform are especially measures to increase milk production with low investment.