GDF Trends and challenges in world dairy farming

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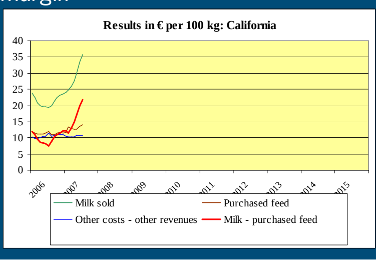
Outline

- Outlook July 2007 (Moscow, Russia)
- Outlook June 2009 (Beijing, China)
- Outlook September 2010 (Bucharest, Romania)
  - to be constructed today
  - Development milk price/feed price/margin per region
  - Volatility of prices/exchange rates/KPI's

Market situation July 2007

- High milk price and high prices purchased feed
- Good margin

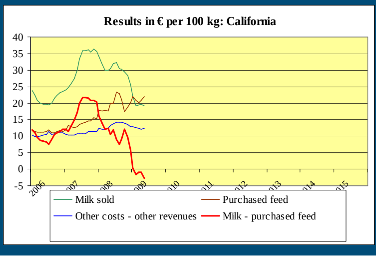


GDF analysis of the environment in 2007

	Oceania	USA	Eastern Europe	Western Europe
Production and sales	Limited increase in output	Stable	Increase	Slight increase
Societal preconditions	Reduction of greenhouse gases	Increasing influence. End of BST and hormone use	Very limited	Very important
Local aspects	Water Labour	Water	Availability of animals. Management level	Good infra-structure Good climate
Economy	Increasing cost price	Cost of biofuels, feed increasing	Milk prices and cost prices increasing	Stable
Strategy	Increases in scale	Increases in scale Collaboration	Increases in scale	Growth in farms. Added value from chain

Market situation May/June 2009

- Low milk price and moderate prices purchased feed
- Low or even negative margin milk/feed



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GDF analysis of the environment in 2009

Current developments	Oceania	China	North America	South America	Europe
Economy/ market	Milk price low, but costs more under control.	Effect melamine Strong support government	Crisis situation: price milk low,/feed high. Difficult to get loans	Brazil: milk and feed price reasonable	Government support will remain (indirect)
Societal preconditions	Water Green House Gasses	Milk quality (very basic)	At the moment no issue	Hardly an issue, environmental demands could arise	Strong: environment, landscape, animal welfare
Labor	Availability no problem, longer term better image needed to attract young people	Availability no problem, quality of management major issue	At the moment no issue	Available, quality is sometimes a problem	
Future strategies		Strong integration, large processors combined with large dairy farms or more gradual development of family owned farms.	First surviving! On farm level: - control on feed production - own processing Chain level: Discussion price + production control	Gradual growth in size. Chain integration will be stronger.	Further increase of scale. Differentiation of types of farms and milk. Stronger horizontal and vertical integration.
Innovations	High capacity robotic milker (Aus) Innovations related to improving grassland efficiency +reduction of GHG emissions	IT, in line testing of milk quality e.g. antibiotics test.	Needed in financing models.	New financing models (loans to buy land)	

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Conclusions/discussion points

- Economy/market
  - 2007: high milk price/high costs for feed: margins good
  - 2009: fall out in demand deepened by financial crisis
  - Big impact on foot loose systems Solutions
    - **Own feed production or long term contracts**
    - **Create higher margins by investing\participating in chain**
    - **New financial models**
  - Pasture based low input: resilient system
  - Different types of chain: total integration vs entrepreneurship of dairy farmers
  - National/regional dairy policy
  - Dairy more connected with total economy
    - **Development feed cost more independent from milk price**
    - **Influence of oil price (importing countries)**

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Conclusions/discussion points

- Societal preconditions
  - 2007: coming up
  - 2009: less pressure
  - Especially important for Western Europe
  - Sustainability issues:
    - Water: availability and quality
    - Climate change
    - Phosphorus
- Labor
  - 2007: scarcity in number and sometimes quality
  - 2009: quality more in picture

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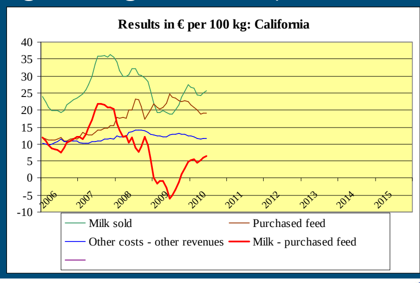
Conclusions/discussion points

- Future strategies and innovations
  - Resilient farming systems: able to cope with fluctuations
    - Good KPI's to monitor management
    - Mitigations strategies for GHG
    - Manure application and handling
    - Water
    - New housing systems, automation, more IT
    - New systems for financing
  - Biggest challenge is to incorporate different demands in integrated systems.
    - Create value from societal demands

Market situation July 2010: California

- Milk price around average/feed costs above average → margins still under pressure



GDF analysis of the environment 2010/2011

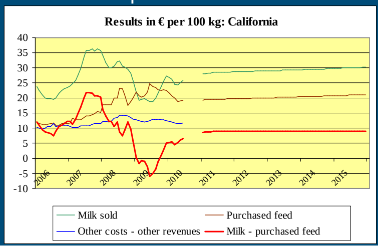
Current developments	Oceania	China	North America	South America	Europe
Economy/ market					
Societal preconditions					
Labor					
Future strategies					
Innovations					

Current situation and outlook of important dairy regions by GDF-members

- Per region:
  - Economy and market
    - Prices, governmental support, consumer demand
  - Societal preconditions
    - Animal welfare, additives
  - Environmental preconditions
    - Water (quality and quantity), landscape, GHG's
  - Labour: availability and quality
  - Future strategies
    - Own strategy
    - Strategies of other (dairy) farmers in the region
  - Innovations

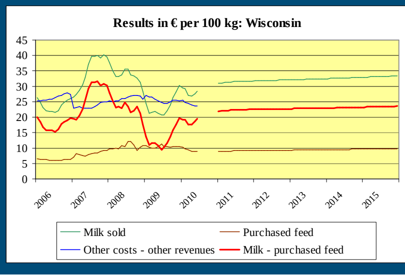
Market situation July 2010/outlook: California

- Milk price around/just above average but feed prices also
- Margins still under pressure



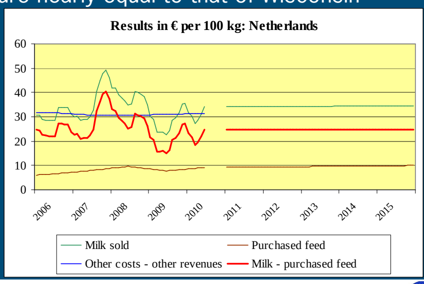
Market situation July 2010/outlook: Wisconsin

- Lower costs purchased feed but higher other costs
- Revenues do not cover all costs



Market situation July 2010/outlook: the Netherlands

- Average of biggest 30% of Dutch dairy farms
- Picture nearly equal to that of Wisconsin

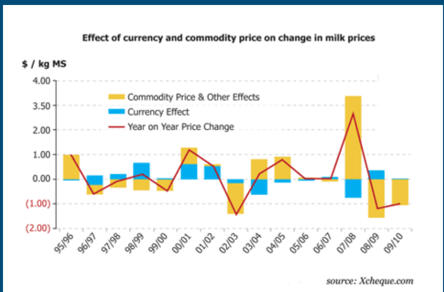


Dairy outlook

- Previous 3 figures show increasing milk prices
- Costs of purchased feed also grow but a little less
- Outlook 2010 (FAPRI) is more positive about the milk price than the preceding FAPRI-outlooks of the past 3 years
- But: price volatility is not incorporated
- Price volatility mainly caused by fluctuations in commodity prices (butter, WMP, cheese, etc.)
- Continuous attention for/managing with KPI's

Commodity price and Currency effect

- Calculated effects for South East Australia



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11 financial KPIs of Rabobank-experts

- Costs for feed and crops per 100 kg milk
- Costs for feed and crops in % of milk price
- Life milk production in kg milk per cow
- Milk production in kg per hour/annual milk production in kg per FTE
- Debts per 100 kg milk
- Milk price per 100 kg milk
- Labour (paid + private withdrawals) per 100 kg milk
- Capital costs (interest, rent and lease) per 100 kg milk
- Tax income per 100 kg milk
- Capacity to set aside per 100 kg milk (farm income + depreciation – private withdrawals)
- Structure of total cost price milk

- First 5 also mentioned by the GDF-members

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The new outlook is there

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