The Dairy Sector in France – Structure and Organization and the Impact of Quota Abolition

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ENPARD WORKSHOP dairy policy 19-21/12/2017
France 2\textsuperscript{nd} largest milk producer in EU (60 000 dairy farms, 24 Mt milk) did not take advantage of the end of quotas?

Cumulative 12 months Milk deliveries
Indice 100= 1st quota (1984/85) by country

source Eurostat - traitement Institut de l'Élevage
Early exit from a few countries
A (predictable) shock of milk supply

- Planned increases
  - In Ireland (+ 50% Food Harvest 2020)
  - In Denmark (+ 20% "Growing livestock in favor of Denmark")
- ... or facilitated by national policies (tax, investments subsidies,...) and processors in the Netherlands and in Northern Germany

Source: RICA UE DG AGRI – Investissements totaux des exploitations laitières (tous types confondus)– traitement Institut de l’Elevage
Substantial investments to transform the expected increase of milk production

Investments >20 millions € between 2012 et 2014

Milk & Wey powders, Infant formula

Cheese

- > 100 M€
- > 50 M€
- 20 to 50 M€

Source: Direction Economie & Territoires du Cniel-Octobre 2015
In the EU, the big gap?

Opposite strategies between:

• Ireland Denmark Netherlands (Northern Germany):
  more than 2/3 of the production is exported;
  Strategy (coop) to take new shares in the growing international market

• France:
  processors (45% coop) adjust their collection to meet their commercial requirements,
  Profitable domestic market (58% of French milk)
  Convenience market (PGC) #1 EU: 85% of consumption made in France

  Market to be protected against 1st price imports -> supply control

  Consequences for dairy farms
Until 2006, French dairy policy with social and territorial objectives, before implementing a competition regime

- **Price Competitiveness (reduce costs)**
  - **Economies of scale**: to produce more? At what cost?
  - **Economies of range**: specialization vs complementarity?
  - **Economies of agglomeration**: to produce and transform cheaper in dense area

- **Non-price competitiveness (increase value)**
  - Quality, image, innovation, services
  - **Differentiation "delayed"** (at processing level) versus **"original" differentiation** (from origin of milk)
Economies of agglomeration
Territorial specialization and concentration

Milk production 2014

Production de lait de vache en 2014 (tonnes/km2)

Milk production 2007->2014

Variation de la production de lait de vache entre 2007 et 2014

Low dense milk fields: higher collection’s costs, inputs & specific services: less availability, quality, competition between providers

Source : Eurostat, Commission européenne, Agreste, DEFRA et GISCO, limites administratives © EuropGeographics, UN-FAO - traitement Institut de l’Élevage
In France, Economies of agglomeration

Milk production moves from mixed crop & livestock areas to two different kinds of specialized areas

Milk Production in 2013/14 (1000 l/km²)

Change from 2008/09 to 2013/14 in %

ENPARD Workshop dairy policy 19-21/12/2017
Dairy farms are not specialized in the Northern France and Eastern Europe

% Produit brut lait/ Produit total hors aides

Source: EUROSTAT FSS 2010 – traitement RMT Économie filières animales

Mixed dairy farms

Specialised dairy farms

Source: Fonds carte GISCO - Eurostat (Commission Européenne) © EuroGeographics
Price Competitiveness

Break even prices reveals different « models »

Milk prices: less gaps than for costs

"Breakeven" = price of milk from which unpaid labor can start to be paid
Economies of scale in most countries (except Denmark)

Cost price of milk
with calculated remuneration for family work
(1.5 French Minimum Wage)

The average farm income increases with the size of the milk enterprise, its variance too. Dimension offers income potential not a guarantee
Dimension accounts for 25% of income variability
Labour productivity, Control of costs, Adaptation of investments, Valuation of products
A rapid and policy-managed transformation of the structure of French dairy farms

Evolution of the number of dairy farms by herd size

- **Disappearance of small dairy farms** (<25 Cows)
- **Appearance of large dairy farms** (>100VL)

Source: Agreste Recensements agricoles et BDNI – traitement et simulations Institut de l'Elevage

Subsidizing closing of small farms
Encouraging medium farms
Penalizing the growth of large farms
With the end of quotas, structural changes accelerate in France and Germany

% dairy cows in herd size >100 cows

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2010</th>
<th>2013</th>
<th>2016</th>
<th>2020 (H1)</th>
<th>2020 (H2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number farms &gt;100 dairy cows</td>
<td>1200</td>
<td>3300</td>
<td>4940</td>
<td>7144</td>
<td>9300</td>
<td>10800</td>
</tr>
<tr>
<td>%</td>
<td>1%</td>
<td>4%</td>
<td>7.2%</td>
<td>9.9%</td>
<td>18%</td>
<td>21%</td>
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For French farms, A difficult economic equation

- Neither prices, nor volumes?
- An expensive return to growth, especially in machinery.
  - A post-quota context that is not easily understandable in France, quotas->contracts, errors of anticipation?
  - A mostly family labor force with few employees,
- Feed self-sufficiency is often expensive or not sufficiently valued by the market
- A very slow adjustment of tax system to price volatility.

Labor productivity (2005 and growth 2005-2015) in specialized dairy farms (kg milk/ AverageWorkUnit)

Source: DG AGRI RICA UE, Exploitations laitières spécialisées (OTEX 45)
A costly feed self-sufficiency or not sufficiently valued by the market

Feed costs (specialized dairy farms, 2012, €/1000l)

- Machinery
- Fertilizer, seed, phytosanitary
- Purchased feed

A high feed self-sufficiency for production systems in France-West (~170g concentrates /l milk).

An advantage taken back by the cost of production of fodder (mechanically grown, harvested, distributed). Even in 2012 (historical maximum feed price)

Source: DairyNZ Economic Survey 2012-13; Dairy Farm management - Business Summary New York State 2012; Dairy Marketing California Cost of Production 2012 Annual Summary, DG AGRI RICA UE 2012 – Traitement des auteurs; exploitations laitières spécialisées pour l’UE (lait/produit hors aides >=70% et moins de 5 vaches allaitantes, et moins de 0.2 gros bovins mâles engraisssés par vache et <25 veaux de boucherie)
Non-price competitiveness and diversity

1) 15% of milk differentiated by origin
   - 9.6% PDO
   - 2.2% Organic
   - Mountain milk
   - Regional labelling/identities,...
   - Special specifications (Omega 3, GMOfree, pasture/freerange milk,..)

   Strong and old link between territory, typicity and image

2) Well known brands marketed worldwide prefer delayed differentiation at processing level

Diversity and competitiveness:
a long story

Price competitiveness very important
(42% of French milk production is exported with 12% outside EU, +4% in 7 years)

A mosaic of dairy territories
Classification of the French milk fields (Idèle)
Renewal of generations insufficient to prevent aging of farmers

Source: Agreste enquêtes structures et Recensement agricole 2010– traitement Institut de l’Elevage
Dairy farming in France: how to support diversity?

• Historically a sector shaped by French socio-structural policy

• Fewer young dairy farmers but variety of holdings and forms of livestock systems
  Typology:
  Herd sizes (from 25 to 109 dairy cows),
  AgriculturalArea (56 to 249 ha)
  Labour organization (0.7 to 5.4 AverageWorkUnits)

• Diversity of jobs and careers for new dairy farmers
  • partner in a partnership
  • entrepreneur managing employees and capital
  • individual high-tech breeder
  • Added value or low cost strategy for medium farm without growth and investments
  • Paid worker managed by his neighbor,

• What skills for new dairy farmers? Technical progress, to deal with volatility, employees (17% AWU), societal expectations

• Enlargement versus Installation.
# French dairy sector: a lot of assets but…

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weaknesses</th>
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| • High production potential, moderate land price, large Agricultural area, moderate animal density, high forage potential (maize and grass)  
• Diversified production systems with link to territory and image, **low input systems, farmers skills**  
• Diverse and innovative **processing companies** (incl world leaders), **strong brands**  
• Captive national market with added value  
• Regulation of production by processing chain limiting price volatility and very low price  
• Many jobs all over the country | • Complexity of downstream supply chain  
• No consensus/method to set the milk price  
• “Sharing Value” between stakeholders (producers, processors, retailers)  
• No clear message from the dairy chain, lack of collective anticipation, excess of individual anticipation  
• Too many investments in farms / limited increase in volume piloted by dairy companies  
• Inadequate tax policy  
• Expensive feed self-sufficiency  
• Costs & labour legislation / others EU |

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<th>Opportunities</th>
<th>Threats</th>
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| • Non price competitiveness (**traditionnal and technological products**)  
• Organic, Agro-ecological, Farm-made products, Big dairy farms in the French way. **Diversity** | • Lack of dairy farmers.  
Training and job attraction to reinforce |

• Financial risks on farms  
• Crop competition on arable land  
• No more milk in some areas |
Challenges for the 3 main production areas/systems in France

- Agro-ecological production systems
  - with moderate resort to maize and improved self sufficiency in proteins (legume based pastures, grazing, home grown energy concentrates and resort to byproducts)

- Well planned size increase to improve productivity (milk per worker)
  - with indoor feeding systems and resort to mechanisation and automation

- Keep strong added value in mountains (PDOs...) together with provision of territorial services
  - Or risks of disappearance
Thank you for attention

For more information:


