Impact of a Geographical Indication on Agriculture and Rural Development - France - COMTE cheese
MINISTÈRE DE L'AGRICULTURE, DE L'ALIMENTATION, DE LA PECHE ET DES AFFAIRES RURALES

**Economics**
- production, price, delocalization
- profitability, distribution
- tourism

**Employment**
- Direct & indirect employment
- Job qualification
- Rural exodus

**Tradition**
- quality
- traditional know-how

**Environment**
- Biodiversity
- Environment preservation
- Landscape

P.D.O. Comté
• Introduction / Comté cheese

• A cheese that can be kept
• Adapted to local conditions
• Roots from the Middle-Ages
• PDO as soon as 1958
• Produced in Franche-Comté
• Rules governing production apply to all process stages

- Milk producers
- Cheese-makers
- Maturing

- Montbéliarde cows
- 1 ha grassland per cow
- Preocessing within 24h
- Limited collect area
- 4 months minimum
- Spruce shelves
• Comté vs Emmental: close origins but opposed developing strategies

Origins
• Geographical area
• Technical constraints to keep the milk

COMTE
P.D.O. strategy
Heritage protection and local development

EMMENTAL
Industrial strategy
Generic product and production delocalization
• Which Impact of the Use and Protection of the GI Comté

• Economics

• Tradition

• Employment

• Environment
Comté production in Franche-Comté has increased at a regular pace of 3%/year for 10 years, whereas the local Emmental production has dropped.
**Economic impact**

- Comté production has remained localized in Franche-Comté as an up-market product, whereas Emmental production was transferred to the West, as a basic product.

### COMTE

<table>
<thead>
<tr>
<th></th>
<th>1971 (%)</th>
<th>2002 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ain</td>
<td>1 292</td>
<td>48 631</td>
</tr>
<tr>
<td>Franche Comté</td>
<td>29 903</td>
<td>1 402</td>
</tr>
<tr>
<td>Total</td>
<td>31 195</td>
<td>50 033</td>
</tr>
</tbody>
</table>

### EMMENTAL

<table>
<thead>
<tr>
<th></th>
<th>1971 (%)</th>
<th>2002 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>West</td>
<td>5 000</td>
<td>178 047</td>
</tr>
<tr>
<td>Other historical areas</td>
<td>62 499</td>
<td>50 807</td>
</tr>
<tr>
<td>Franche Comté</td>
<td>34 471</td>
<td>29 075</td>
</tr>
<tr>
<td>Total</td>
<td>101 970</td>
<td>257 929</td>
</tr>
</tbody>
</table>

Comté production - France (tons) - source: DRAF

Emmental production - France (tons) - source: DRAF
Economic impact

- Comté up-market strategy has an impact at every stage of the production value with higher prices than those observed in the Emmental sector. Moreover, the gap is increasing.

**Milk price (€/hl)**

- Comté milk
- Basic milk

**Gross price - maturing (€/kg)**

- Comté
- Emmental

**Consumer price (€/kg)**

- Comté
- Emmental

- Comté is in the up-market segment
- Emmental is considered more as a cooking ingredient rather than a cheese (55% grated cheese)
• P.D.O. Comté helps to counterbalance the retail dominating position

**Economic impact**

**COMTE**

Appropriation of 1 point of the growth rate by the retail companies, that is **40%** of the total growth rate

<table>
<thead>
<tr>
<th>Gross price</th>
<th>Consumer price</th>
</tr>
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<tbody>
<tr>
<td>1.5</td>
<td>2.5</td>
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</table>

1 %

**EMMENTAL**

Appropriation of 0.5 point of the growth rate by the retail companies, that is **100%** of the total growth rate

<table>
<thead>
<tr>
<th>Gross price</th>
<th>Consumer price</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>0.5</td>
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</table>

0.5 %

Comté price evolution per year (%)

Emmental price evolution per year (%)

The economic profitability of milk farms in the Comté area has regularly increased, and has nowadays a 32% premium on Franche-Comté milk farms outside the PDO area.

- Improved profitability
- Lower volatility
Economic impact

- Comté, as a traditional product, contributes to the promotion of tourism in the region, and to develop food and hostelry activities

PDO area - 2002

- 2 190 000 overnight stays
- 115 000 visits of “fruitières”
- 30 000 visits of maturing caves, a majority of visitors buying cheese
- A museum (la maison du Comté) is dedicated to this cheese in Poligny

Tourist animations on the theme « Routes du Comté »

PDO area : 5% of the farms are concerned
Non-PDO area : 3%
The rules governing production stabilize several stages of the process that contribute to the specific quality of Comté, and that could have been given up under the only investment profitability objective.

<table>
<thead>
<tr>
<th>Technical process</th>
<th>Quality contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local grazing</td>
<td>Specific tastes</td>
</tr>
<tr>
<td>25 km collect area</td>
<td>« Crus » of Comté</td>
</tr>
<tr>
<td>Processing 24 h</td>
<td>preservation of the milk characteristics</td>
</tr>
<tr>
<td>Copper tanks</td>
<td>Stainless steel develops unpleasant tastes</td>
</tr>
<tr>
<td>4-month maturation</td>
<td>Elaborated tastes</td>
</tr>
</tbody>
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Basic product: Quality = sanitary security

PDO product: Quality = typicity
**Quality / tradition impact**

- Comté P.D.O. preserves traditional know-how that gives its characteristics to the cheese, without blocking technical progress

<table>
<thead>
<tr>
<th>Preserved traditional know-how</th>
<th>Abandoned traditional methods</th>
</tr>
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<tbody>
<tr>
<td>Copper tanks</td>
<td>Coagulated milk extraction with a linen</td>
</tr>
<tr>
<td>Maturing on spruce shelves</td>
<td>Manual reversal of cheeses</td>
</tr>
<tr>
<td>Natural crust</td>
<td>Manual milking</td>
</tr>
<tr>
<td>Lait cru (&lt; 24h)</td>
<td></td>
</tr>
<tr>
<td>Collect area 25 km</td>
<td></td>
</tr>
</tbody>
</table>
• Emmental milk farm size is 17% higher than Comté milk farm size.

Comté

Emmental

Milk delivery per farm (litres) - source: DRAF

182 917

213 932

- Comté PDO gives the opportunity to develop a profitable activity on a smaller area
- 3200 Comté milk producers
Employment impact

• Cheese dairy concentration has been much more important in the Emmental sector

- Average size of a cheese dairy: COMTE = 270 tons; EMMENTAL = 5 400 tons
- Very high concentration level in Emmental sector: 6 producers make 90% of the total production
- Preservation of a dense professional network in the Comté business
Employment impact

- The number of full time equivalent jobs per litre is 5 times higher in the Comté sector (not including milk producers)

<table>
<thead>
<tr>
<th>Comté</th>
<th>Emmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>0.13</td>
</tr>
<tr>
<td>Packaging</td>
<td>0.6</td>
</tr>
<tr>
<td>Maturing and selling</td>
<td>0.98</td>
</tr>
<tr>
<td>Collect and primary processing</td>
<td>1.29</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
</tr>
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</table>

3.0 FTE vs 0.6 in the Emmental sector

- 0.5 indirect FTE per Ml in the Comté sector (promotion, consulting…)

Total jobs in the Comté business

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Milk producers</td>
<td>3200</td>
</tr>
<tr>
<td>Direct jobs</td>
<td>1520</td>
</tr>
<tr>
<td>Indirect jobs</td>
<td>250</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4 970</td>
</tr>
</tbody>
</table>

Number of full time equivalent jobs per 1 000 000 liters collected

Source: fédération des coopératives laitières du Doubs, DPEI estimates
Milk producers

- Rearing practices that give more time to producers.

Transformation process

- Comté cheese dairy has a higher concentration of qualified cheese-maker jobs.

- 40% of job proposals in milk schools come from PDO businesses, which account for only 10% of the total cheese production

- More unqualified jobs in Emmental plants, and more non cheese qualified jobs (computer, automat...)

- More extensive practices…

- … that imply an easier management of the livestock…

- … that help the farmers to save time.
Employment impact

- The economic vitality of the Comté area helped limit the rural exodus, with almost twice as less departures than in the non-PDO area.

An attractive Comté sector situation that can be characterized by the facility to sell farms to young producers.

Evolution of the number of bovine milk farms between 1988 and 2000

source: agricultural inventory
Environment / landscape impact

- The rule governing production implies a lesser intensification of rearing and a better protection of environment.

- The use of fertilizers and herbicide increased 2.5 times less rapidly in the PDO area.
- The number of animals is 0.95/ha in the Comté area versus 1.11 in other areas.
- 30 to 65 botanic species have been identified per field in the PDO area vs only 10 species in artificial grasslands.
The preservation of a profitable and traditional rearing activity in the Comté area helped limit the diminution of the grassland surfaces.

<table>
<thead>
<tr>
<th>Comté PDO area</th>
<th>Non-PDO area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1988</strong></td>
<td><strong>2000</strong></td>
</tr>
<tr>
<td>321 269</td>
<td>299 908</td>
</tr>
</tbody>
</table>

- The grassland area has diminished 2.5 times faster in the non-PDO area.

Evolution of grassland area in Franche-Comté (ha) – Source: DRAF
The Comté PDO helps preserve open landscape, transition between grasslands and forests, that are traditional in Jura rearing areas.

Source images: "Territoires de Franche-Comté en images. CD Rom. Ecole d'agriculture de Levier et Cnerta-enesad Dijon"