COOPERATIVE INNOVATIONS & STABILISATION OF PRODUCERS’ ACCESS TO MARKET: THE CASE OF INDIA

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AC&SD 2016 Conference
13/12/2016
Dairy market liberalisation

Cooperative societies Act 1912
Industry Act 1951
Essential commodity act 1955
NDDB Operation flood 1965
Kaira strike 1946
Creation of the « Kaira District Cooperative Milk Producers’ Union » 1955
Milk and Milk Products Order 1991
Foreign Direct Investment 2003
Producer Company 2012

COOPERATION As driver of dairy development
COOPERATION remains the way of development (exclusion zones)
COMPETITION + diversification of the cooperative models

Indian dairy production (millions tonnes)
Emerging questions

- **Growth of the inner demand**
  - 180 million tons en 2022
  - -> + 5 million tons /year over the next 15 years

- **Increased competition** with private dairies since 2000
- A cooperative model in evolution: **Milk Producers Company**

- **Will the very small farm remain at the heart of the dairy sector development model?**
  - 70 millions dairy farmers including 15 millions cooperative members
  - Less than 3 bovines or buffalos per farm on average, including 1 or 1,3 female (Livestock Census)
Methodology

• Institutional framework of dairy chain analysis:
An analysis of coordination devices to shed light on value creation and sharing (Fligstein, 1996; Dervillé et Allaire, 2014)
  • Rules of exchange
  • Conception control & market structure
  • Governance structure
  • Property right

• Farmers inclusiveness thought in terms of rights and duties
  Property right: « right to undertake certain actions » (Commons, 1925) ;
  a bundle of rights at the origin of various status (Ostrom, 1990)
  • Market access
  • Access to the value created
  • Right to take part in collective choice rules elaboration

• Literature (including activity reports) + 70 interviews
Result 1: Cooperatives’ organisational innovations and value creation
3 tiers model

**CONSOMMERS**

- **PRODUCERS**
  - **VILLAGE SOCIETY**
    - **UNIONS**
      - **FEDERATION**
        - **NDDB**
          - Indian government

**NLDB**
Finance and pilot the development

**Etat**
Marketing

**District**
Collection & processing

**Village**
Collection

**Exploit.**
Production

**District**
(Gujarat)

**Village**
(17 000)

**Exploit.**
(3,2 millions)

**Union**
Bonus

**Village Society**
Bonus Dividend shares

**PRODUCERS**

**CONSUMERS**

**Dairy products**

**Feed & extension services**

**Collection**

**Marketing**

**Production**

**Finance and development**

**Indian government**
(17)
(17 000)
(3,2 millions)
Result 2: Diversity of models as a driver of inclusiveness
## Collection networks & business models

<table>
<thead>
<tr>
<th></th>
<th>Rajkot Dairy</th>
<th>Vasudhara</th>
<th>Amul Dairy</th>
<th>Maahi</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of members</strong></td>
<td>69 000</td>
<td>120 681</td>
<td>684 807</td>
<td>98 000</td>
</tr>
<tr>
<td><strong>Av. Delivery per member (LPD)</strong></td>
<td>6,5</td>
<td>4</td>
<td>3</td>
<td>6,5</td>
</tr>
<tr>
<td><strong>Cow milk</strong></td>
<td>22 %</td>
<td>87 %</td>
<td>60 %</td>
<td>20 %</td>
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<tr>
<td><strong>Buffalo milk</strong></td>
<td>78 %</td>
<td>13 %</td>
<td>40 %</td>
<td>80 %</td>
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<tr>
<td><strong>Share of the production collected</strong></td>
<td>15%</td>
<td>28%</td>
<td>50%</td>
<td>?</td>
</tr>
<tr>
<td><strong>Population type</strong></td>
<td>Urban</td>
<td>Rural</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Products</strong></td>
<td>Liquid milk, Butter Milk, Ghee</td>
<td>Peda + Dahi + icecream+ aromatised milk</td>
<td>Full Amul range including cheeses</td>
<td>SMP</td>
</tr>
<tr>
<td><strong>Turnover 2014-2015 (billion Rps)</strong></td>
<td>6,9</td>
<td>41,5</td>
<td>9,9</td>
<td></td>
</tr>
<tr>
<td><strong>Share realised with another organisation</strong></td>
<td>36%</td>
<td>64%</td>
<td>?</td>
<td>50 %</td>
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</table>
## Specific conditions to access market

<table>
<thead>
<tr>
<th></th>
<th>INDIAN COOPERATIVES</th>
<th>Regional variability</th>
<th>French cooperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEMBERS</strong></td>
<td>Cattle; &gt; 750L/year</td>
<td>Criteria: +/- respected</td>
<td>Producers</td>
</tr>
<tr>
<td></td>
<td>Social share: 10 Rps</td>
<td>Access to non-members</td>
<td>Social share</td>
</tr>
<tr>
<td><strong>QUALITY</strong></td>
<td>Since 1956</td>
<td>Formula adapted</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TB (+ TP )</td>
<td>to the average</td>
<td></td>
</tr>
<tr>
<td></td>
<td>India + Union</td>
<td>characteristics of the milk collected</td>
<td></td>
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<tr>
<td><strong>PRICE</strong></td>
<td>Federation Framework</td>
<td>Raj Vasu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Union turnover</td>
<td>Cattle: 24,3 - 28,3 Rps/l</td>
<td></td>
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<tr>
<td></td>
<td>Validation by the producers</td>
<td>Buffalo: 40,3 – 35 RpsL/l</td>
<td></td>
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<td></td>
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<td></td>
<td>Board based on interpro. indicators</td>
</tr>
<tr>
<td><strong>VOLUME</strong></td>
<td>Full collection</td>
<td>+/- direct sale</td>
<td>Contractual Volume</td>
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<td></td>
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<tr>
<td><strong>PROD. COSTS</strong></td>
<td>Support to production increase &amp; cost reduction: AI, feed,</td>
<td>Services prices &amp; availability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>vet...</td>
<td>(Feed: +/- 4Rps/kg</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>AI (15 -&gt; 130 Rps)</td>
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<td></td>
<td></td>
<td>+ service availability</td>
<td></td>
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<td>Bulk purchase &amp; bargaining</td>
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Result 3: Institutional innovation with the creation of MPC & adaptation to the liberalisation

- Limits of the traditional cooperative model (Ebrahim, 2000; Singh, 2013)
  - Efficiency issue: administration, funding
  - Growth of collection by private firms

- The required interface between producers and market (Singh, 2008)
  - Mutualisation, scale economy, development

- Cooperatives features but inscription in the Company act
  - Only producers as members
  - Profit sharing based on patronage
  - Joint-venture and alliance; reserves mandatory
Patronage & business orientation strengthened

Consumers

Private or MD plant
Contract basis

Milk Producer
Company

Mother Dairy

Milk pooling
Sahayac – Contract basis

Member Relationship Group

Village Contact Group

Representatives

Stricter access rules, controlled & applied

3 classes of producers

Service

Raw Milk

Milk & Milk product

Producers
Preliminary conclusions & perspectives

• Network of cooperatives & MPC allowing a maximisation of the producers dairy income through
  • Price, bonus, technical support

• Adaptation of the coordination devices framing market access to the diversity of territorial context for a better inclusion

• Inclusiveness in terms of access to market and value added but limited to alliances with large farmers in case of rules framing.

• Coexisting or renewal of the traditional cooperative model through MPC?
• Coexisting with the private formal and informal sector?
THANKS FOR YOUR ATTENTION!