Dairy development in Vietnam
Smallholder Farming and Large Scale Investments

Case-Study in Ba Vi (Hanoi)

JD Cesaro, Nguyen Mai Huong, Dung, Pham Duy Khanh, Hoang Vu Quang, G. Duteurtre
PART 1:
GENERAL CONTEXT AND QUESTIONS
New economic growth and the dairy sector

- Growth of milk consumption
- A « white revolution » in Vietnam ?
- Importance of policy programmes

Tableau : Consommation apparente de lait (kg/capita.an)

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<tbody>
<tr>
<td>France</td>
<td>219,5</td>
<td>235,2</td>
<td>281,6</td>
<td>287,2</td>
<td>272,9</td>
<td>260,5</td>
</tr>
<tr>
<td>China</td>
<td>2,5</td>
<td>2,3</td>
<td>3,2</td>
<td>6,5</td>
<td>11,1</td>
<td>28,7</td>
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<tr>
<td>Thailand</td>
<td>2,4</td>
<td>7,3</td>
<td>9,3</td>
<td>15,0</td>
<td>20,2</td>
<td>22,5</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>1,9</td>
<td>4,3</td>
<td>1,1</td>
<td>2,1</td>
<td>11,2</td>
<td>11,9</td>
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</tbody>
</table>

Source : FAOSTAT, 2011 Supply of milk products - except butter
Supply versus production between 1961 and 2009

Source: FAOSTAT, 2011 Supply of milk products - except butter
The Scaling up of the production

- Small Scale Dairy Territories
  - In a limited number of districts
  - Based on smallholder farms

Dairy production by district in 2011
The Scaling up of the production

• New investments in mega-farms
  – Where investments are possible
  – A new national strategy?

Large scale farms by district in 2014
The Scaling up of the production

Dairy production by district in 2011

Large scale farms by district in 2014

Number of dairy animals by district

- 41000
- 16000
- 5800
- 1200
- 150
- 30

Source: AR Census GSO (2011)

Source: Our Survey (2014)

Status of farm:
- Working
- Planned (2015-2016)

Cartography: JD. CESARO (2014)
Question on the sustainability of dairy farms

• Economic Efficiency
  – Dependency from Outside : a Rational Economic Model?
• Social Equity
  – The Peasant question in Vietnam dairy sector
  – Who wins? Who loses?
• Environmental justice
  – When dairy production has to cope with local territories
PART 2
CASE-STUDY:
THE BAVI MILK VALUE CHAIN
Ba Vi, a case study
The Milk Value Chain in Bavi
First results on the role of smallholders

NGUYEN MAI HUONG, N.T. DUNG, CESARO JD., PHAM DUY KHANH, DUTEURTRE G.
Cow and dairy production in Ba Vi:

Key milestones

- Colonial farms closed
- Dairy farms established by French
- Military-managed farms established (658)
- BaVi State-run farm established
- BaVi State-run farm restructured
- BaVi cow research center established
- Nesle milk processing factory established
- National strategy for Dev. of dairy sector 2001-2010
- IDP set up factory
- Vinh Nga Co. founded
- Strategy for livestock development 2010-2020
- IDP set up an Industrial farm (350 cows)

State-run production

Farm-run production
Cow and dairy production in Ba Vi:

Current Facts and Figures

**Cow heads in mountainous communes**

Source: Phạm Duy Khánh, study on monitoring cow production, 2011
<table>
<thead>
<tr>
<th></th>
<th>Unit</th>
<th>Communes</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Tân Lĩnh</td>
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<tr>
<td>Surface/farm</td>
<td>m2</td>
<td>4.610</td>
</tr>
<tr>
<td>Including forage land</td>
<td>m2</td>
<td>3.300</td>
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<tr>
<td>Family members</td>
<td>Pax</td>
<td>4</td>
</tr>
<tr>
<td>Farm labour (active)</td>
<td>Pax</td>
<td>1,8</td>
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<tr>
<td>Farmers owing biogas</td>
<td>% HH</td>
<td>62,5</td>
</tr>
</tbody>
</table>

Source: Nguyen Nhu Hoa, 2010; Ta Van Tuong, 2011,
PRODUCTION

(2010):
- 15 communes,
- 1,484 HH

Smallholders (Forage autonomy)

Farms attached to BV Research Center

Specialized farms

Industrial farm
Environmental sustainability

Compared Efficiencies of Different Types of Dairy Farms in Bavi
(Fodder autonomy)

Source: Lairez, 2012
Economic sustainability

Compared Efficiencies of Different Types of Dairy Farms in Bavi
(in million VND)

Source: Lairez, 2012
ORGANISATION OF THE VALUE CHAIN

INPUT

PRODUCTION

COLLECTING

Collecting points (IDP)

Collecting points (Ba Vi Cow Research Center)

Farmers

Auto-processing (1%)

PROCESSING

IDP

Ba Vi JSC

Xuan Mai JSC

Retails stores

Marketing channels of companies, stores

Consumption
Consumers
Feed, Heifers, Machines…
Dairymen
Milk Collectors
Dairy plants
Wholesalers, Shop agents, Showroom
Retailers
Consumers

Channel 1

Channel 2

Large-scale plants: IDP, BaVi milk JSC, Xuan Mai
Small-scale processors: Vinh Nga (Van Hoa), Ba Vi Milk Cake JSC (Tan Linh)

Feed, Heifers, Machines…
Dairymen
Milk Collectors
Family-scale processing/ Small shops
Consumers

KEY CHANNELS
## Difficulties and opportunities by VC function

<table>
<thead>
<tr>
<th>Input</th>
<th>Production</th>
<th>Collection</th>
<th>Processing</th>
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<tbody>
<tr>
<td>Lack of green feed (5)</td>
<td>Late fertility (4.69)</td>
<td>Shortage of tanks and equipments (4.61)</td>
<td>Quality control at small-scale processors (4.69)</td>
</tr>
<tr>
<td>Inadequate local vet (4.31)</td>
<td>Credit access: high interest (3.38)</td>
<td>Absence of anti-biotic test tools (4.46)</td>
<td>Lack of sustainable linkage (4.38)</td>
</tr>
<tr>
<td>Increase price of concentrated feed (4.23)</td>
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</thead>
<tbody>
<tr>
<td>Increase in cow head (4.61)</td>
<td>Favorable weather conditions (5)</td>
<td>Presence of processing plants in the locality (4.85)</td>
<td>Big potentials for the markets (4.69)</td>
</tr>
<tr>
<td>Supports of companies (4.46)</td>
<td>Presence of processing plants in the locality (4.85)</td>
<td>Extended collecting network (4.38)</td>
<td>Collective mark granted by NOIP (4.54)</td>
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<tr>
<td>Technical supports from local Gov (4.46)</td>
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CONCLUSION

Participation of smallholders: What role in sustainability of the dairy sector?

- **Sustainability at the farm level**
  - Economic efficiency (forage autonomy, efficiency)
  - Social equity (rural employment)
  - Environment sustainability

- **Sustainability at the country level**
  - Capacity to reach self-sufficiency in milk
  - Forage and feed dependency?

- **Sustainability at the value chains level**
  - Needs to continue further research to understand equity, efficiency and environmental sustainability of current value chain governance
  - Who wins? Who loses?
THANK YOU
CÂM ƠN