Introduction

Some definitions:

- **ORGANIC FARMING**: European and French regulations
- **CONVERSION PERIOD**: French Administrative definition

**Research context:**

AIDY program (2010-2012), financed by INRA, multidisciplinary, two scales: plot and farm-level analysis, technical and economic approaches

Outline

- Context: an increasing number of conversions in grape growing
- Method: creation of a method with economic and financial indicators
- Survey: testing the method on a sample of growers in organic farming
- Conclusion
1. Context

- Organic farming in viticulture is rapidly increasing:
  - 1.3% vineyards areas in Europe are organic (2009), 3.3% in France
  - 28,190 ha in France (whose 50% in conversion) – conversion rate: 130% of already certified vineyards (1st crop) (2009)
  - 3 main areas in France: Languedoc-Roussillon, PACA, Aquitaine

- Institutional context:
  - Agriculture 2020: 6% of areas by 2012, 20% by 2020
  - Because of the crisis, viticulture is particularly concerned and considered as a way to maintain and sustain grape farms
  - Lack of knowledge and tools to advise grape farms

Changes during conversion concern:
- Agronomy
- Sociology
- Economics and finance
  → lack of knowledge about the consequences of such a change in grape farms, particularly in economics

Literature, but not specific to viticulture:
- FADN survey: important investment for equipment, more labour force, higher sensitivity to climate
- Other works: decrease in yields
2. Methodology

An economic and financial approach based on three main tools:
- Activity Based Costs (ABC): variation during conversion
- Operation Based Costs (OBC): changes
- Multiyearly Financial Flows (MFF): Financial behaviour

Cost of a bottle = Cost of Vine + Cost of Vinification + Cost of Aging + Cost of Botteling + Cost of Marketing

- Main Financial Behaviour during conversion,
- Financial Capacity to overcome needs,
- Financial Coherence regarding solvency situation
3. Results: an explanatory survey

3.1. Producing organic wine is often more expensive

- Vine production costs evolve according to different strategies

<table>
<thead>
<tr>
<th>Week</th>
<th>Costs in euros/ha</th>
<th>Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1234.56</td>
<td>5.6%</td>
</tr>
<tr>
<td>2</td>
<td>1234.56</td>
<td>5.6%</td>
</tr>
<tr>
<td>3</td>
<td>1234.56</td>
<td>5.6%</td>
</tr>
<tr>
<td>4</td>
<td>1234.56</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

- Impact of conversion on the costs of other activities: marketing

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>10%</td>
</tr>
<tr>
<td>Marketing</td>
<td>20%</td>
</tr>
<tr>
<td>Finance</td>
<td>30%</td>
</tr>
</tbody>
</table>

3.1. Producing organic wine is often more expensive

- Costs vary from one farm to another

<table>
<thead>
<tr>
<th>Farm</th>
<th>Costs in euros/ha</th>
<th>Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm A</td>
<td>1234.56</td>
<td>5.6%</td>
</tr>
<tr>
<td>Farm B</td>
<td>1234.56</td>
<td>5.6%</td>
</tr>
<tr>
<td>Farm C</td>
<td>1234.56</td>
<td>5.6%</td>
</tr>
</tbody>
</table>
3. Results: an explanatory survey

3.2. The importance of changes during the conversion is still difficult to highlight

- Changes seem happen, and technical changes are linked with economic ones,
- Intensity and speed of changes are determinant to explain “quantity” of changes,
- Farm situation before conversion determines mainly level of changes,
- Economic consequences are not easy to characterize, relying on many technical and human factors
- Need to link changes with profitability situation

Conclusion

- Economic characterization of conversion necessitates a behaviour analysis at different levels
- A methodology relying on production costs (activities, operations) and MFF
- Results show some tendancies and have to be confirmed by a largest survey
  • Increase in production costs of Vine and Marketing \( \rightarrow \) increase in production cost of a bottle (links with profitability to check)
  • Different technical choices for conversion: mecanization or increase in labour force
  • No specificity of financial behaviour
- Need to improve information systems

Thanks for attention