Joint Bachelor Course on Organic Agriculture 2014

Lecture 3: Private standards and state regulation on organic farming

Prof Dr Urs Niggli
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- Certification bodies
- Equivalence of standards between the big markets
- Comparison of the global private standard IFOAM and the 2 most important state regulations (USA and EU)
# Development of private and legal standards

<table>
<thead>
<tr>
<th>Year</th>
<th>Key Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900-1950</td>
<td>• Concepts and ideas of pioneers</td>
</tr>
<tr>
<td>1950</td>
<td>• First private standards, e.g. Nature et Progrès (FR), VSBLO (CH), Bioland (DE), Soil Association (UK)</td>
</tr>
<tr>
<td>1980</td>
<td>• IFOAM global standards. <em>International Federation of organic Agriculture Movements</em></td>
</tr>
<tr>
<td>1992</td>
<td>• EU regulation.</td>
</tr>
<tr>
<td>2000-2013</td>
<td>• NOP (USA), JAS (Japan), CNOPS (China), EAOPS (East Africa)</td>
</tr>
</tbody>
</table>
Organic standards and regulation include (1)

- Rules for the separation of organic and non-organic farming and business activities. Some private standards demand whole farm conversion, others exclude parallel organic and non-organic production of the same crops or animals. Any mixture of organic and non-organic material has to be prevented by strict Quality Management Systems (QMS).

- Standards and regulation demand third-party inspection and certification.

- Rules for the declaration and labelling of foods.
Rules for plant production and fertilization (2)

 Allowed:

- Wide crop rotations including legumes
- Harvest residues and compost
- Seeds from organic production, if available
- Organic commercial fertilizers
- Livestock manure and slurry in crops

 Not allowed:

- Chemical commercial fertilizers
- GMO varieties
Rules for weed control (3)

- **Allowed:**
  - Mechanical weeders (e.g. finger Hoe)
  - Harrows or rotary/pushed hoes
  - Flame weeders
  - Handweeding

- **Not allowed:**
  - Spraying with chemical herbicides
Rules for disease and pest control (4)

> **Allowed:**

- Wild flower strips to promote natural enemies of pests
- Release of indigenous predators or parasitides (e.g. Trichogramma in maize)
- A restricted list of sprays like plant extracts, microbiological products, mineral oils, copper or sulphur

> **Not allowed:**

- Spraying with chemicals
Rules for livestock feeding (5)

▷ Allowed:

Robust breeds, excellent feed converter, especially for roughage, free range grazing and feeding

Excellent feed stuff quality, organic concentrates

▷ Not allowed:

Growth promotors and antibiotics in feed stuff

Niggli, 2014.
Rules for livestock husbandry (6)

- Allowed:
  - Animal welfare, free range grazing
  - Animal-friendly housing systems, dry littering

Niggli, 2014. 9
Rules for livestock husbandry (7)

» Not allowed:

- Mutilations of animal

- All year indoor animal keeping, fully slatted floors, tethering

Niggli, 2014. 10
Rules for livestock health and breeding (8)

Preferred:

Health prevention by herd management

Alternative therapies like phytotherapy and homoepathy

Tolerated or forbidden:

Preventive use of chemical and antibiotic drugs forbidden, curative use on prescription of veterinarians. Doubled with holding periods.

Embryo transfer, certain reproductive and genetic breeding techniques forbidden.
Processing methods should guarantee that the organic integrity and vital qualities of the product are maintained through all stages of the production chain.

The preparation of processed organic food must be kept separate in time or space from non-organic food.

Some private standards limit extrusion of cereals as they prefer gentle processing which keeps the natural quality and authenticity.
Rules for food processing and trading (12)

- The product must be produced mainly from ingredients of agricultural origin (added water and cooking salt are not taken into account).

- The following ingredients may be used: additives, processing aids, flavourings, water, salt, preparations of micro-organisms and enzymes, minerals, trace elements, vitamins, as well as amino acids and other micronutrients in foodstuffs for particular nutritional uses, but only in so far as they have been authorised for use in organic production in accordance with Article 21 of Council Regulation(EC) 834/2008.
Rules for food processing and trading (13)

- Non-organic agricultural ingredients can only be used if they have been authorised within Article 21 or have been provisionally authorised by a Member State.

- An organic ingredient cannot be present together with the same ingredient in non-organic form or an ingredient in conversion.

Organic and non-organic potatoes cannot be stored in the same storage.

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Rules for food processing and trading (14)

- Food produced from in-conversion crops can only contain one crop ingredient of agricultural origin.
- Substances and techniques that correct the results of negligence in the processing of these products or that otherwise may be misleading as to the true nature of these products cannot be used.

Synthetic food-colourings, flavour enhancers, artificial aromas, stabilisers or synthetic sweeteners are strictly banned from the manufacture of organic foods.
Inspection and certification

- Standards and regulation usually demand third-party inspection and certification. Inspection bodies are both private companies or state units. Inspection bodies are accredited by national accreditation agencies.

- For smallholder farmers, group certification is possible. In these cases, not every farm of a cooperative is inspected. The group certification procedure is supervised by a third-party inspection.

- A few countries support Participatory Guarantee Systems (PGS). In such cases farmers control farmers mutually. One country with PGS is Brazil.
Organic Regulations by Continent (2011)

<table>
<thead>
<tr>
<th>Continent</th>
<th>Countries with Regulations 2002</th>
<th>Countries with Regulations 2012</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>27</td>
<td>38</td>
<td>EU 27 Other: 11</td>
</tr>
<tr>
<td>America and Caribbean</td>
<td>6</td>
<td>21</td>
<td><strong>Organic Brasil</strong></td>
</tr>
<tr>
<td>Asia and Pacific</td>
<td>10</td>
<td>25</td>
<td><strong>Organic Canada</strong></td>
</tr>
<tr>
<td>Africa</td>
<td>1</td>
<td>2</td>
<td><strong>USDA Organic</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>86</strong></td>
<td></td>
</tr>
</tbody>
</table>
Countries Drafting Regulation

- Europe: Russia, Ukraine, Bosnia-Herzegovina.
- America and Caribbean: Jamaica, St Lucia.
Number of certification bodies per region

- Africa
- Asia
- Europe
- Latin America & Caribbean
- North Americas
- Oceania

SNF/SCOPES

Niggli, 2014. 19
## Countries with most certifiers

<table>
<thead>
<tr>
<th>Country</th>
<th>2012</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>76</td>
<td>33</td>
</tr>
<tr>
<td>Japan</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>USA</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>Germany</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td>Spain</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>China P.R.</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>India</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Canada</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Romania</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>Italy</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Poland</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>France</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: www.organicstandard.com/directory

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Equivalency of the big markets

- The countries with the largest organic market share (consumption) have mutual recognition arrangements e.g. USA and the EU.
- Organic products of both are mutually accepted to be equivalent and no complementary certification is needed.
- Geographical scope: Products grown or imported in US/EU (acceptance of each others imports)
- The following products are excluded and a complementary certification is required:
  - Apples and pears from US
  - Livestock from EU
- Not in the scope: Wine, Aquaculture
Import rules in EU

- In addition to the US, other Third Countries are recognised as being equivalent.
- Control bodies (CB) are directly approved for operating inspection and certification in Third Countries (since 01.07.2012)
- 53 certification bodies approved
- for around 60 countries
- Individual import authorizations expire by 01.07.2014 the latest.

Organic banana quality inspection
The standard setters dilemma

Too little detail in standards

- Lack of clarity and too much room for interpretation

Too much detail in standards

- No flexibility to allow for varying conditions (e.g. different climatic, soil, cultural, economic and social conditions)

Niggli, 2014. 23
## Comparing Standards (1)

<table>
<thead>
<tr>
<th></th>
<th>IFOAM</th>
<th>EU</th>
<th>US NOP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td>Products labelled as organic</td>
<td>Raw products, food, feed</td>
<td>Products labelled as organic</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td>1-100 % organic ingredients</td>
<td>„impression“ organic</td>
<td>Term „organic“ 1-100 % organic ingredients</td>
</tr>
<tr>
<td><strong>Conversion period</strong></td>
<td>Annual: one year prior sowing; perennial: 1.5 prior harvest Full application of organic farming practices</td>
<td>Annual: two years prior sowing; perennial: 3 prior harvest Full application of organic farming practices (inspection during conversion required)</td>
<td>No application of unauthorized substances for 3 years prior harvest (inspection only prior first organic harvest)</td>
</tr>
<tr>
<td><strong>Fertilization</strong></td>
<td>Human excrements: restricted, exceptions possible</td>
<td>No human excrements</td>
<td>No human excrements</td>
</tr>
</tbody>
</table>

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## Comparing Standards (2)

<table>
<thead>
<tr>
<th></th>
<th>IFOAM</th>
<th>EU</th>
<th>US NOP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fertilizers</strong></td>
<td>No Chilean Nitrate</td>
<td>No Chilean Nitrate</td>
<td>Chilean Nitrate up to 20% of total nitrogen requirement</td>
</tr>
<tr>
<td><strong>Parallel Production</strong></td>
<td>Accepted if clear separation is insured</td>
<td>Restricted: only with varieties which can be distinguished visually or for perennials;</td>
<td>Not mentioned – no restrictions</td>
</tr>
<tr>
<td><strong>Buffer Zones</strong></td>
<td>Required</td>
<td>Not mentioned</td>
<td>Required</td>
</tr>
<tr>
<td><strong>Veterinary treatments</strong></td>
<td>Double with-holding period, chemical allo-pathic veterinary drugs accepted</td>
<td>Double withholding period, antibiotics allowed if necessary to avoid suffering of animals</td>
<td>Antibiotics not allowed</td>
</tr>
</tbody>
</table>

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## Comparing Standards (3)

<table>
<thead>
<tr>
<th></th>
<th>IFOAM</th>
<th>EU</th>
<th>US NOP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feeding</strong></td>
<td>Max. 10-15 % conv. feeding permissible</td>
<td>By derogation up to 5 % conv. feeding up to 2011 for non-herbivores</td>
<td>No conventional feeding</td>
</tr>
<tr>
<td><strong>Animal husbandry</strong></td>
<td>8 pages</td>
<td>Very detailed</td>
<td>No animal specific requirements</td>
</tr>
<tr>
<td><strong>Farm inputs</strong></td>
<td>Positive and negative listing</td>
<td>Only positive list</td>
<td>Positive and negative listing</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Principle of health, ecology, fairness, care</td>
<td>Process oriented approach</td>
<td>More materialistic approach with stricter lines</td>
</tr>
</tbody>
</table>
Literature/ References

  www.organicstandard.com/directory (Last Access 29th April 2014)
Acknowledgement

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