

# PROORG

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CREA (ITALY)

PARTNERS

DENMARK (KU)

FRANCE (ACTIA, ITAB, INRAE)

GERMANY (AÖL, FH MU, TI, KASSEL)

HUNGARY (ÖMKI)

ITALY (ASSOBIO, UNIVPM, CREA)

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THE NETHERLANDS (WUR)

  
CORE organic



**Challenges for the organic food processors**

Growth of the organic food market

Consumer expectations

Regulations and standards

Lack of practicable details and indications for the appropriate technologies

**CORE Organic Cofund Project:**

**Code of Practice for organic food processing - ProOrg**

To develop a Code of Practice addressed to organic food processors and labeling organizations with the aim to provide a set of strategies and tools that can help them for making the best choice for careful processing methods and formulations free of additives, while addressing the organic principles, high food quality, low environmental impact and high degree of consumer acceptance.

### Participant organization name and acronym

Consiglio per la Ricerca in agricoltura e l'analisi dell'economia agraria – CREA (IT)

Università Politecnica delle Marche – UNIVPM (IT)

Associazione Nazionale delle Imprese di Trasformazione e Distribuzione di prodotti Biologici e naturali – ASSOBIO (IT)

Assoziation Ökologischer Lebensmittelhersteller – AÖL (DE)

Thuenen Institut – TI (DE)

FH Münster University of Applied Sciences - FH MU (DE)

University of Kassel – UniKassel (DE)

Wageningen University – WUR (NL)

Wageningen Food Biobased Research – WFBR (NL)

Institut Technique de l'Agriculture Biologique – ITAB (FR)

Institut National de recherche per l'agriculture, l'alimentation et l'environnement – INRAE (FR)

The French Network of Food Technology Institutes – ACTIA (FR)

University of Copenhagen – KU (DK)

Forschungsinstitut für biologischen Landbau – FiBL (CH)

Berner Fachhochschule – Hochschule for Agrar-, Forst- und Lebensmittelwissenschaften (BFH-HAFL)

Warsaw University of Life Sciences – WULS (PL)

Hungarian Research Institute of Organic Agriculture – ÖMKi (HU)

### Advisory Board

Jostein Hertwig (Chairperson) REMA 1000 (Norway and Denmark) and Saltå Kvarn (Sweden)

Rosi Fritz Ulrich Walter/Lebensbaum (Germany)

Zbigniew Kozłowski PIŻE (Poland)

Markus Jehle Töpfer (Germany)

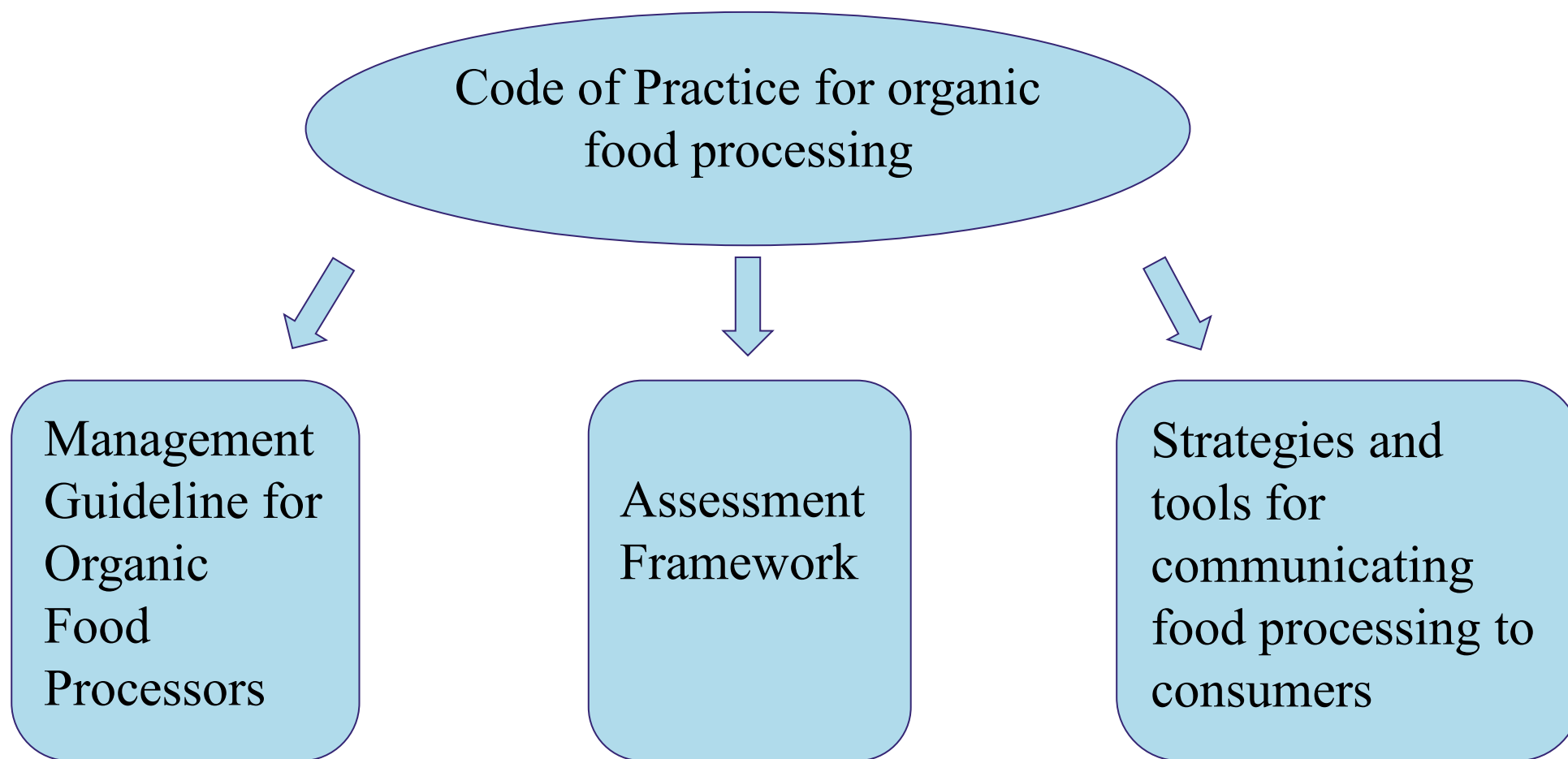
Fabrizio Piva CCPB (Italy)

### Tutor:

Sari Iivonen

Director

Finnish Organic Research Institute

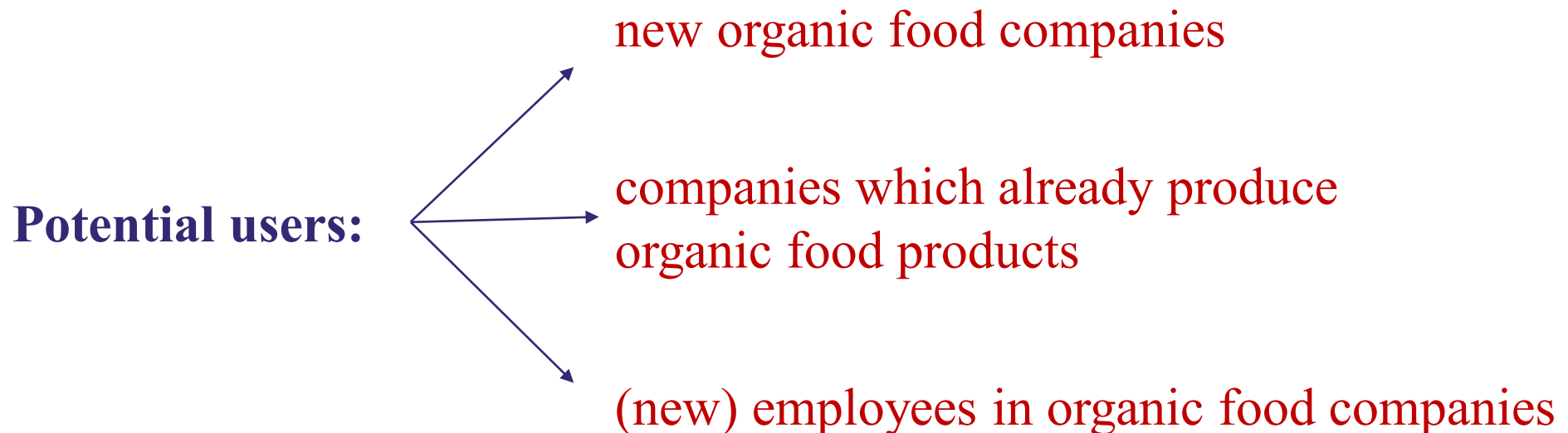


# Management Guideline for Organic Food Processors

**AöL, Münster University, FiBL + all partners**

**Objective:** to give companies a guideline for the implementation of the regulatory requirements of the organic food sector applicable for the daily practice

*To contribute to the further development of the practice of organic food processing in terms of increased quality, integrity, transparency and success.*



The Management Guideline is not focused on economic aspects

The Management Guideline is referring to the EU Reg. 848/2018

**Structure of the document:** a chapter for each relevant area of activity

1. Organisational requirements and business policy
2. Quality management
3. Raw materials
4. Production/processing
5. Appearance, packaging, advertising
6. Storage and Transport
7. Environmental management and social standards

For each topic, a checklist

| Done                     | Status     | Requirement   | Ref. EU-Reg.   | Tools   |
|--------------------------|------------|---|--|---|
|                          | <b>2.</b>  | <b>Quality Management</b>   |  |   |
| <input type="checkbox"/> | Compulsory | Development of an OCP (Organic Critical Control point) concept for the identification of risk of non-compliances to organic regulation and their handling.  | Art 27 and Annex II Part IV 1.2/1.3/1.4 Art 38 d) Art 39 | Manual (DE)   |
| <input type="checkbox"/> | Compulsory | Establish criteria for the identification of those non-compliances affecting the integrity of the organic products and giving clear guidance to identify if the suspicion can be substantiated or eliminated. | Art 27 Art 28 (2)  | <a href="#">A&amp;L guidelines for quality management (EN)</a>  |
| <input type="checkbox"/> | Compulsory | Establish appropriate and proportionate measures to avoid the risk of contaminations with no authorised products. Measures to avoid those risks should be established.  | Art 28   | <a href="https://www.dropbox.com/s/43b538sua877securbio.7c781e9/FR">https://www.dropbox.com/s/43b538sua877securbio.7c781e9/FR</a> |
| <input type="checkbox"/> | Optional   | Integrate the OCP concept including the handling of possible non compliances into the QA system.  |  |   |
| <input type="checkbox"/> | Compulsory | This system needs to be set up for product procurement, internal processes in the company and sub-contracted operations   |  |   |
| <input type="checkbox"/> | Compulsory | Define the working directives necessary to transfer the OCP Concept into practice of the overall operation. These working directives need to be presented for the employees in understandable language.       |  |   |
| <input type="checkbox"/> | Optional   | Introduce ecologically sound measures, which are followed throughout the entire business for all quality related topics, e.g. pest control.   |  |   |
|                          | <b>2.1</b> | <b>Process description</b>  |  |   |
| <input type="checkbox"/> | Compulsory | The technology and recipes of organic products and the production process must be described in detail.  | Art 38 d)  |   |
| <input type="checkbox"/> | Compulsory | The particular aspects (for example qualification of raw materials by specifications) which have to be considered for organic production, must be clearly identified.   |  |   |
| <input type="checkbox"/> | Compulsory | The product flow separation measures (critical points) must be precisely described for the entire operation. Requirements for control and handling of those CP are established.                               | Art 38 (1)   |   |
| <input type="checkbox"/> | Optional   | All relevant information should be included in a organisational handbook or other appropriate documentation.  |  |   |
|                          | <b>2.2</b> | <b>Cleaning and disinfection</b>  |  | <a href="#">Leitfaden Reinigung &amp; Desinfektion (DE)</a>   |
| <input type="checkbox"/> | Compulsory | Only those cleaning and disinfection substances can be used that are authorised for organic production.   | Annex II Part IV 2.2.3                                   |   |
| <input type="checkbox"/> | Optional   | Cleaning procedures should be established that can be carried out using as little cleaning and disinfection substances as possible, but as much as necessary.   |  |   |
| <input type="checkbox"/> | Compulsory | Document the effectiveness of the cleaning measures in terms of the prevention of mixing and avoidance of contamination.  | Art 28 (1)/Art 38 (1) c) Annex II Part IV 1.4            |   |

## Assessment Framework

**FiBL, AöL, Wageningen University, Copenhagen University, University of Warsaw, INRAE, ITAB, CREA**

**Objective:** to provide guidance on how to objectively assess organic food quality as affected by processing technologies, processing methods, as well as additives and processing aids

*To provide an objective basis and guidance on how to assess and compare different processing technologies aiming at the same processing goal (benchmarking process)*

**Potential users:** (organic) food processing operators, labelling organizations

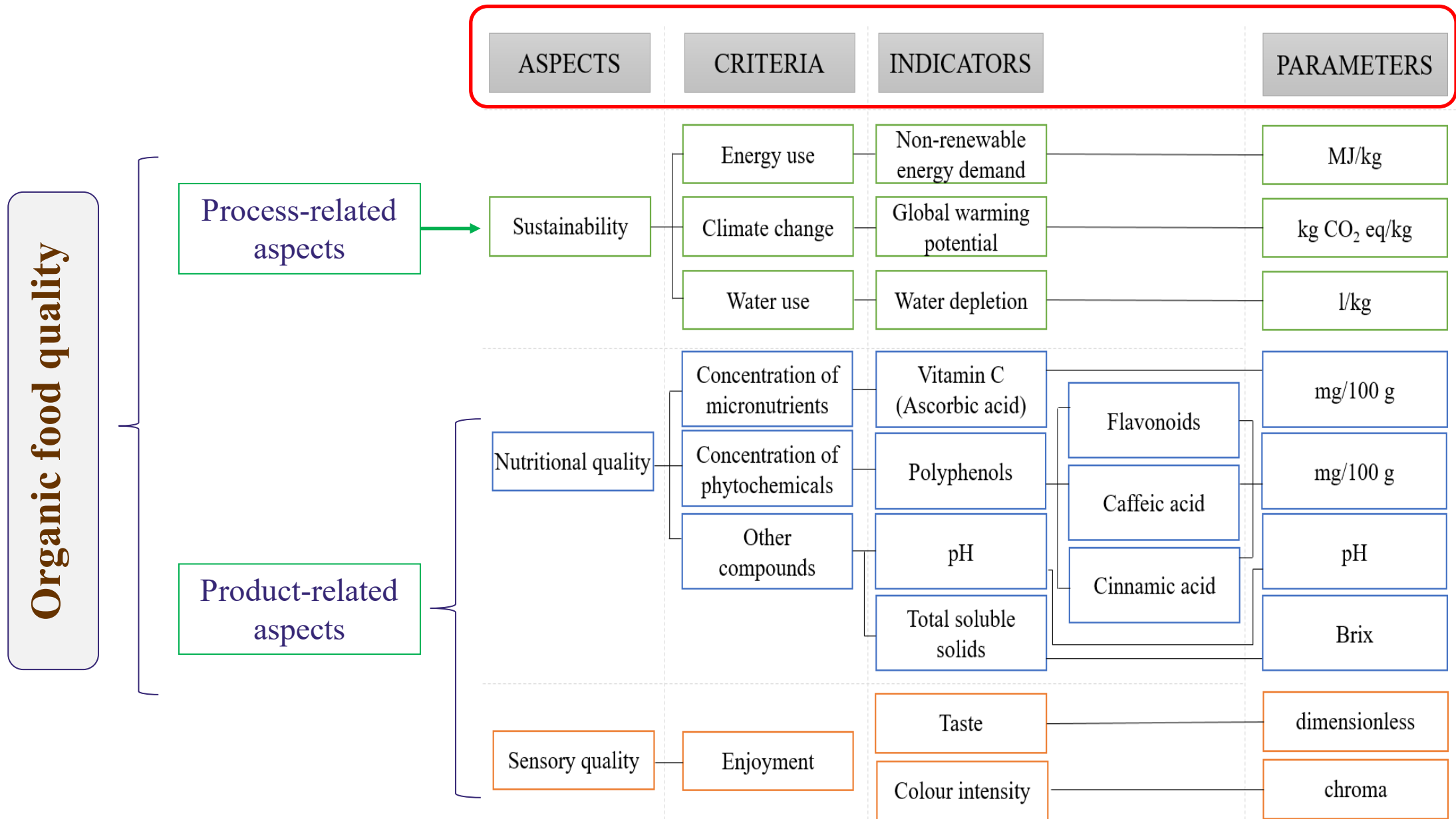
Flexibly adaptable

The AF is not intended for the purpose of certification

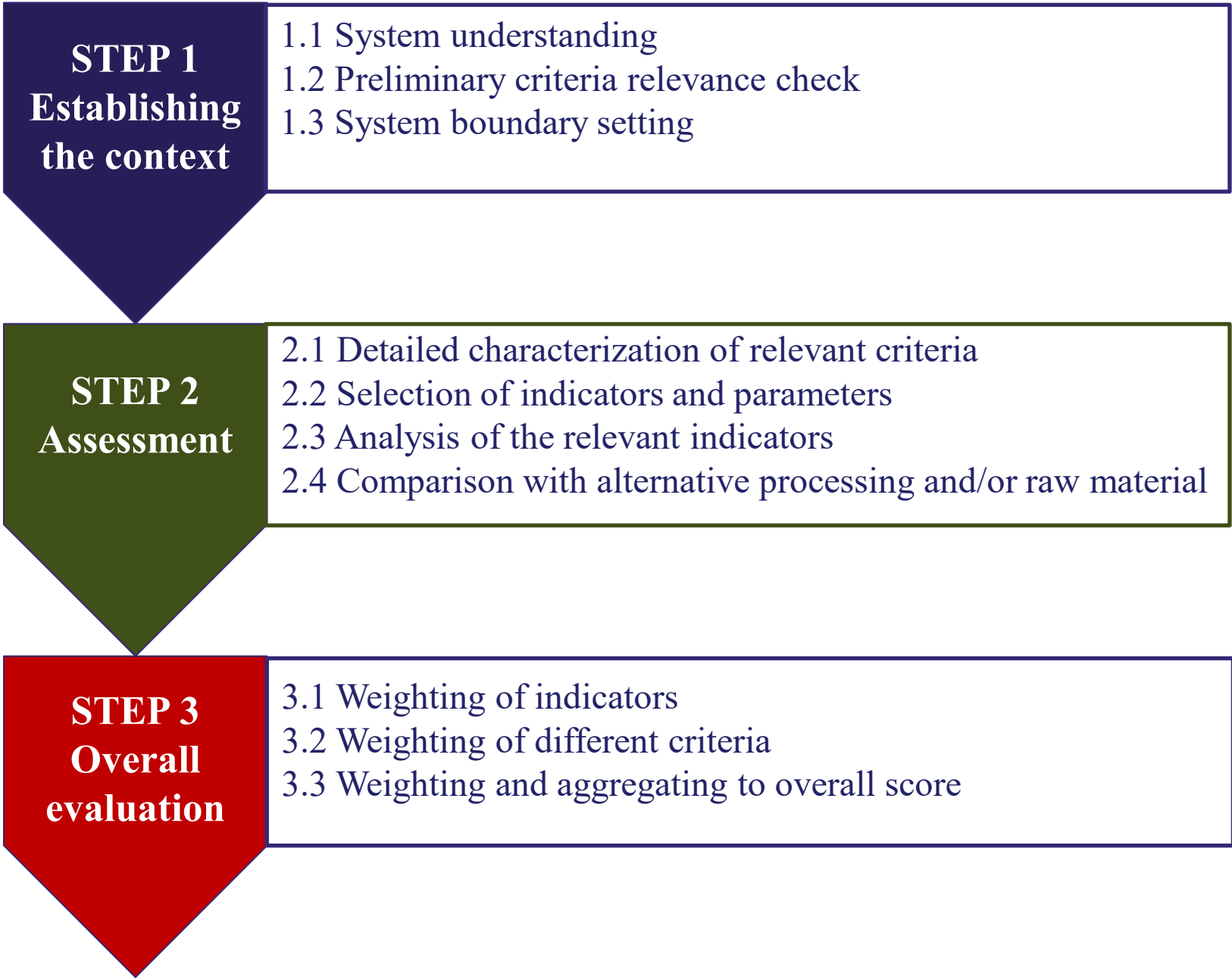


# Organic food quality concept (Kahl et al., 2012 and 2014)

just an example



# Assessment process



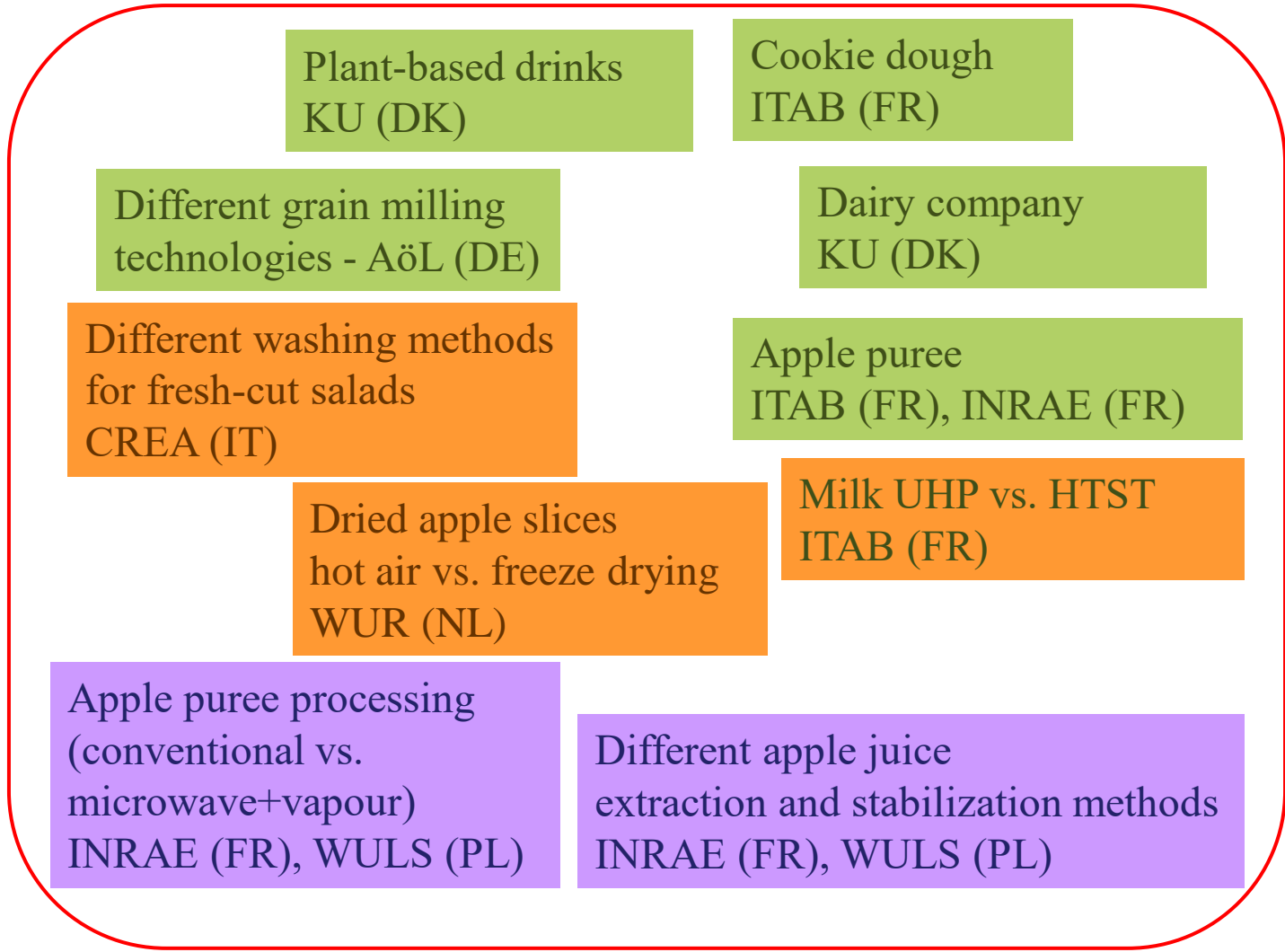
} calculation tool provided

Case studies  
WUR (NL)

A protocol was developed to guide the users through the assessment process

To test the usability of the AF

- At company level
- Scientific literature
- At laboratory level



↓ feedback, inputs

**Finalization of the AF**

## Next steps

### Breakdown the AF to develop versions for the different stakeholder groups:

- Processing companies
- Label organisations
- Competent authorities

### AF will be clearly guided

1. Instruction video of the goal and the principle of the methodology
2. Set of given indicators and criteria
3. Excel tool for the evaluation of the given parameters
4. Guidance will be with “yes” and “no” questions to focus on the relevant criteria

# Set of strategies and tools for communicating organic food processing to consumers

Kassel University, Thuenen Institut, Münster University, FiBL, Università Politecnica delle Marche, CREA + all partners

## 1. To analyze consumer expectations and acceptance of (organic) food processing technologies

### Research questions:

- What do consumers know about (organic) food processing?
- What do consumers think a careful/organic processing is?

9 focus group discussions in Germany and Switzerland

An online survey in Germany (N=600) and Switzerland (N=687)

Consumer's knowledge of food processing and food technologies is low

Processing is associated with additives, chemicals, packaging



negative connotation

Processing has advantages



convenience



It holds also for processed organic food

Processing technologies are not part of the consumers concept of "organic"



"Organic" is associated with fresh or minimally processed food

Consumers do not have a clear idea of what careful processing means



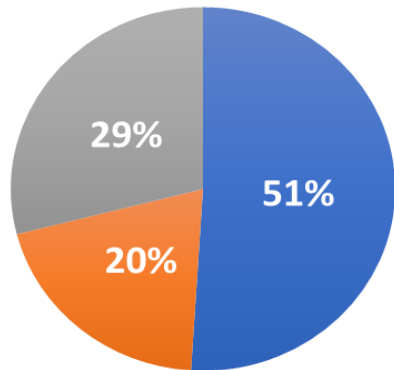
limited loss of nutritional and sensory characteristics and a low environmental impact

Consumers expect information and transparency from organic products

**Consumer preferences for milk processing methods**

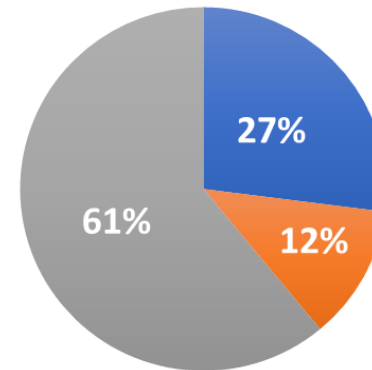
Question: What would be your favorite milk processing method?

Without information



- Pasteurization
- Microfiltration + pasteurization
- High Pressure Processing

With information



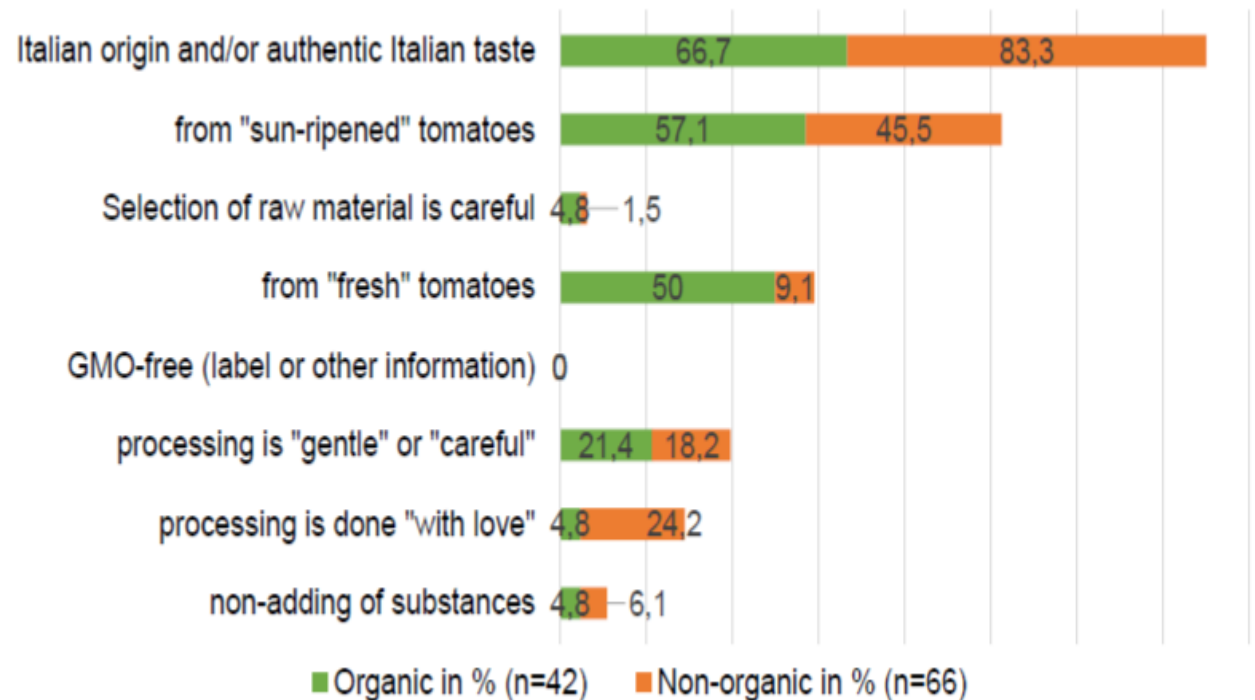
- Pasteurization
- Microfiltration + pasteurization
- High Pressure Processing

## 2. To analyze how food quality and producing methods are communicated to consumers through food product packaging

Münster University, Warsaw University, Wageningen University, CREA

Market survey, collection and analysis of textual information about quality and production methods on organic and non-organic food (milk, fruit juice, tomato products) packaging and non-packaging promotion (videos, commercial spots)

Figure 3: Information items about processing on tomato product packages



Data analysis is still ongoing

From: Borghoff and Strassner. 33<sup>rd</sup> EFFoST International Conference. Rotterdam, 12-14 November 2019



## **Further research questions**

**What is the consumer concept of organic food?**

**What is the purchase intention of organic food?**

**How do the consumer concept of organic food and intention to purchase are affected by information on the sustainability (process, packaging, transport), use of additives, nutritional/sensory quality?**

**How do emotions and different type of communication regarding selected careful processing technologies influence organic consumers' attention and preference (choice)**

**What are food and food processing quality understandings of food processors and consumers?**

**Data collected. Analysis is ongoing**

## Conclusions

The Code of Practice can help organic food processors to comply with the organic production rules

The final aim of the Code of Practice is the optimization of the organic food processes in relation to the nutritional and sensory quality and sustainability of the processed food products

The Code of Practice can contribute to the sustainable development and innovation of the organic sector

## European organic stakeholder consultation about the usage of technologies in organic food processing

Today, there is a lack of mandatory standards and indicators for organic food processing in Europe. We have started a project called ProOrg to address this lack by developing a set of strategies and tools (Code of Practice) that can help organic food processors in the selection of appropriate technologies. It will give guidance for making the best choice for careful, minimal and mild processing methods.

Before drafting a Code of Practice for processors, we need to know how different stakeholder groups and market actors perceive the benefits or threats of certain (new) processing technologies in the organic sector. We have invited you to participate in this survey because of your expertise in organic food processing.

**The questions we ask are about your opinion, so there is no right or wrong. The survey typically takes around 15 minutes to complete. The survey is anonymous so your answers will not, and can not, be traced back to you.**

For more information please visit: <http://www.proorgproject.com/>  
or contact me at [toralf.richter@fibl.org](mailto:toralf.richter@fibl.org)

Best,  
Toralf Richter

**Link to the survey:** <https://survey.fibl.org/index.php/223747?lang=en>

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