



**INNO
FOOD
LABS**

Welcome to our 2nd Webinar: Role of processing in local organic food systems

26.05.26

InnOFoodLabs project is funded by the European Union (Grant no. 101181923) and by the Swiss State Secretariat for Education, Research and Innovation (SERI). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, REA or SERI. Neither the European Union, nor REA nor SERI can be held responsible for them.



**Funded by
the European Union**



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra



Today's Program 16:30 – 18:00

- 1 Introduction & Context
- 2 Organic Food Processing Insights
- 3 Discussion & Interactive Workshop

Moderation: Alexander Beck

Interactive Exchange: Nina Lamprecht; Ivraina Brändle

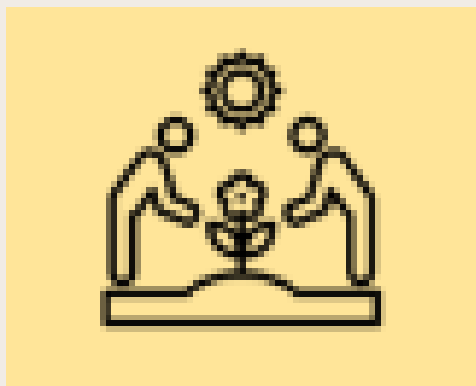


Innovation themes of living labs



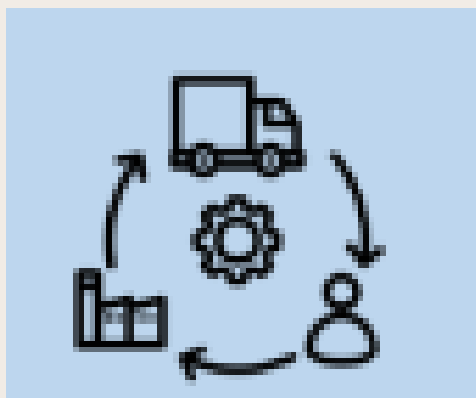
1. Small scale food processing

- Careful processing techniques
 - preservation of nutritional quality
 - food safety
 - reducing perishability
- Sustainable and reusable packaging



2. Reconnecting farmers and food processors

- Better collaboration between farmers and food processing
- Public kitchens
- Restaurants



3. Innovative supply chain and distribution models

- New forms of collaboration between citizen/consumer and local food chain operators
- New communication and marketing concepts

Specific Objectives of the Project

1. Set up **12 Living Labs (LLs)** in **9 European countries** which will implement **23 innovations**
2. Establish a **Community of Practice (CoP)** for capacity building
3. Assess the **sustainability impact of the innovations** in the Living Labs
4. Support the **innovation potential of the Living Labs**
5. Create **synergies with other EU projects** and connect with **policy makers** and key actors
6. **Communicate and disseminate the project's findings**
7. **Exploit the project results**

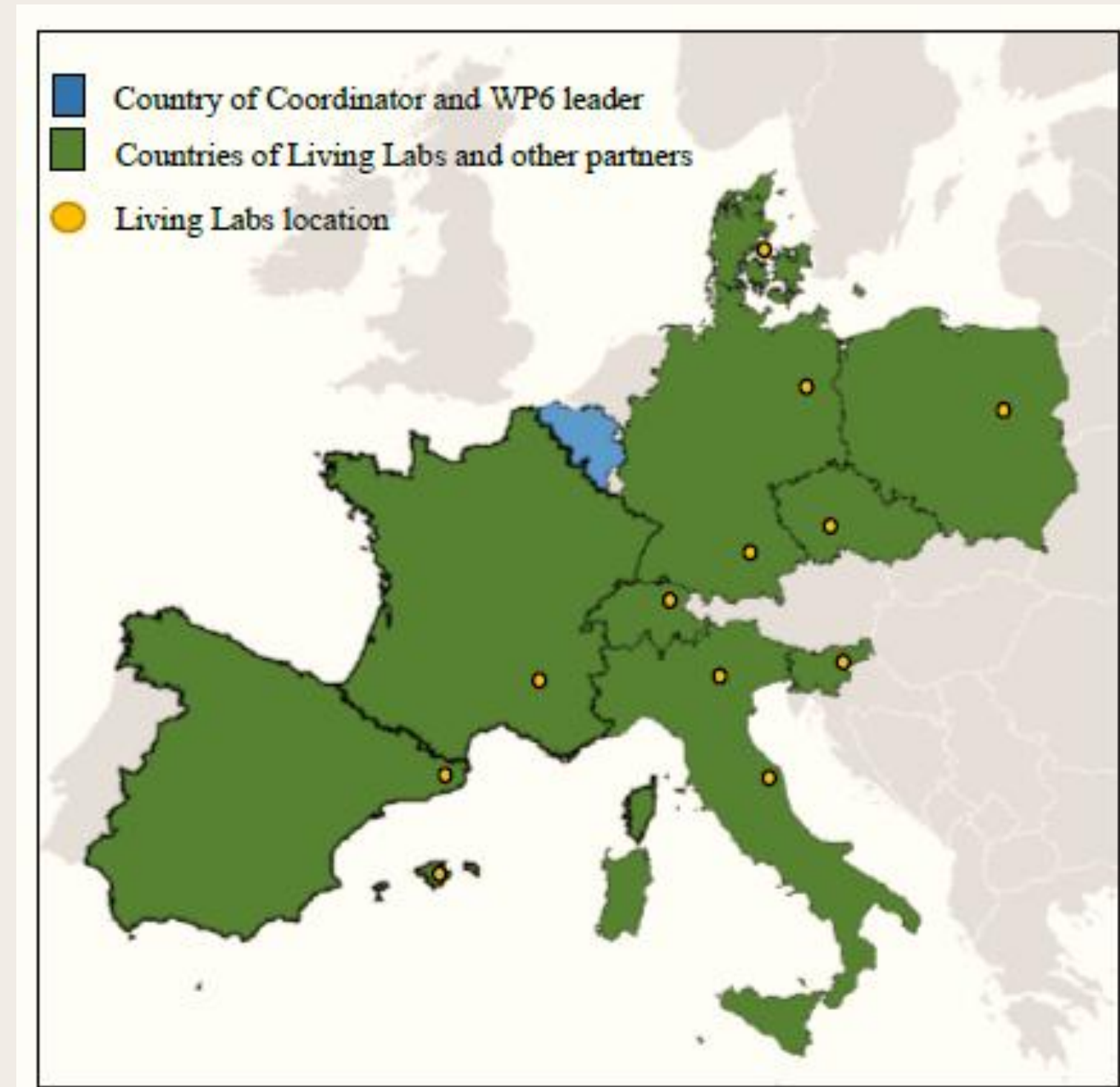


Figure: InnOFoodLabs



Organic Food Processing Experts



Bernard Lignon

Regulations and Organic Product Quality
Project Lead
Synabio



Rodolphe Vidal

Quality and Processing Division
Coordinator
ITAB



Organic processing what does this means ?

Specific principles

Compliance with the principles and general rules of organic production

As part of a holistic, systemic approach

The principles of Organic Farming



The Principle
of Health.



The Principle
of Ecology.



The Principle
of Fairness.



The Principle
of Care.

4 pillars which define the principles of OF
and thus give the underlying principles for the organic food system



Organic processing what does this means

Compliance with the principles of organic production

Article 4 Objectives

Organic production shall pursue the following general objectives:

(d) **substantially contributing to a non-toxic environment;**

(f) encouraging **short distribution channels and local production** in the various areas of the Union;



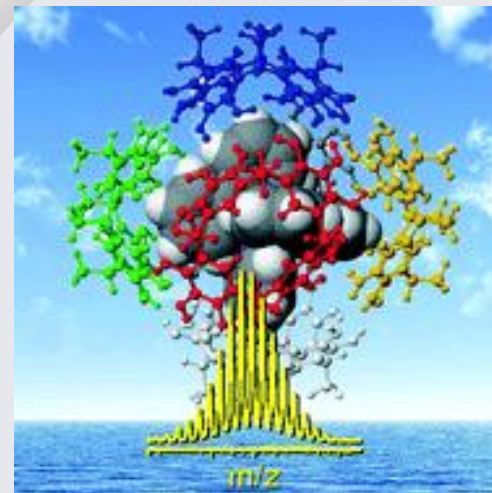
Article 5 General principles Organic production is a sustainable management system that is based on the following general principles:

(d) the production of a wide variety of high-quality food and other agricultural and aquaculture products **that respond to consumers' demand** for goods that are produced by the use of processes that do not harm the environment, human health, plant health or animal health and welfare;

(h) the adaptation of the production process, where necessary and within the framework of this Regulation, to take account of the sanitary status, **regional differences** in the ecological balance, climatic and local conditions, stages of development and specific husbandry practices;

Article 9 General production rules

4. **Ionising radiation** shall not be used in the treatment of organic food or feed, and in the treatment of raw materials used in organic food or feed.



Article 11 Prohibition of the use of GMOs

Compliance with the general rules of organic production



Organic processing what does this means ?

Compliance with **specific principles**

Organic agricultural ingredients



Food additives, micronutriments,
processing aids restriction



Natural approach



Careful processing (restriction chemical
process)



Exclusion engineered



- Article 7*
- Specific principles applicable to the processing of organic food**
- The production of processed organic food shall be based, in particular, on the following specific principles:
- (a) the production of organic food from organic agricultural ingredients;
 - (b) the restriction of the use of food additives, of non-organic ingredients with mainly technological and sensory functions, and of micronutrients and processing aids, so that they are used to a minimum extent and only in cases of essential technological need or for particular nutritional purposes;
 - (c) the exclusion of substances and processing methods that might be misleading as regards the true nature of the product;
 - (d) the processing of organic food with care, preferably through the use of biological, mechanical and physical methods;
 - (e) the exclusion of food containing, or consisting of, engineered nanomaterials.

Natural approach

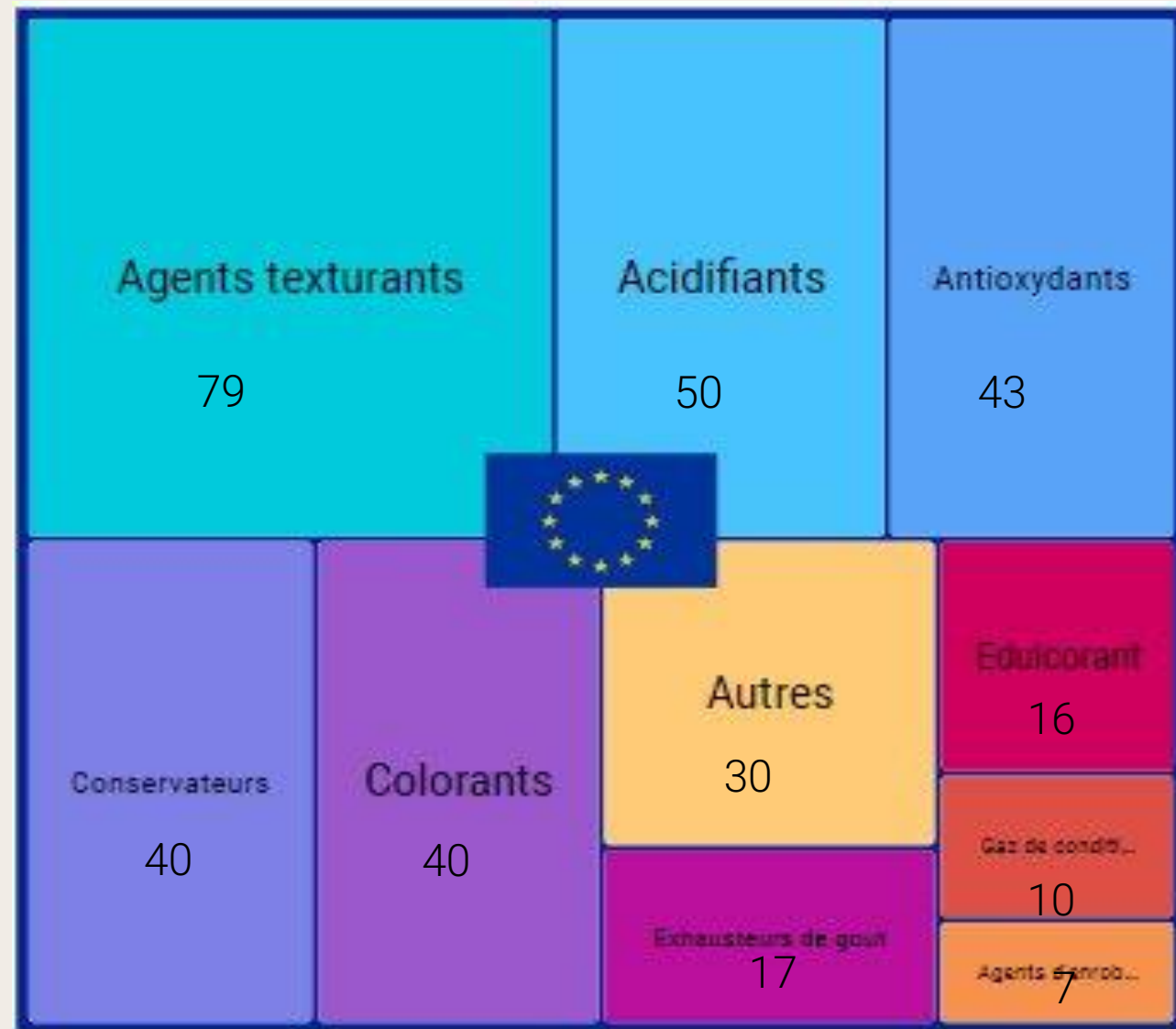
A maximum of 5% (subject to very strict authorisation rules for non-organic agricultural ingredients, additives and processing aids)

Synthetic flavourings prohibited

In practical terms no use of micronutrients, colourings or ion exchange resins (except in baby food)

„Let our food be as natural as possible“ W. Kollath

Exemple of additives permitted in organic processing



340 additives autorised in FOOD in EU

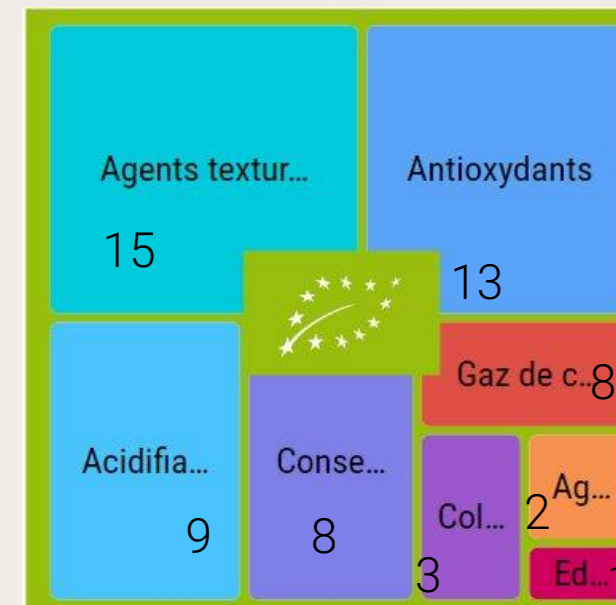
Regulation CE 1333/2008



A limited number of additives in organic products

Only 59 additives can be used in organic food

Regulation CE 2021/1165 (annex V)



Limited fonctionnality
Natural forms preferred,
Colorings and flavor enhancers prohibited (with few exceptions like traditionnal cheese colouring...)
Only one sweetener allowed



A larger number of additional requirements to use it

Restricted to certain food categories
Restricted use vs conventional products
Organic origin required for some
Limited quantity (max 5%)
Non-GMO origin

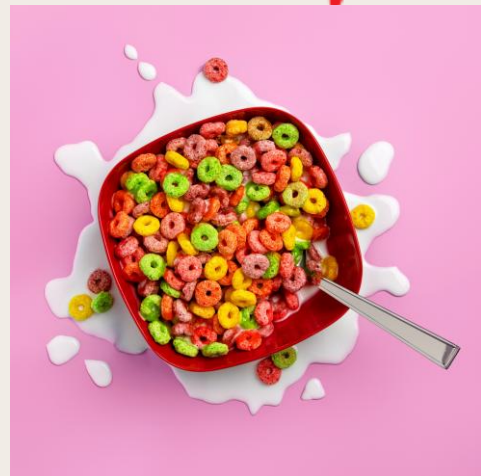
When a product can be labelled « organic » ?

		Technological aids	Annex V A and enzymes used as technological aids		
		Water and salt	Drinking water and salt (organic and non-organic)		
MAX 50%	 NON-agricultural ingredients		• Additives from Annex V A (except *) • Microorganisms and enzymes (if listed in Annex V A) • Colorants (prohibited except for meat and egg stamping and some cheeses) • Minerals, vitamins, amino acids, trace nutrients: (authorized only if required by law)		
MIN 50%	 Agricultural ingredients (including additives marked with an asterisk *)		 Non-organic: only those listed in Annex V B, or authorized by the member state, or additive with * non-organic, or non-organic yeasts, or natural flavors of non-organic x	 ORGANIC (including natural flavors of organic x and organic yeasts)	Max 5%
					Min 95%

Ultra-processed food

A third of daily calories intake in France !

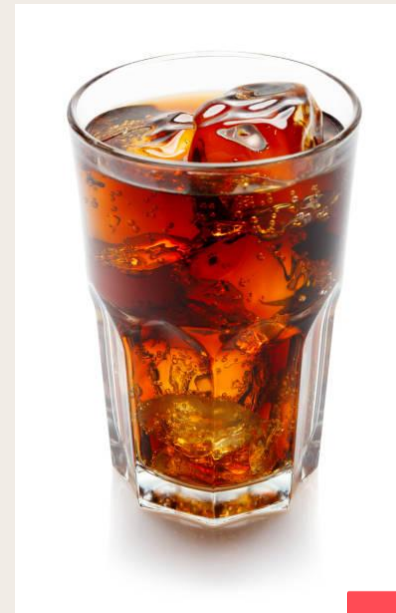
Julia et al. (2018)



60 % in the US



Baraldi et al. (2018)



78 % in the Netherland
79 % in Germany
61 % in Spain



Slimani et al. (2009)

Product the most contributing to UPF consumption : Sweet product (28 %),
sweet drinks (16 %), UP F&V (18 %), breakfast cereals (12 %)

Debras et al. (2022)

UPF and Organic

— Less UP product in the stores when organic labelled

Davidou et al. (2022)

Desquilbet et al. (2018)

- NOVA **1** Unprocessed or minimally processed foods
- NOVA **2** Processed culinary ingredients
- NOVA **3** Processed foods
- NOVA **4** Ultra-processed food and drink products



i Organic food may contains some UP marker such as refined oils, naturals extracts and aromas, natives starchs, glucose syrup, lecithin, citric acid...



Organic processing what else does this means ?

As part of a holistic, systemic approach

Declaration of organic status

Inspection at least once a year by an independent certifying body

Full traceability

Separation in space or time

Preventive measures

Clear and specific labelling rules



Role of processing in local organic food systems ?

- Holistic quality approach
- Local adopted
- Decentralisation (resilient food system)



Role of processing in local organic food systems ?

Holistic quality approach



Environmental emergency
Climate crisis
Biodiversity loss



Diet-related chronic diseases



Loss of reference points for consumers
Absence of perceived values
Proliferation of logos
Prices considered too expensive

Definition of Sustainable Organic Food

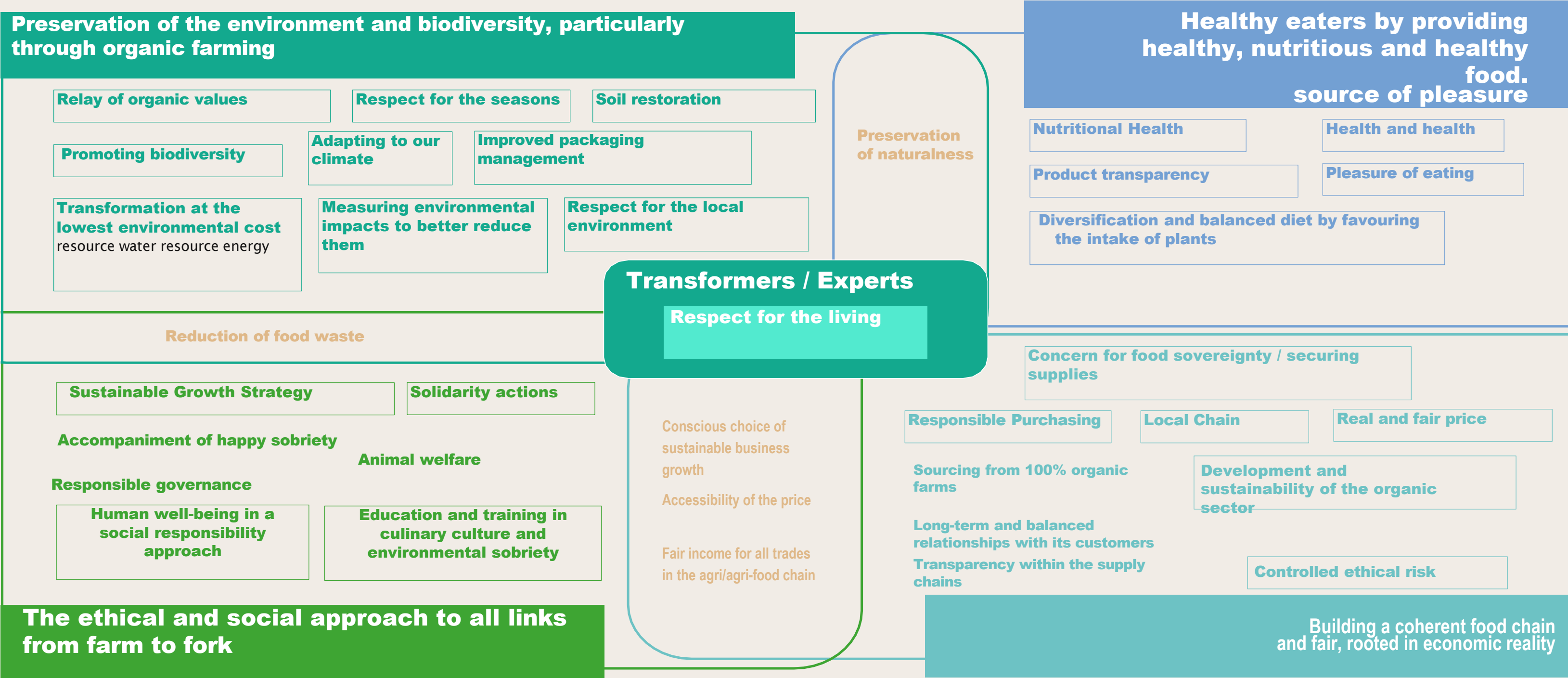
Sustainable food diet is food diet from organic farming that chooses to perpetuate living world for the well-being of current and future generations and the health of the planet.

This diet is based on 4 pillars:

- the preservation of the environment, the climate and biodiversity, through organic farming
- the health of farmers and eaters by offering healthy, nutritious and enjoyable food
- the construction of a coherent and equitable food chain, anchored in economic reality
- the ethical and social approach to all links from farm to fork



Each pillar is supported by stakes that are broken down into concrete actions





Role of processing in local organic food systems ?

Locally adopted

=> from economic, social, nutritional, traditional ... point of view

For example:

- Local production => harvesting at the peak of ripeness
- No fortification in organic food
- More taste
- More natural nutritional value

For example:

- No use of synthetic pesticides
- No pollution of local soil
- Good water quality for consumers or food and drink companies (beer production).

For example:

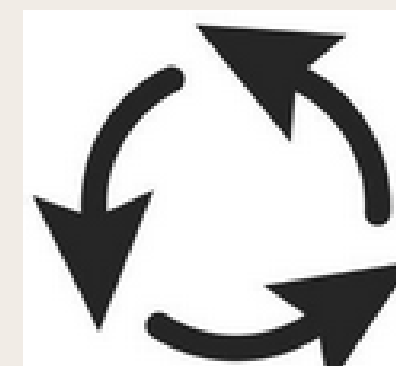
- Fewer additives in organic food
- Shorter shelf life of products
- The need to consume them more quickly and to minimize transport and storage times



Role of processing in local organic food systems ?

- Decentralisation (resilient food system / food sovereignty)

- Feeding animals with local organic produce
- No imports of synthetic fertilisers
- No reliance on chemical pesticides
- Encouraging the preservation of rare and native breeds in danger of extinction
- Responsible use of energy and natural resources, such as water, soil, organic matter and air





Examples

1. Organic public catering in Courtonne-la-Meurdrac
2. Le Valentin, Agricultural Lycée in South of France



Organic Public Catering / Local Sourcing

100% organic produce sourced largely from local producers.

Courtonne-la-Meurdrac, with a population of 676,

Multi criteria

Public health issues, soil and water contamination, and the loss of biodiversity are all challenges that have guided our actions

Step by step

The start of the change 2003 / 50% organic and local products 2014 / 100 % in 2017

Local Approach

Since 2020, sourcing **organic yoghurts and cheeses** from a supplier located **15 km** from the town.

Price and cost

The additional cost incurred by switching to 100% organic (around 50 cents per meal) is not passed on to families, to remain affordable for parents. The total cost of a meal is €5, including food and overheads. In 2020, families pay €3.62 per meal; the remainder is covered by the local council

Collective commitment

This success has been made possible by the **commitment** of elected representatives, staff and suppliers, through **effective supply chain management**, and by **very low food waste** (less than 1 kilo per day) –

Le Valentin, Agricultural Lycée in South of France An organic farm & processing lab

- A technical support for pedagogic purposes,
- An organic farm since 2010 on 65 ha
- 45 cows which produce 320 000 liters of milk per year
- 4,5 hectares of fruit trees : apples, plums, cherries, figs...
- 6000 m² of vines (grape variety Viognier)





Le Valentin, Agricultural Lycée in South of France An organic farm & processing lab



- A technical support for pedagogic purposes,
- An organic processing plant since 2023
- Producing blended yoghurt (with the farm milk)
- Producing fruit dessert (purée). From fruit from the farm but also from others producers (processing capacity up to 45 tons of fruits).
- Products are sold in short circuits (on site shop and catering).





Role of processing in local organic food systems ?

French context gives the opportunity to develop organic product in public catering (Egalim law)

- **Objectives** : diversify dairy products for catering
- **Demand** : Customers demand for «crème dessert »
- **Problem to solve** :
 - find a proper recipe with few additives (crème dessert is much more fragile than yogourt)
 - develop the product and adapt the processing line (the lab is already quite full and the machinery have to be adapted) => question : do they have to spin off the production ?
 - How much will the product cost ? would it be acceptable for customer ?



Role of processing in local organic food systems ?

Product Innovation : the technical issue !

- **Focus on recipe : which formulation will give the right texture and flavour !!**

it can be achieved via different ways :

- additives : which ones ? how many ? how much ?
- ✓ those permitted in organic production :
 - starch (wheat, maize, cassava, rice)
 - milk powder (firmness)
 - additives



Role of processing in local organic food systems ?

Product Innovation : the technical issue of formulation !

- **Focus on recipe : Texture and flavour !!**

Clean label ? starch (wheat, maize, cassava, rice) and milk powder (for firmness)

With additive from seaweed like carraghenan (E407), xanthan gum (E415), pectin (E440), sodium citrate (E331), carub/locusta flour (E410), lecithins (E322x)



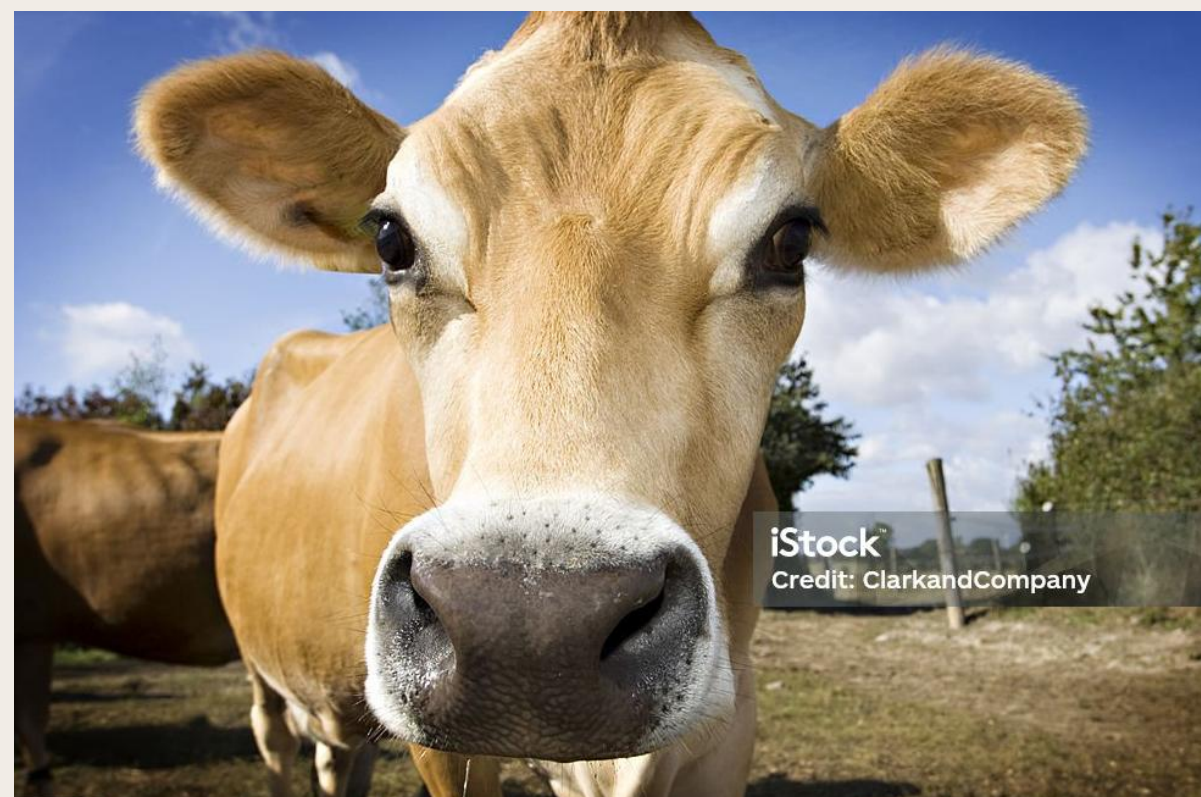
Role of processing in local organic food systems ?

Systemic approach : to what extend ?

Relying only on raw materials : we can also study the effects of fat content of the milk to reach a smoothy texture

it can have a systemic consequences like change the cattle composition (from full montbeliarde to jersey race)

will it be possible to handle the change ?





Role of processing in local organic food systems ?

Local approach : to what extend ?

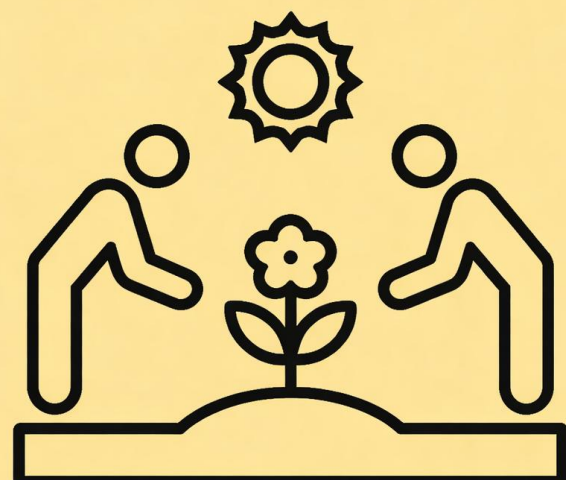


Flavor : everyone like vanilla and chocolate ?
local flavour can also add a value to the product (like chestnut and could reduce the risk of supply disruption or price level up but had also a impact on the product price)





Next Webinar 2026 – save the date!



**17th Sept.
2026**

Connecting farmers, communities, and markets in organic agriculture.

Speakers:

Michaël Wilde (Organic Embassy, NL)

Michèle Hürner (Biomondo, CH)

Camilla Mikkelsen (Økologisk Samsø, DK)

Auba Capo (Terranostra, ES)

Moderation:

Nina Lamprecht (FiBL, CH)



Wrap up: Become a member (free of charge)

Together we shape the future of local organic food systems in Europe:

- National & international meetings
- Peer-to-peer exchange
- Training activities
- Co-learning & co-creation

JOIN NOW!



InnOFoodLabs project is funded by the European Union (Grant no. 101181923) and by the Swiss State Secretariat for Education, Research and Innovation (SERI). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, REA or SERI. Neither the European Union, nor REA nor SERI can be held responsible for them.

hweizerische Eidgenossenschaft
nfédération suisse
nfederazione Svizzera
nfederaziun svizra



Contact us

Community of Practice:

Team: Ivrainna Brändle, Nina Lamprecht, Giulia Vogel, Ludivine Nicod, Regula Züger, Alexander Beck

- E-mail: cop@innofoodlabs.eu

Communication:

- Website: www.innofoodlabs.eu
- LinkedIn: @InnOFoodLabs
- YouTube: @InnOFoodLabs

General project coordination:

- Bram Moeskops IFOAM OE
- Jorge Del Cueto FIBL BX

