



For a definition of Social Innovation in the Organic Fruit Breeding

Italian online workshop

15 June 2023

University of Pisa and CIHEAM



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Agenda of the workshop

Objectives:

- To validate and appropriate the definition of Social Innovation (SI) developed and to be used within the InnOBreed project.
- To establish a network of stakeholders working on Social Innovation

Agenda:

1. Introduction and presentation of the relevance of SI in the OFB sector
2. How the defining process of SI took place within InnOBreed
3. Presentation of the different cases of SI mapped in Italy
4. Presentation of the definition drafts of SI and the OFB sector and discussion about their clarity and relevance
5. Recommendations to review and implement the definition drafts:
 - i) review of the proposed definitions
 - ii) new definitions that include the suggested changes

Relevance of SI in the OFB sector



InnOBreed social approach and expected social impacts

- Foster sustainable and ethical production of food.
- Create new varieties adapted to the local environment to provide food security for the local population.
- Farmers empowerment.
- Environment-friendly practices.
- Participative, multi-actor and multi-trait approach to Innovation.
- Improved open access to knowledge and novel governance models.



How to consider social aspects along InnOBreed

- It is important to consider how breeding and testing activities impact communities, society and social issues.
 - Participatory decision-making processes,
 - strengthening the role of women,
 - fair trade initiatives,
 - involvement of food networks,
 - positive effects on human health,
 - changes in regulations, incentives, values, behaviours, perceptions
 - consumer's role in the innovation process,
 - social equity.



Why Social Innovation?

- Moving from discontent with innovation as we know it, and its ability to deliver just and sustainable outcomes.
- Needs of integration including other processes, actors and purposes.



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How the defining process of SI took place within InnOBreed

Task and deliverable 5.1

5.1 - Multi-actor-informed definition and conceptual definition of social innovations in organic breeding sector

- Operational and inclusive definition
- Conceptual framework based on existent literature and adaptation to sector



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Outlining a conceptual framework for the understanding of SI in OFB based on the literature review

Mapping innovative experiences based on a **template on SI** experiences.

Carrying out interviews with relevant stakeholder in each country to complement data from the survey.

Online workshops to validate the definition of SI (at national and EU levels).



Presentation of the SI mapped in Italy



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Map of Italy with the mapped SI located



Sector	Name	Location
Conservation and production	Participative development of Susina di Dro	Trento
Education	Educational farms	Emilia Romagna
Conservation and production	Rosa Romana of the Bologna Apennines apple supply chain	Appennino Bolognese (Emilia Romagna)
Conservation	Research, preservation and communication of ancient varieties in Central Italy	Città di Castello (PG)
Conservation	"Giving-back" the local fruit biodiversity to local communities in Umbria	Umbria
Conservation	Fig conservatory and tourism at Giardini di Pomona	Cisternino (BR)
Education	Open air museum of biodiversity	Locorotondo (BA)
Conservation	Vineyard on the diversity of primitivo in Taranto prison	Taranto

SI 1: Participative development of Susina di Dro

The project is developed by **operative group of Trento province**.

It is aimed to promote sustainability in fruit growing and focused on the genetic and sanitary selection of the local variety of plums known as Susina di Dro, with the aim of providing healthy nursery material with defined nutritional and quality profiles.

Participative work has been done involving various stakeholders in fruit growing activities, including **producers, nursery operators, researchers, and consumers**.



Trento



SI 1: Participative development of Susina di Dro

Needs	Process	Outputs
<p>Enhancing local and/or rural development.</p> <p>Increasing economic opportunities in rural areas.</p> <p>Establishing pathways for sustainability, diversity and resilience.</p> <p>Protection of agricultural biodiversity.</p> <p>Protection of cultural heritage.</p> <p>Protection of the knowledge necessary to sustain them.</p> <p>Providing open and easy access to diverse seeds/plants.</p> <p>Re-framing dominant agricultural and rural development paradigms (e.g., valuing old varieties).</p> <p>Restoring the social function of agriculture: solidarity, integration, developing relations and local community.</p>	<p>Participative development of varieties.</p> <p>End-users' involvement, e.g., connection with consumers.</p> <p>Establishing connections with organic networks.</p> <p>Cultivating trust base community and relations.</p> <p>Exchanging experiences, knowledge and info.</p>	<p>Innovative market models, e.g.:</p> <ul style="list-style-type: none"> -Multifunctionality and integration of tourism. -New options for the growth of the organic market, e.g., collaboration with public procurement. - Bio-districts. <p>Conservatories or other means of ensuring access to fruit plants.</p> <p>Exchanges of fruit plants among gardeners, farmers, scientists and researchers.</p> <p>Sale of traditional varieties for professional purposes.</p> <p>Sale of traditional varieties to amateur growers.</p> <p>Sale of fruit from traditional varieties to consumers.</p> <p>Network of exchanges of experiences and knowledge.</p> <p>Innovative partnership with research.</p>

SI 2: Educational farms

Fattorie didattiche is a pioneer project from the **Region Emilia Romagna**, started in 98-98 to implement direct contact with farmers to foster citizens' knowledge and direct experience of food and agriculture.

Farmers are charged with designing and conducting the experience of agricultural and taste education.

Today, more than 300 participating farms.

Emilia Romagna



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SI 2: Educational farms

Needs	Process	Outputs
Enhancing local development. Increasing economic opportunities in rural areas. Establishing pathways for sustainability, diversity.	End-users' involvement, e.g., connection with consumers. Establishing connections with productive districts. Inclusion of disadvantaged categories, including women and youth. Cultivating trust base community and relations. Exchanging experiences, knowledge and info.	Innovative market models, e.g.: -Multifunctionality and integration of tourism. -New options for the growth of the organic market, e.g., collaboration with public procurement. -Vertical connection in the sector. Conservatories/means of ensuring access to plants. Sale of fruit from traditional varieties to consumers. Experiences of social agriculture. Capacity for adaptation to Climate Change. Network of exchanges of experiences and knowledge. New communication tools and supports. Events for sharing memory, taste and heritage.



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SI 3: Rosa Romana apple of the Bologna Apennines supply chain

The project, developed by **Region Emilia Romagna**, aims at the reintroduction of old local apple variety cultivation in the original area using organic agriculture.

It brings together the fruit growers who produce Rosa Romana apples, processors and commercial operators to adopt common promotion and sales strategies.

In the field, it promotes the adoption of cultivation techniques with low environmental impact, according to the principles of organic farming in order to save old varieties from extinction.



Appennino
bolognese (Emilia
Romagna)



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SI 3: Rosa Romana apple supply chain of the Bolognese Apennines

Needs	Process	Outputs
Enhancing local and/or rural development. Increasing economic opportunities in rural areas. Establishing pathways for sustainability, diversity and resilience. Protection. of agricultural biodiversity. cultural heritage, and associated knowledge Re-framing dominant agricultural and rural development paradigms (e.g., valuing old varieties). Restoring the social function of agriculture: solidarity, integration, developing relations and local community. Need for trust-based modes of community organizing. Need of restoring belief in the future. Need for promoting legislation at all levels to ensure farmers' and gardeners rights to all of the above.	Establishing connections with productive districts. Establishing connections with organic networks. Cultivating trust base community and relations. Exchanging experiences, knowledge and info.	Innovative market models, e.g.: -Multifunctionality and integration of tourism. -New options for the growth of the organic market, e.g., collaboration with public procurement. - Bio-districts. Conservatories or other means of ensuring access to fruit plants. Exchanges of fruit plants among gardeners, farmers, scientists and researchers. Sale of traditional varieties for professional purposes, to amateur growers., to consumers. Lobbying activities to promote farmers' rights in legislation. Network of exchanges of experiences and knowledge. Innovative partnership with research. Events for sharing memory, taste and heritage.



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SI 4: Research, preservation and communication of ancient varieties in Central-Italy

The main focus of the **Archeologia Arborea Foundation** is the research and conservation of old and local fruit varieties (Central-Italy).

For the last 40 years, the Foundation has been searching for ancient local varieties in abandoned farms and monasteries.

The collection serves to maintain and share plant and cultural resources, as well as the historical, cultural and landscape heritage.



SI 4: Research, preservation and communication of ancient varieties in Central Italy

Needs	Process	Outputs
<p>Increasing economic opportunities in rural areas.</p> <p>Establishing pathways for sustainability, diversity and resilience.</p> <p>Protection. of agricultural biodiversity and cultural heritage.</p> <p>Restoring the social function of agriculture: solidarity, integration, developing relations and local community.</p> <p>Need for promoting legislation at all levels to ensure farmers' and gardeners' rights to all of the above.</p>	<p>End-users' involvement, e.g., connection with consumers.</p> <p>Establishing connections with organic networks.</p> <p>Exchanging experiences, knowledge and info.</p>	<p>Innovative market models, e.g.:</p> <p>-Multifunctionality and integration of tourism.</p> <p>Exchanges of fruit plants among gardeners, farmers, scientists and researchers.</p> <p>Reinvented agroecological methods.</p> <p>Network of exchanges of experiences and knowledge.</p> <p>Innovative partnership with research.</p>



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SI 5: Experience to “give-back” the local fruit biodiversity to local communities in Umbria

Institution-led experience for giving-back the local fruit biodiversity to the local communities, developed by the **Parco Tecnologico Agroalimentare dell Umbria**.

The park is complementing its research, collection and characterization of the local germplasm of fruit varieties with activities aiming at plant material multiplication and distribution within the local communities.



Umbria

LA BIODIVERSITÀ
DI INTERESSE
AGRARIO



LEGGE REGIONALE 12/2015
TUTELA DELLE
RISORSE GENETICHE
AUTOCTONE DI
INTERESSE AGRARIO



SI 5: Experience to “give-back” the local fruit biodiversity to local communities in Umbria

Needs	Process	Outputs
<p>Enhancing local and/or rural development.</p> <p>Protection. of agricultural biodiversity and cultural heritage.</p> <p>Providing open and easy access to diverse seeds/ plants.</p> <p>Re-framing dominant agricultural and rural development paradigms (e.g., valuing old varieties).</p>	<p>Participative development of varieties.</p> <p>End-users’ involvement, e.g., connection with consumers.</p> <p>Exchanging experiences, knowledge and info.</p>	<p>Innovative market models, e.g.:</p> <ul style="list-style-type: none"> -Multifunctionality and integration of tourism. <p>Conservatories or other means of ensuring access to fruit plants.</p> <p>Sale of traditional varieties:</p> <ul style="list-style-type: none"> • for professional purposes. • to amateur growers. • to consumers.



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SI 6: Fig conservatory and tourism at Giardini di Pomona Gardens

The Botanical conservatory (approx 10 ha) is developed by the association **Pomona onlus** (Associazione Nazionale per la valorizzazione della biodiversità).

It focuses on figs and Mediterranean fruits, highly adapted to hydric scarcity.

It combines the conservation of biodiversity with scientific research and dissemination.

The activities comprises the guided tours of the collections, tourism, the sale of quality agricultural products transformed in an artisanal way.



Cisternino (BR)

SI 6: Fig conservatory and tourism at Giardini di Pomona Gardens

Needs	Process	Outputs
Protection of agricultural biodiversity. Protection of cultural heritage.	<p>Exchanging experiences, knowledge and info.</p> <p>Other modes of organizing/governing:</p> <p>Collaborations with amateurs to select new varieties</p> <p>Collaboration with other research centers and conservatories to keep and use those fig biodiversity.</p>	<p>Innovative market models, e.g.:</p> <ul style="list-style-type: none"> • Multifunctionality and integration of tourism. • Accommodation facilities for self-financing, and then to bring the public closer. <p>Conservatories or other means of ensuring access to fruit plants.</p> <p>Exchanges of fruit plants among gardeners, farmers, scientists and researchers.</p>

SI 7: Open-air museum of biodiversity

Locorotondo (BA)

It is an innovative museum dedicated to presenting farmer traditions, culture, and local biodiversity from the Apulia region, developed by **CRSFA**.

The museum is located within the biodiversity fields (fruit and vineyards) and restored rural buildings.



SI 7: Open-air museum of biodiversity

Needs	Process	Outputs
<p>Establishing pathways for sustainability, diversity and resilience.</p> <p>Protection. of agricultural biodiversity.</p> <p>Protection of cultural heritage.</p>	<p>Participative development of varieties.</p> <p>End-users' involvement, e.g., connection with consumers.</p> <p>Establishing connections with organic networks.</p> <p>Exchanging experiences, knowledge and info.</p> <p>Employers' inclusion in managerial aspects.</p> <p>Other ways of knowing and exchanging knowledge:</p> <p>Organization of experiential activities for civil society</p>	<p>Methods and capacity for adaptation to Climate Change.</p> <p>Network of exchanges of experiences and knowledge.</p> <p>Innovative partnership with research.</p>

SI 8: Vineyard on the biodiversity of primitivo in Taranto prison

The vineyard, managed by **Taranto prison in collaboration with CRSFA and a winery**, is born with the aim of conserving different biotypes of Primitivo recovered in the area and allowing social recovery through the work of prisoners.

Approx 10 prisoners have the possibility to work in the vineyards, with traditional practices, and learn how local biodiversity is grown, used and preserved.



Taranto



SI 8: Vineyard on the biodiversity of primitivo in Taranto prison

Needs	Process	Outputs
<p>Protection of agricultural biodiversity. cultural heritage, and associated knowledge.</p> <p>Restoring the social function of agriculture: solidarity, integration, developing relations and local community.</p>	<p>Participative development of varieties.</p> <p>End-users involvement, e.g., connection with consumers.</p> <p>Inclusion of disadvantaged categories, including women and youth.</p> <p>Exchanging experiences, knowledge and info</p> <p>Other ways of knowing and exchanging knowledge: Organization of experiential activities for civil society.</p>	<p>Network of exchanges of experiences and knowledge.</p> <p>Innovative partnership with research.</p> <p>Innovative partnership with civil society organization.</p> <p>New communication tools and supports.</p>



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Draft definition of SI in the OFB sector

Draft definition of the OFB sector

From the survey conducted by Fibl in January 2023

1. Technical considerations (4 sub-categories)
2. Ethical considerations
3. Marketing considerations
4. Other considerations

InnOBreed definition

The **Organic fruit breeding** can be defined as the process of developing, **under growing organic conditions**, new fruit varieties that are adapted to organic farming systems and meet the needs of organic growers, **market** and consumers. This involves selecting and crossing parent plants with **specific desirable traits**, such as **disease and pest multi-resistance and robustness**, while also taking into account factors such as the value of **local old varieties** and **maintaining genetic diversity**. The underpinning approach **excludes genetic engineering** and privileges **participative breeding**.

Daft definition of the OFB sector: discussion

Suggestion for discussion: We should try to go beyond the elements included in the formal definition of OFB and underling elements important for InnOBreed.

Missing elements?

1. Reference to the territory / local adaptation, needs
2. Community / small farmers needs
3. Soil health
4. Environmental sustainability
5. Biodiversity - explicitly to mention?



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Preliminary general definitions of SI

1. Bureau of European Policy Advisers

Social innovations are innovations that are **social** at both **their ends** and **their means**. Specifically, we define social innovations as new ideas (products, services and models) that simultaneously meet **social needs** (more effectively than alternatives) and create new social relationships or collaborations.

Innovations that are not only good for society but also enhance society's capacity to act.

*SI are innovations that aim at meeting social needs and addressing societal problems, aiming at **rural development, end-user involvement, innovative market and organizational solutions and communication tools**.*

2. Social Innovation in Marginalised Rural Areas (SIMRA)

The **reconfiguring of social practices**, in response to **societal challenges**, which seeks to enhance **outcomes on societal well-being** and necessarily includes the **engagement of civil society actor**.

3. SmartChain (in the context of short food supply chains)

Social Innovations (SI) are processes that change short food supply chain systems by altering the **collective perspective of the actors** involved and their corresponding **action mode**, thus leading to new or improved products or processes, which result in the **creation of sustainable value** in the short food supply chain's economic and social performance .

The 3 pillars of SI

NEEDS Societal challenges

- SI originates from social demands that are traditionally not addressed by the market or existing institutions and are directed towards vulnerable groups in society.

ENDS Social values

- SI aims to create sustainable social value, enhance outcome and social well-being, on the long term. It aims at increasing social capital and sustainability.

MEANS Process/Social Interactions

- SI is based on social interactions and changes in knowledge, motivations, capacity of participating. It develops new strategies to reform society in the direction of a more participative and sustainable arena.



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Adapting SI to InnOBreed

InnOBreed theoretical stance

Based on the needs and goals of InnOBreed, we consider relevant to consider the following aspect in the definition of SI to be used within the project:

- SI result from a **process of co-construction** - the co-design of the SI should be done with the society, and should not be fully institutional driven / top down.
- SI should be “**socially relevant**” and corresponding to societal well-being in a wider context, encompassing also **economic or environmental** considerations,
- Need to understand the specific characteristics of different **places** which might limit replication/scaling-up of SI
- The **Innovation system** should be considered: relationships between different types of innovation (organizational, institutional, marketing, technical/product) that evolve over time.
- **SIs and business innovations** are not always strictly separated because innovations can have more than one focal objective (e.g. profit and quality of life).
- It is important to look at new relations and social practices within **formal organisations, informal networks and/or governance arrangements**.

Adapting SI to InnOBreed / OFB sector

Specificity of the OFB sector

The following list of elements were extrapolated from an analysis of the definitions of SI included in the filled Templates that were used to map SI in the projet countries.

- Long term scope (adapt to CC, educate young people that are the future consumers)
- Context-dependency of sustainable breeding (adaptation to the territory)
- Important role for knowledge dynamics, esp. localfarmers knowledge and consumers education
- Necessary active involvement of growers and consumers/citizensNecessary active involvement of growers and consumers/citizens.
- Need to be transdisciplinary, combining competences in plant biology, genetics and agronomy, and competences in socio-economic sciences.
- Tight connection between researchers and the professional world.

Draft definition of SI in the OFB sector

Social innovation in the organic fruit breeding sector refers to the development of **new approaches/ perspectives and social practices** that address **social, environmental, and market challenges** faced by the sector, especially by **organic fruit growers**, and the overall society and planet.

It comprises a **reconfiguration of social relationships and collaborations between different actors**, including farmers, breeders, researchers, policymakers, and consumers.

Its aim is to **improve the well-being, empowerment, and inclusion** of all stakeholders involved in the production and consumption of organic fruits while promoting social, economic, environmental sustainability on the long term.



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Draft definition of SI in the OFB sector

Suggestion for discussion:

We should try to synthesize and remove non-essential aspects. It could be useful to distinguish between: (i) necessary elements/criteria and (ii) relevant but not necessary elements/criteria.

Missing elements?

- Should the SI be citizen-led or citizen-engaged or both
- Which are the sector of application/drivers: public sector, civil society, consumer, business sector (SIMRA 17).
- Should make explicit reference to participatory approach and methods
- Being locally adapted
- Mention of specific aims/outputs/outcomes: rural development, defence of biodiversity, end-user involvement, innovative market and organizational solutions and communication tools.
- Trust among different actors (research/professional world)