



# FOODLEVERS

**Deliverable 1.1: Creation of a network of stakeholders**

## Leverage points for organic and sustainable food systems

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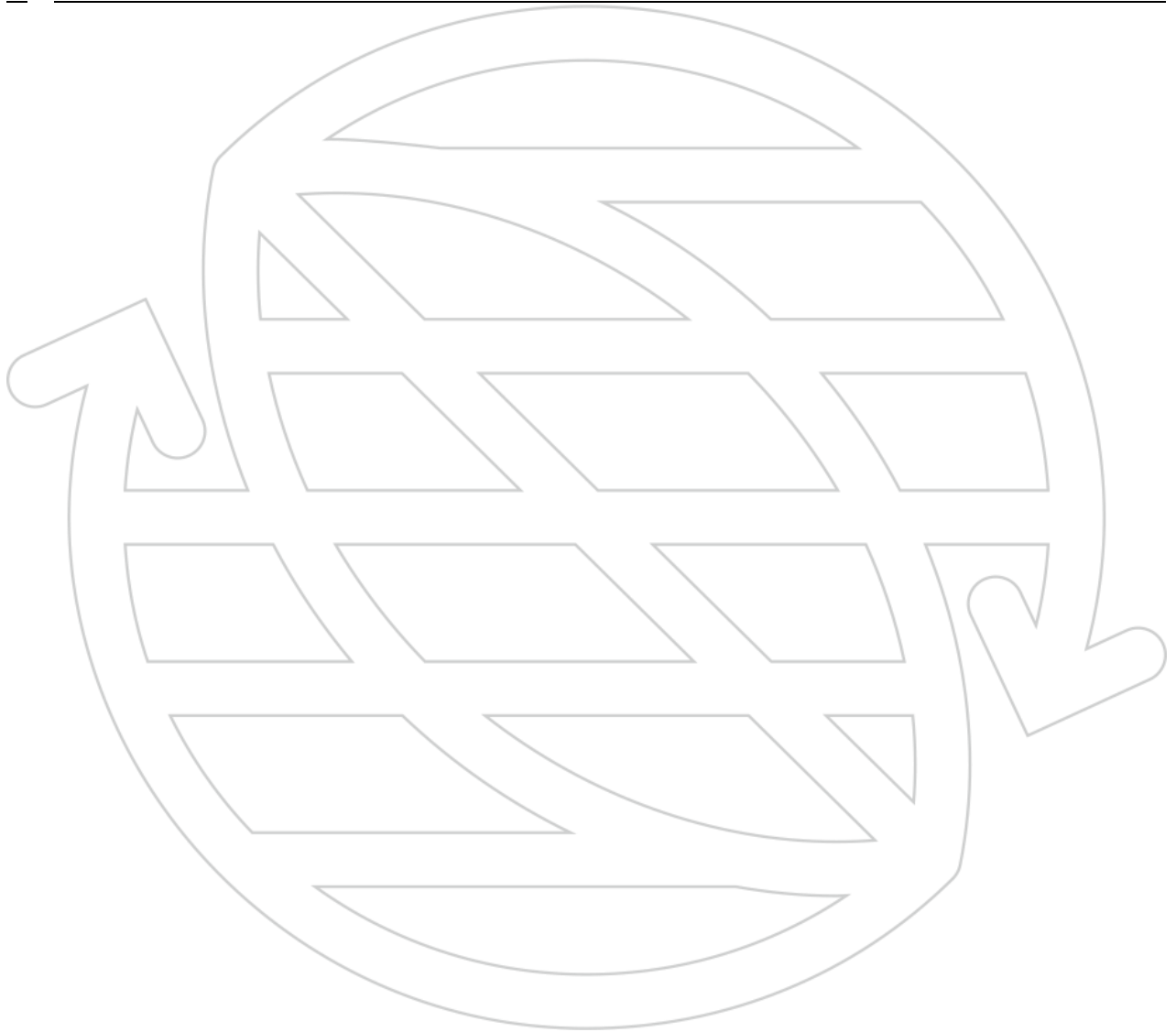


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## 1. Objectives

Within the FOODLEVERS project we will assess a wide range of innovations within European food systems through the lens of a Donella Meadows' inspired "leverage points" research framework. Selected innovations will be assessed in terms of their influence on **one-or-more** of the dimensions of "deep leverage" proposed by Abson et al. <sup>1</sup>: "Re-connect": reconnecting people to nature to encourage sustainable behaviours whilst shortening feed-backs and improving wellbeing; "Re-structure": re-organising institutions and considering how institutional dynamics can create an enabling environment for sustainability and; "Re-think": considering how knowledge is created and used, shared and validated. Research addressing the relationships between such "leverage points" can help to build an understanding of effective practices, and how these interact within the design of and intent of complex systems <sup>2</sup>.

Key to building this understanding is an exploration of how innovative farmers (and other food system actors) are pushing the boundaries of what is known, what is expected and what is thought to be do-able. Outputs will contribute to social theory about re-organisation and restructuring food systems <sup>3</sup> and to the development of practical recommendations for policy and practice (e.g. guidance notes on policy design, practice abstracts for farmers and land managers).

This document therefore provides an overview of the FOODLEVERS Innovative Case studies (FICs) and associated stakeholders groups. Each of the FICs will be assessed in detail to reveal the leverage potential of key innovation(s) currently being applied within each case, and their impact across multiple domains of sustainability (environmental, economic, social, governance <sup>4</sup>).

## 2. Criteria and definitions used for the Case Studies

The innovations considered in the selection of case studies were based on the definition provided by the Organisation for Economic Co-operation and Development (OECD<sup>5</sup>):

*"An **innovation** is a **new or improved product or process** (or combination thereof) that **differs significantly** from the unit's previous products or processes and that has been **made available** to potential users (product) or **brought into use** by the unit (process)"*

As the impact of such innovations rarely come as 'silver bullets' but from simultaneous changes across supply chains, the final selection of FICs considered the coverage of four areas of innovation: (1) Products; (2) Production techniques; (3) Marketing; and (4) Organisation and governance as defined in Table 1. Considering these various elements is vital to enable assessments in FOODLEVERS to identify trade-offs/synergies between production, distribution and consumer stages and between "top-down" (e.g. retailer-led sustainability labels) and "bottom-up" (e.g. farmer led knowledge exchange) innovations.

Table 1: OECD innovation categories from manual on The Measurement of Scientific, Technological and Innovation Activities<sup>5</sup>

Product innovations	Production techniques	Marketing	Organisation and governance
<ul style="list-style-type: none"> <li>• New or improved good or service</li> <li>• Differs significantly from the firm’s previous goods</li> <li>• Already introduced on the market</li> </ul>	<ul style="list-style-type: none"> <li>• New or improved process for producing food or fibre that has been brought into use</li> <li>• Includes significant changes in techniques, equipment and/or software.</li> </ul>	<ul style="list-style-type: none"> <li>• New or improved approach to pricing, product placement and product promotion;</li> <li>• Includes advertising for trademarks that are not directly related to a specific product</li> <li>• Public relations activities</li> </ul>	<ul style="list-style-type: none"> <li>• A new organisational method in business practices, workplace organisation or external relations.</li> <li>• Also refers to administration and management (e.g. for human resources).</li> </ul>

Many innovations within the above categories are “bundled”, i.e. presenting characteristics that span more than one type of innovation<sup>5</sup>. This is due to the complementarity between different types of innovations. Some possible combinations of innovation types are as follows:

- A business process innovation can significantly improve the quality of a product, resulting in a joint business process and product innovation.
- A product innovation can require a supporting business process innovation. For example, a new online function for selling products is both a business process innovation (requiring ICT and web development) and a service innovation for potential users. If it creates a new sales channel for the first time, it can also be a marketing innovation.
- Product and business process innovation can be closely intertwined, especially when the process is not distinguishable from the product. This applies particularly to services for which production, delivery and consumption occur simultaneously.

Each FIC may therefore represent a selection of innovations and/or a single innovation in practice.

### 3. Overview of the FOODLEVERS case studies and their associated stakeholder groups

Using the criteria described above the following case studies were identified within the consortium through individual contacts and discussion / selection through online meetings held with the project management team throughout 2020-2021 (Table 2).

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Table 2: Overview of the FOODLEVERS case studies and their attributes

Case study name (Country)	Products	OECD Innovation category(ies)	Description of innovation	Description of leverage potential
CSA: Die Kooperative Frankfurt am Main - cooperative of biodynamic farms (DE)	Vegetables, Fruits, Honey, Eggs, Juice, Bread, Noodles	Production techniques, marketing, organisation and governance	biodynamic city-farm cooperating with a large network of regional organic farms, consumer-driven decision making, innovative method of distribution	<b>Reconnect:</b> Members of the CSA are encouraged to help on the farm (connecting urban consumers to producers), educational offers concerning nature are planned. <b>Restructure:</b> short supply chains providing exclusively for the members of the CSA. Restructuring the mobility by using cargo bikes for distribution. Rethinking the way the CSA is governed by letting everyone have a say in how future plans should be executed
Fattoria Cupidi: Organic farm (UAA 15 ha) managing silvopastoral systems where walnut plantation and olive orchard are grazed by laying hens (IT)	Eggs, nuts and extra virgin olive oil (EVOO). The farm exploits by products and residues to produce manure, biogas and energy.	Product, Production techniques, Marketing, Organisation and governance. Multifunctionality, high quality products, circular economy, social responsibility and attention to the well-being of people represent the main innovations of the farm.	The farm is included in an agreement on the sustainable management of local resources, based on organic principles and practices, aiming at the fulfilment of the economic and sociocultural resources of the territory. The farm promotes educational programmes addressed to people interested to live rural farms, students, organized groups and disadvantages people. The farm has a strong and constructive relationships with different organizations and public institutions, and it has stable partnerships and networks with local services, consumers, young people and other stakeholders.	<b>Re-structure:</b> the cooperation with local administrations permits to adopt jointly responsible management of natural resources with the aim to promote virtuous processes as green public procurement, introduction of organic food in school and collective catering, avoid use of pesticides and herbicides in urban green, public areas and roads, increase of waste recycling and supporting the use of biodegradable materials as dishes and glasses in public events. <b>Re-connect:</b> Educational activities are laboratories and active pedagogical settings where people can learn how food is produced and the connection between nature, agricultural products and nutrition. The connection with the nature is particularly relevant for disadvantaged and vulnerable people who can find benefits from a constructive relationship with the nature. <b>Re-think:</b> the farm organizes meetings, workshops and seminars open to farmers and general public to spread and share knowledge about sustainability, circular economy, best practices, organic food. This action has a multiplied effect in the context of the bio-district.
Pasture Community - organic farms (PL)	Beef, vegetables, fruits, wood	Product (1-3), Production techniques (1) , Marketing, Organisation and governance (1)	Local farms network to penetrate the market and get "grass-fed" standard for beef; to improve short value chains and create joint shop for community farmers	<b>Restructure:</b> Local food encouraging restructure of distribution channels. Reconnection of farmers and to nature. Rethink: farmer to farmer/consumer knowledge sharing
Stroud CSA - biodynamic mixed farm (UK)	Vegetables, beef, pork, poultry meat, eggs, dairy	Product, Production techniques, Marketing, Organisation and governance	Community supported farm with over 350 members and innovative governance structure	<b>Reconnection</b> to nature, <b>Restructure</b> of distribution channels, <b>Re-thinking</b> access to land for new entrants / young farmers
Ferma Ecologica Topa - biodynamic mixed farm (RO)	Vegetables, fruits, dairy, medicinal plants, jams, pickles,	Organisation and governance, Marketing	Biodynamic farm cooperating with a large network of regional organic farms, consumer-driven decision making, innovative method of distribution, Volunteer program, On site learning for local school children	<b>Reconnection</b> to nature through education of young school children on site, reconnection to nature of volunteers from all over the world on site, through volunteers program. <b>Restructure</b> of distribution channels. Product selling and distribution is being made through several channels, from using a trailer to sell products in different places, on farm store, direct distribution with food baskets, to food hubs and on-line platforms.
Mushroom cultivation in forests (FI)	Edible mushrooms (shitake, oyster, truffles) and medicinal mushrooms (reishi, chaga), wood products, (mushroom extracts)	Product, production techniques, marketing, circular bioeconomy	Forest farming: Mushroom farms and companies selling mushrooms (edible mushrooms mostly organic) grown in forests. Healthy mushrooms produced using small diameter trees (=forestry side product). More efficient land use (forestry + food products from the same area of land). More efficient use of side products (small diameter trees are now used for food production instead of bioenergy). Some of the companies are also offering courses to farmers and other people interested in mushroom cultivation.	<b>Restructure</b> and <b>Rethinking</b> supply chains and conventional production methods. <b>Restructure:</b> short-supply chains and on-farm sales. Some farms also sell to local restaurants. <b>Reconnect:</b> some of the mushroom companies offer courses for farmers and other interested people, mainly from big cities such as Espoo, Vantaa, Helsinki. After the course, some people might feel a bit more reconnected with nature and food production again, they can even try it themselves at home. <b>Rethink:</b> The companies make good use of the available scientific knowledge in designing their growing systems. Use of scientific knowledge gives a competitive advantage and added product value (premium products).
Het Polderveld (BE)	vegetables, herbs, flowers, potatoes, fruits, sheep meat, poultry	Products and production techniques. Especially the farms' marketing and the consequent organisation and governance are innovative, due to the close collaboration with AZ Zeno, the local hospital	Products: certified organic. Hospital: organic meals, additional service to the patients: agroforestry plot as "healing garden" Production techniques: Organic, focus on FAB, minimum tillage, mulching Marketing: CSA principle is used both for private customers (self-harvesting) and for the local hospital Organisation & governance: Community-Shared Agriculture (CSA). At the beginning of the season, the cultivation plan is made in consultation with the hospital. The hospital kitchen prepares about 1200 meals a day. With a number of vegetables such as pumpkin, celeriac and courgette, Het Polderveld can meet almost the entire annual requirement.	<b>Re-connect:</b> Large scale catering connected to local farm, Connecting patients to nature/agriculture ("healing garden") <b>Reconnect</b> consumers to nature/agriculture Re-structure: new cultivation dynamic + new kitchen dynamic; <b>Re-think:</b> Entry point to reach potential future organic consumers (the patients) without pre-set positive attitude



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A range of stakeholder organisations were also identified for each case study to assist with dissemination and project engagement (Table 3).

**Table 3: Overview of stakeholder groups connected to each FOODLEVERS case study**

Case study name	Stakeholder categories										
	Farmer / land manager groups	Local community groups	Contractors / contractor associations	Extension services / consultants	Consumer groups	Retailers	Processors	Environmental protection / conservation organisations	Government bodies	Researchers / academics	Other - please add
CSA: Die Kooperative Frankfurt am Main - cooperative of biodynamic farms	6 cooperation farms supplying different products: Eichwaldhof Familie Förster; Inselhof, Björn Kral; Bioland-Obsthof Speth; MainAppellhaus Lohrberg; Biohof Dieffenbach; Frutas Biobena		Logistic subcontractor (cargo bikes): SAR -cargo bike logistic (about 70% of food boxes is delivered by SAR)  cooperation partner for additional product supply: gramm.genau  suppliers of processed goods: Denningers Mühlenbäckerei; Mulinbeck Bäckerei; Bee Friends Frankfurt e.V.  network of distribution hubs: 23 stores/public facilities/private individuals	other CSAs as consultants: Kartoffelkombinat; Kartendorfer Hof  umbrella association: Solawi- Genossenschaft; Netzwerk Solawi	CSA members (mainly private individuals)	organic wholesale for member store: Phönix  own store: Suppenladen (catering); Naturkost (will be developed to member store)	processor for fruit juices: Roter Hamm Lohrpresse (apple, pear, quince)	organic association: Demeter (certification body)	environmental authority; authority for construction and real estate; local advisory council		local citizen association for sustainable development: Bürger AG
Fattoria Cupidi: Organic farm (UAA 15 ha) managing silvopastoral systems where walnut plantation and olive orchard are grazed by laying hens	Network of farms managing organic and agroforestry systems	Tramercato; Comunità Rurale Diffusa; Biodistretto Via Amerina e delle Forre  Biodistretto del Lago di Bolsena		Agronomist Council and Farmer Associations	GAS – Gruppo di Acquisto Solidale (Solidarity Purchase Group)	COOP – large distribution group	*Gusto Umbria Terre dell'Upupa*: Public processing laboratory	AIAB (Italian Association of Organic Farms)  Slow Food – global, grassroots organization, founded to prevent the disappearance of local food cultures and traditions.  Val di Paglia Bene Comune environmental association	Local Municipalities  Local Action Group	CNR – National Research Council  Enrico Petrangeli – Coordinator of Trame di Comunità a social inclusion project for community cooperative building	
Pasture Community -organic farms	28 farms supplying different products: Bodak Mikolaj, Hortal Jan, Hyczko Artur, Kaszczak Pawel, Kleczyński Sławomir, Kuczala Małgorzata, Kula Andrzej, Lepak Pawel, Lukasz Mariusz, Majerski Andrzej, Mirek Andrzej, Mitoraj Stanislaw, Nowak Andrzej, Ogrzałek Marian, Olchawa Kamil, Rozwadowski Adam, Siuta Mirosław, Tomasiak Bolesław, Tomasiako Jan, Wal Romusik, Worobel Józef, Wozniak Grzegorz, Wójcik Andrzej, Wójcik Marcin, Wójcik Wojciech, Karpiński Jan (NO), Wasylczak Pawel (NO), Szura Jan (NO)	Association of Cattle Breeders "Pasture"	OIKOS Company - a company responsible for meat processing and distribution	Regional Advisory Centres (Małopolskie and Podkarpackie regions)	individuals (80%), wholesalers (15%), restaurants and processors (5%)	OIKOS Company own stands (3), retail stores in 6 cities (10)	OIKOS Company, DanKon Slaughterhouse	Organic association, Living Earth Coalition (the biggest Polish NGOs coalition promoting agroecology, including WWF, Greenpeace, Polish Agroforestry Association)	The Agency for Restructuring and Modernisation of Agriculture (ARMA) - CAP payment agency; District Veterinary Inspection	LUNG, SGGW at Warsaw, Rzeszów University	
Stroud CSA - biodynamic mixed farm	National Farmers Union, Agriculture Development Board	CSA network	Agricultural Industries Confederation	FWAG		Waitrose, Sainsburys, Tesco, Morrisons			Defra, Env. Agency	Reading, RAU, Organic Research Centre	Sustainable Food Trust
Ferma Ecologica Topa - biodynamic mixed farm	Colina Farms, Fermele Ecologice Transilvania, EcoRik, BioCulture,	ADEPT Foundation, Local Action Group - Dealurile Tamavelor, Local Action Group Somes Antes	cooperation partner for additional product supply - Beekeeper		Private FET customers, Biocoop customers, Culinariativ - Food Blog	Biocoop - organic products store chain, Nod Verde - Food Hub		Ecoruralis	AFIR - Association for Financing Rural Investments, APIA Agricultural Payments and Intervention Agency	University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca	
Mushroom cultivation in forests	Several farms cultivating edible mushrooms (shiitake & oyster, about 4 farms) and farms which have established truffle orchards over the last couple of years (> 10 farms).		Companies buying and selling mushrooms and/or processed mushroom products: KääpäBiotech, Helsinki, Baltic Truffles Oy, Juva Truffle Centre, Polar Shiitake Oy, Suomen Pakuri	Pro-Agria, Suomen Pakuri, KääpäBiotech	Restaurants and private customers	Kesko (K-City Market and K-ruoka market) and S-group (Prisma and S-market)	KääpäBiotech, FOODIN, Polar nutrition, Kouvola Herkku Oy, Herkkujuustola Oy	Baltic Sea Action Group	Maa- ja metsätaloustieteiden - Ministry of Agriculture and Forestry	Luonnonvarakeskus (Natural Resources Institute Finland); Luominstituutti (Finnish Organic Research Institute), University of Eastern Finland	
Het Polderveld	Polderveld farmers CSA-network: self-learning network, currently comprising 64 farms spread over Flanders. Organic sector networks Other (organic) farmers' organisations			CSA-network, Organic sector networks, Living Lab Agro-Ecology and Organic Agriculture	private CSA customers, AZ Zeno patients		AZ Zeno catering		Department of Agriculture and Fisheries	In first instance: the members of the Flanders' advisory board	

The identified case studies and stakeholder groups will provide a valuable resource to learn from innovative practitioners and engaged citizens within the FOODLEVERS project.

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