Collection of factsheets about operational governance models implemented in the sectors represented by the Hungarian Engage4BIO Hub

Outline

Innovative governance models can play a crucial role in fostering sustainable development in both urban and rural areas. They often represent a fundamental shift from traditional, top-down approaches to more collaborative, networked "governance" systems, involving a wider range of stakeholders that can **co-create new forms of interaction** between public and private actors, e.g. government bodies, municipalities, citizens, company representatives and other actors.

Innovative governance aims to empower communities and increase their capacity to participate in collaborative processes. Implementing such models can bring the following benefits:

- strengthening local social networks, creating more resilient and inclusive communities,
- building trust between municipalities and citizens,
- contributing to environmental education,
- enabling societies to adapt, collaborate, empower, and manage their resources more sustainably.

Collecting good practices of innovative governance provides an information tool that enables regional policymakers, municipalities and other communities to **learn from other communities' strategies and models** and to gain insights into how to tackle specific challenges. Learning from existing practices, whether national, international, or local, is essential for effective and structural change that benefits local communities. It can help to transfer successful approaches to new contexts, even if tailoring is required.[1]

Tangible results and proven local successes encourage the spread of good practices from one place to another. Presenting good practices can empower communities and individuals by showcasing how active citizenship can contribute to environmental education, strengthen local social networks, and build trust between municipalities and citizens. It can also help to **identify key factors that foster socially innovative governance**, such as decentralised government structures and advanced interregional networking.

National platforms[2] can support knowledge exchange and provide specific skills relevant to the national context, further aiding capacity building.

Scoping

The following aspects have been taken into account when compiling this collection of innovative governance models:

- the target area of the models included in the collection should be the production and/or valorisation of biomass, in other words it should be related to the bioeconomy in the sectors represented by the hub (agriculture-related activities or agro-food industries);
- the models included should cover an existing case that works successfully to date (note: many similar models are being developed, but unfortunately a significant number of them are not operational in the long term);
- the models included should be replicable and implementable by other communities.

[1] For example, as the Lisbon Participatory Budgeting process inspired other cities in Portugal and across Europe. (Innovative governance of urban green spaces - Learning from 18 innovative examples across Europe. D6.2 of EU FP7 project GREEN SURGE (ENV.2013.6.2-5-603567), 2016, DOI:10.13140/RG.2.1.1067.4324)

[2] For example: Hungarian Bioeconomy Forum

Title

Reducing Food Waste at Home by Zero Waste Scotland

Scope

Raising awareness of ranking food waste as a very important part of wasted goods and energy.

Main organization responsible for the development and implementation

Zero Waste Scotland Limited

Geographical scale (country, region)

United Kingdom, Bedfordshire and Hertfordshire

Starting year

2023

Key actors

citizens

Website(s)

Food Waste Reduction Bitesize Training Course

Description of the governance model*

The Reducing Food Waste at Home bitesize course is available for free on the Zero Waste Scotland website, and is designed to give users a comprehensive understanding on food waste, why it matters, and hacks on how to reduce food waste at home, in as little as 15 mins.

The online course consists of five sections, each focusing on a different aspect of food waste and culminating in an interactive quiz. Users who complete the course can choose to sign up to three further email communications with more tips and advice on reducing food waste.

A popular TV chef is a vocal advocate of the new tool as a means to help the people of Scotland gen up and take action on food waste.

We often say that it is the small changes to our routine that can have the biggest impact – from flights to food and fashion to furnishings – buying and wasting less would help to reduce our carbon footprint. This journey provides this community a huge amount of facts, ideas, examples, actual help to be able to participate and go along this road successfully.

(The above summary is based on the Zero Waste Scotland project's Interreg Europe website.)

Supporting role of local/regional government or any political actor or political decision-making process (if any)

Public Sector: National Health Service Scotland; local authorities: Convention of Scottish Local Authorities (CoSLA)

Impacts, identified challenges and barriers encountered

Reducing food waste, which relates back to the climate impact;

Spending less money on unnecessary things makes the consumers more conscious in their decisions not only in this scope but in all aspects of life.

Title

Lucie Garden

Scope

Turning a downtown sealed football field sized square to a public park.

Main organization responsible for the development and implementation

KulturPflanzen e.V. established by local citizens (Lucies), neighbours living near the square; adjacent retirement home; neighbouring daycare centre

Geographical scale (country, region)

Alte Neustadt, Bremen, Germany

Starting year

2012

Key actors

citizens of Neustadt

Website(s)

lucie-bremen.de

Description of the governance model

Driven by local citizens as volunteers, gathered in an organization (The Lucies) to be able to represent the needs of the local citizens, neighbouring retirement home and daycare centre in order to turn a parking lot into a public garden.

The Lucies turn the place into a park step-by-step. The transformation includes remodelling, planning of trees, dry stone walls and large garden beds.

In order to establish and consolidate comparable projects in other cities or countries, a municipal administration that is willing to facilitate such a project and provide financial support for conversion measures at irregular intervals is needed in addition to the initiative from society.

Regarding the resources it is evident that for grassroots initiatives the long-term engagement of volunteers is key. Additionally:

(i) Binding usage agreement between municipality and NGO,
(ii) Participation process with neighbours, planning, municipality and gardeners,
(iii) Investments for unsealing and redesigning (ca.€100k for 2,000 m²).

(The above summary is based on the Lucie Garden project's Interreg Europe website.)

Supporting role of local/regional government or any political actor or political decision-making process (if any)

municipal council

Impacts, identified challenges and barriers encountered

The good practice "Lucie Garden" shows the high potential of urban gardens for citizen engagement, recreation, climate adaptation and urban biodiversity. Even though the success of grass root initiatives such as this depends above all on the long-term commitment of volunteers, an enabling attitude on the part of the city in financial and non-financial matters is an important prerequisite.

Title

Sustainable and innovative nutrients for Mediterranean crops – FERTIMED

Scope

The project aims to introduce the use of microfiltered agro-industrial digestate, a ready-to-use fertilizer that can fully replace, in a fertilization plan, traditional synthetic fertilizers

Main organization responsible for the development and implementation

AB GROUP Società Agricola S.R.L

Geographical scale (country, region)

Vittoria, Ragusa County, Sicily, Italy

Starting year

2020

Key actors

AB GROUP Società Agricola S.R.L
Lorenzo Frasson, an agronomist
Società Agricola Agroalimentare Dittaino a r.l.
Az. Agr. Scuderi Alessandro - production of organic vegetables, cereals, citrus fruits
OP Esepridio Società Cooperativa – citrus production
The Department of Agriculture, Food and Environment (Di3A)

Website(s)

Fertimed – Sustainable and innovative nutrients for Mediterranean crops – Fertimed

Description of the governance model

The project "Sustainable and innovative nutrients for Mediterranean crops – FERTIMED" aims to introduce the use of microfiltered agro-industrial digestate, a ready-to-use fertilizer that can fully replace, in a fertilization plan, traditional synthetic fertilizers. The contribution of microfiltered digestate for the irrigation and fertilization of citrus and *Opuntia* crops will also be decisive both to improve the organic matter content of Sicilian soils, subject to an incessant process of desertification, and to reduce water inputs and water withdrawals from the subsoil.

The key was the innovative system developed for the treatment of solid-liquid separation and microfiltration of digestate.

Local and regional authorities can use this approach, collaborate with the biogas plants in their areas and contribute to healthier soils and more sustainable agriculture.

(The above summary is based on the FERTIMED project's Interreg Europe website.)

Supporting role of local/regional government or any political actor or political decision-making process (if any)

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Impacts, identified challenges and barriers encountered

Reduction of usage of chemical fertilizers (already reported 30-40% reduction) and water consumption
Saving the degrading soil of certain areas for food production
Expanding circular economy in practice with an innovative development
Usage of the digestate can be refused because of some socio-cultural barriers – these circumstances will be investigated

Title

Auróra Climate Garden in Budapest

Scope

Creating a unique ecosystem in the heart of Budapest, to which the compost produced in the garden contributed greatly. Eco-forestry project in the heart of the capital of Hungary.

Main organization responsible for the development and implementation

A single citizen funded social media group, called Auróra Community House

Geographical scale (country, region)

Hungary, Budapest, 8th district

Starting year

2019

Key actors

Founder, volunteers

Website(s)

auroraonline.hu

Description of the governance model

The garden was initiated in 2019 by a volunteer who started cooking for the homeless and needy of Budapest in an abandoned gravel parking lot. A composter was set up to recycle the green waste from the kitchen, where local residents could bring their garden and kitchen organic waste under strict conditions.

In the first year, the gravel covering the car park looked unbreakable, so all the plants were planted in pots. The resulting compost mulch slowly took the place of the previous pavement. Initially, grass seeds were scattered, then a few plants were planted and nature was left to do the rest. In 5 years, the 400 square meter car park has grown into a real jungle, which no longer needs watering.

The aim of the practice was to create a unique ecosystem in the heart of Budapest, to which the compost produced in the garden contributed greatly. The composter produces 10-15 cubic meters of compost per year, which is enough for the land of 400 square meters. Another aim was community building and education. The garden is now open two days a week for anyone to visit, and groups are welcome and given a tour.

This practice offers significant potential for learning and transfer, due to its simple yet impactful approach to urban greening and waste management. The project demonstrates how an abandoned urban space can be transformed into a thriving green area using locally produced compost. The model is highly adaptable to other urban environments with minimal resources, making it accessible to communities and municipalities worldwide.

Key transferable elements include community-driven composting systems, volunteer engagement, and educational programs that raise awareness about sustainability and urban ecosystems. Additionally, the low-cost implementation makes it feasible for replication in various settings. By emphasizing hands-on community involvement and the use of local organic waste, the initiative provides a blueprint for similar projects aiming to improve urban resilience and foster environmental education.

(The above summary is based on the Auróra Climate Garden project's Interreg Europe website.)

Supporting role of local/regional government or any political actor or political decision-making process (if any)

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Impacts, identified challenges and barriers encountered

Impacts: reduction of municipal waste; forming attitude through building a local community; significant impact on city climate

Title

Field Farming – Urban food production

Scope

In cities, where many people live in apartment blocks, residents often lack opportunities for gardening or growing their own food. This opportunity has been provided via field farming.

Main organization responsible for the development and implementation

Lahtis' local government

Geographical scale (country, region)

Finland, South area, Lahti

Starting year

1980s

Key actors

The city covers the operational costs associated with field farming in these areas. TEAK-Huolto Oy, a tractor and equipment maintenance service company; The Martha Association - non-profit organization well-known for its dedication to educating the public in matters of home economics

Website(s)

Lahti allotment farming – Lahti allotment farming

Description of the governance model

Nowadays, the city has agreed on a land lease agreement with the operator TEAK-Huolto Oy, which is now responsible for coordinating field farming operations. TEAK-Huolto Oy allocates plots to residents, manages payments, handles tillage in the spring and autumn, and provides necessary materials based on residents' orders.

Local residents can rent a plot through TEAK-Huolto's website and grow their own food using organic methods. They can also compost organic materials, such as weeds and inedible plants, either on their plots or in the area's communal compost.

Allotment farming makes it possible to produce your own food even if you do not own a vegetable garden or garden. The organizer rents allotments owned by the City of Lahti for one cultivation season at a time. There are 8 different suburban areas to provide easy accessibility for everyone. On each area, so called columns could be rented, 5m*10m or 10m*10m plots. There are strict rules for the farmers but also there are various informational and educational sites and sources to learn and to improve in planting.

This practice can be transferred to other cities and municipalities. Field farming is an excellent idea to put up in areas that have no other use, and it can be implemented even in small areas. Organic field farming supports local food production, access to organic food, biodiversity, composting, nutrient recycling and building a healthy relationship with food and nature.

(The above summary is based on the Field Farming project's Interreg Europe website.)

Supporting role of local/regional government or any political actor or political decision-making process (if any)

The City of Lahti rents land for field farming at a very low cost. Local government covers the operational costs associated with field farming. They are also responsible for planning, constructing, and maintaining essential infrastructure (roads, parking, benches).

Impacts, identified challenges and barriers encountered

Besides of the obvious advantages of consuming their own organic food, the firsthand knowledge of circular economy, circulation of organic materials, field farming most likely also has social benefits since the farmers contact regularly and share information. In Lahti, field farming is popular among the residents.

Title

A Fusquenlla: Agri-food transformation centre for small farmers in Moeche

Scope

This project promotes the involvement of young people in agriculture by reducing investments and contributes to curbing rural depopulation. In addition, it promotes more sustainable practices, which help mitigate climate change.

Main organization responsible for the development and implementation

Local public authority

Geographical scale (country, region)

Northern Spain, Galicia

Starting year

2021

Key actors

Ayuntamiento de Moeche - Local public authority

Website(s)

A Fusquenlla

Description of the governance model

"A Fusquenlla" plays a key role in the economic revitalization of rural areas and in supporting small farmers, fighting against depopulation and helping to prevent the abandonment of land, so reducing the risk of fires, being an important problem in Galician rural areas.

Rural municipalities, traditionally linked to agricultural activity, have seen this reduced in recent decades. To reverse this trend, "A Fusquenlla" was born as a centre that facilitates the transformation of local products, improving their marketing and creating new rural employment opportunities.

This centre is specialised in the transformation of garden products and fruit into juices, preserves and jams. It was created as a solution to process surpluses, and now it is becoming an incentive to increase local production. In addition, the centre offers training, advice and marketing support, participating in pilot projects that seek to improve the profitability of farms and encourage collaboration between producers.

Creating an agri-food processing centre in other regions has high transferability potential, benefiting especially local producers. One of the main advantages is that farmers would not have to make investments to acquire equipment, since an entity would face those investments. This reduces the financial burden on small and medium-sized farmers, allowing them to access advanced technologies and transformation processes without the need to go into debt. By centralizing processing in a single location, resources are optimized, improving efficiency and the quality of the final product. In addition, this approach encourages collaboration between producers, generating economies of scale and increasing their competitiveness in the market. This model strengthens the local agri-food sector. In addition, given its ease of execution, it would allow its implementation in various regions.

(The above summary is based on the A Fusquenlla project's Interreg Europe website.)

Supporting role of local/regional government or any political actor or political decision-making process (if any)

Municipal government

Impacts, identified challenges and barriers encountered

Of the users who are dedicated to the sale, there are at least 11 people registered in the agricultural activity. Of these, 6 are women and 5 are men, all over the 30. Approximately 10 young people under 30 used the workshop. The number of people qualified for compulsory training is around 80.

In addition, other municipalities joined the partnership that manages the space: Cedeira, As Pontes and Narón.