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D4.2 Facilitation & Guidelines for Policies & Pilots Development



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Deliverable D4.2_ Facilitation & Guidelines for Policies & Pilots Development

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1 INTRODUCTION

The current state of food systems is deemed unsustainable due to a multitude of reasons, including population growth and urbanization, social inequality and the environmental pressure associated with food production and processing (FAO 2019; Godfray et al. 2010; Springmann et al. 2016). The intensification of food production has detrimental effects on soil and water quality, biodiversity, climate change and ultimately on local economies, communities and individual health. The COVID-19 pandemic has contributed to awareness of the vulnerability of food systems, particularly in the policy arena. The attention of policy makers has now shifted towards food systems, focusing particularly on the access of citizens to food security and overall system resilience (Béné, 2020).

Policy can play a pivotal role in food system transformation as a supportive lever for systematic change. It is argued that the formation of fair and fitting policies is supported by a widening of the concept of sustainable food systems. The food systems definition is altered to include additional food system elements (SAPEA, 2021), widening the lens through which food system transformation is regarded. As food is connected to many aspects of society and its economy, its importance should be reflected in policy across public, private and civic actors across all governance levels; globally, regionally, nationally and locally. Put more simply, no one can do everything, but everyone can do something.

Structural changes to food systems that are characterized by their multilevel and multidimensional configuration should therefore also be explored at city-regional level (Mi et al. 2019). Urban regions are nexus of food consumption, thereby centralizing food system impacts. Increasing urbanization rates across Europe accentuate the importance of restructuring the farm to fork relationship. Food systems must be understood in their full complexity; both as a global complex and as an area for localized action – small places can contribute to solving grand challenges. As cities are centres of public resources, population, consumption, economic activity and innovative action, they are a suitable locus to initiate system transformation processes.

Sustainability challenges in urban food systems are addressed specifically through the City Region Food System (CRFS) approach. The CRFS approach aspires to increase access to food, generate decent jobs, increase the region's resilience, foster rural-urban linkages, promote ecosystem management, and support participatory governance (Blay-Palmer et al. 2018). The CRFS approach is a relatively new approach but is becoming increasingly widespread and supporting city-level networks, specifically the Milan Urban Food Policy Pact (MUFPP). The MUFPP captures city commitments and supports transformation processes through the development of actionable recommendations and tools. The concept of City-Region Food Systems and the Milan Urban Food Policy Pact form the core of the policy labs in Cities2030.

Cities2030 aims to drive sustainable food systems transformation with a city-region approach. Citizen engagement is essential to establishing a democratic system that supports equality in nutrition and economic outcomes. Therefore, citizens play an increasingly central role in transformation towards healthy and sustainable urban food systems; an approach that is

increasingly recognized and supported by top-down policy actors (Brons et al. 2022). The CRFS policy labs are comprised of collaboration across 43 partners, including 10 cities and 2 regions. These city-regions form the centers of research and policy development, as they will implement local living labs and policy labs in an overlapping and integrative fashion. The CRFS labs will pilot and validate solutions and policies that support sustainable food systems and as such engage a mosaic of solutions across various contexts. The connection between the innovation and policy elements of CRFS labs is to facilitate synergetic interplay of sustainable development and accelerated food system transformation.

CRFS labs facilitate the co-creation of new solutions and as such generate a wide array of reflective, inclusive and bottom-up practices. WP4 takes an open policy creation approach supporting system - and design thinking. Pilot cities and regions are supported in the framing and describing of the dynamics of their local food systems through a loosely defined program that allows for differences across contexts, characteristics, and processes. Labs start by describing their CRFS to gain insight into the structure of the local food industry and the value chain from farm to fork. This description helps to uncover dependencies and connections and provides an understanding of strengths and weaknesses in the local food system. Each of the Cities2030 pilot cities and regions will find their own pathway to local food system transformation. The purpose of the pilot cities and regions is to steer away from developing a one-fits-all policy and fully recognize the variety across CRFS and good practices.

This deliverable provides an overview of the approach and methods used within the policy labs, as well as the support that is offered to pilot cities in implementing policy labs. This guide includes descriptions of elements and processes as well as actual examples of material used. The purpose of the guide is to share intentions and experiences inherent to the Cities2030 project and its pilot cities and regions. This guide outlines relevant policy domains such as the sustainable development goals, the food system approach, the MUFPP and the City-Region Food system approach. It describes the support provided to policy labs, methods of CRFS lab development, and an initial description of each pilot lab. The guide includes references to helpful external resources.

The guide can be seen in connection with other deliverables of the Cities2030 project, especially the "Policy Lab Step by Step Guide" (Deliverable 4.2), the "Policy Lab Action Plans" (Deliverable 4.3), which describes at lab level how the approach set out in this deliverable are realized. This document includes templates for planning and monitoring the lab activities. Also closely related to this deliverable is the "Policy Co-creation Capacity Building Program" (Deliverable 4.1) which provides a training guide to labs.

2 POLICY BACKGROUND

2.1 Food System Transformation

Food system elements (production, processing, distribution, consumption, and waste) are interconnected and embedded into multiple systems throughout politics, health, environment, society and economy. Governance actors aim to influence the food system, amongst other through the enactment of policies related to food quality, health, environmental impacts or market-based policies such as taxes and subsidies. Vice versa, policy decision making can be exposed to influence from the food system through lobbyists and by the societal importance of food to reaching a healthy and adequate live for the general public. Food system governance shapes the food landscape through steering food system elements, either in isolation or as interacting elements, to get to a socially optimal outcome.

Food systems directly impact the inhabitants of regions. Multiple chronic degenerative *civilization diseases* have been linked to the Western diet (Swinburn et al. 2019). Additionally, food production is a main driver of climate change and other environmental shocks, primarily through the output of intensive agriculture greenhouse gas emissions and driving biodiversity loss through land use and deforestation. The simultaneous rise of obesity, undernutrition and climate change has led to food systems being considered to contribute to a *global syndemic* (Swinburn et al. 2019), which generates a triad of significant costs in the social, economic, and environmental realms of communities. Simultaneously, international food trade threatens rural smallholder farmers and their livelihoods while consolidating power to few global agri-businesses. The COVID-19 pandemic exposed multiple vulnerabilities of global food systems and food supply chains, and heavily impacted local economies (McDermott & Allison-Reumann, 2022).

Given the uncertainty, health and welfare impacts, climate change, price volatility and value divergence, the governance of food systems can be conceived as a *wicked problem*; an issue that is challenging or impossible to solve due to its complex and interconnected nature (Head, 2008). A systems thinking approach is needed to deal with the complexity and the interconnected nature of food systems. Systems thinking addresses complex problems with multi-causality and allows for effective coordination of efforts towards sustainable food transformations.

Rather than a one-size-fits-all solution, a complex system of place-specific policies with a systems-based approach is required. Recent developments in food system transformation have been focusing on bottom-up transformation (Sonnino et al. 2019) using innovation as transformation driver (Den Boer et al. 2021) with a central role for the public as consumer (Vermeulen et al. 2020) and democratic partners (Anderson et al. 2019) and stakeholder inclusion to lead to ethically just outcomes. New food governance and territorial governance structures such as city Food Councils (Renting & Wiskerke, 2010). To facilitate this transition, food policies should be flexible to adhere to variations across regions aiming to place-specific responses and ensuring multi-stakeholder participation. The evolution of new governance approaches can contribute to integrated solutions that establish sustainable food systems and support food security and human health.



Figure 1 The 17 Sustainable Development Goals

2.2 Local Food System Transformation Processes

The Sustainable Development Goals (SDGs) are a developmental milestone in the global sustainability arena, linking sustainability elements and assisting in food system conceptualization. SDG's support understanding the pathways by which food systems connect to multiple topics such as health & nutrition, industry & sustainable production, natural systems & climate, and decent jobs (figure 1). The SDGs have initiated the perception of food and agriculture as domains directly connected with other societal, economic, and environmental dimensions. The indicators for the SDG goals suggest concrete ways to measure progress and pathways for implementation. The importance of food system transformation and its role as part of the overall goals for 2030 Agenda for Sustainable Development was articulated in the UN Food System Summit.

It was advocated that change should happen in line with the SDGs, with policy and implementation through local, regional, and global coalitions. These supra-local dialogues provide substantial basis for understanding regional dynamics, challenges, and agendas to fulfil SDG goals. In these dialogues, *innovation* and *finance* were identified as *levers of transformation*, along with infrastructure for smallholders and better governance with integrated land and water planning. Some other levers of transformation included: focus on livelihoods, recovering surpluses, restructured government, public/private partnering, cross-sectoral working, and multi-stakeholder engagement. These topics were integrated in the development of the European strategic framework.

FOOD 2030 is the EU research and innovation policy to transform food systems. It aims to ensure access to affordable, nutritious food to lead a healthy life (Froidmont-Görtz et al, 2020) and aims to achieve solutions for four overarching priority areas, illustrated in figure 2 as climate, circularity, innovation, and nutrition. Following a system-thinking approach, the areas of action are mutually driving and enforce each other. Circularity can drive value-chain innovation, while product innovation can enable the development of healthy food with less environmental impact. The Farm-to-Fork EU strategy also stresses the role of cities and regions in increasing food awareness, fostering social innovation, and developing data-driven food and nutrition systems that meet societal and environmental needs. Urban food systems and cities-regions and towns are highlighted as innovation agents, as cities can create thriving innovative ecosystems and living labs that generate new business models and products, thereby fostering sustainable and accessible food for all.



Figure 2
The Food 2030 schematic approach

Until recently, food systems were primarily addressed at national governance levels, leaving minimal space for cities to steer their local food systems. Food was perceived as a rural issue to be steered by national governments through agricultural policies. Despite EU member states integrating the Common Agricultural Policy (CAP) into national level strategies, the centralization of food governance at the national level has led to a fragmented and siloed approach in addressing food system issues. An increasing number of scholars, policymakers and urban practitioners indicate the potential of cities as catalysts for food system transformations as they have closer relationships and proximity with both food producers and citizens (Wolfram, 2016). Cities can strengthen democratic processes through stakeholder engagement and citizen involvement and direct public participation. Food system transformation is however a global issue that requires multilevel governance and interconnected approaches that facilitate local innovation and policy experimentation.

Despite the contribution of supra-local initiatives and national governance approaches to food systems challenges, food governance and policies are currently fragmented along sectoral boundaries, administrative levels, temporal and spatial scales, and public and private spheres. The limited governance of food systems has led to a concentration of power in the hands of market actors and has been criticized by scholars and urban practitioners who underline the need for an integrated policy approach (Candel & Pereira, 2017). The main purpose of such food policy is to coordinate and align actions across different policy areas and levels of governance. Under a new integrated framework, national and European policies would be put in the service of supporting city-level transitions, in an effort to re-define each governance level role in delivering sustainability and innovation. Overall, a more coherent approach would give more regulatory tools, policies and agency to cities and local governments to tackle their food system challenges, without undermining the role of national and European policies.

2.3 City-Region Food Systems

City-regions are optimal for food policy innovation and empirical knowledge collection due to the concentration of economic and political activity in cities and the close relationships with diverse (political) actors (Hebinck & Page 2017). Cities were once perceived as territorial spaces separated from their rural surroundings, functioning in vacuum, yet the links between urban centers and their rural environment is increasingly recognized. The urban-rural linkage is crucial for food systems sustainability as it reconnects food producers and farmers to consumers and secures equitable smallholder food production for regional consumption.

The concept of a city-region food system is not to be understood as being marked by city borders. Rather than relating to administrative and specific territorial borders, the City-Region Food System (CRFS) approach is defined functionally, through local food system dynamics and connections. The CRFS approach addresses this view on the local city-regional food system, which is a functional or territorial category rather than a political-administrative unit. The CRFS exclusively concerns sustainable food production through strengthening of rural-urban linkages.

The definition for CRFS:

“The complex network of actors, processes, and relationships to do with food production, processing, marketing, and consumption that exist in a given geographical region that includes a more or less concentrated urban center and its surrounding peri-urban and rural hinterland; a regional landscape across which flows of people, goods and ecosystem services are managed.”

(Blay-Palmer et al, 2018)

To pursue sustainable CRFS and its proposed benefits a framework of indicators and processes to discover and implement are available. The toolkit is freely accessible via the FAO Urban Food Actions Platform¹. CRFS is advocating for a framework where processes are strengthened through deliberate governance, and food system planning is explicitly territorial. The proposed benefits of CRFS are multiple including benefits on economic development, environment, health, food security and governance and culture (Blay-Palmer et al, 2018). The approach stimulates economic development of the city-region by supporting regional economic growth, increasing rural incomes and jobs, and stimulating food entrepreneurship and innovation. The resulting shorter supply chains can generate increased income for farmers, while reducing greenhouse gas emissions by limiting food transportation. The CRFS approach promotes opportunities for circular economy by re-purposing food, reducing food waste and loss, while potentially increasing local agroecological diversity and territorial food knowledge. Cities2030 applies the City-Regional Food Systems (CRFS) approach in driving policy experimentation, citizens participation and stakeholder engagement.

¹ Accessible through <https://www.fao.org/in-action/food-for-cities-programme/toolkit/introduction/en/>

City-regions are assembling in multiple coalitions of change and networks of practices to identify best practices and scale up the impact of policy experimentation. Multiple collaborative platforms and networks exist, including C40, ICLEI, Food Places, Let's food cities and Fledge. These platforms vary in degree of collaboration, engagement, scope and reach, yet share the ambition to support cities. These networks have developed into important city-level platforms, as city-regions have enriched information on actionable systemic change through sharing their experiences and actions. Collaborative city-region food system networks provide peer-to-peer learning and best-practice sharing. The networks develop established approaches, thereby increasing the credibility and value of CRFS lab experimentation.

2.4 Milan Urban Food Policy Pact (MUFPP)

The MUFPP is an international agreement of mayors that has been signed by more than 200 cities. By signing the declaration, cities commit to implementing actions for a more sustainable and equitable food system. Leveraging the potential of CRFS framework, the MUFPP focuses its efforts to support and foster food system sustainability and serves as a new arena of policymaking, in areas where cities can drive concrete impact. By developing indicators to guide implementation and track progress it serves as a reference framework for knowledge sharing, from city to city. It activates private sector's involvement towards urban food innovation and scale up. The MUFPP framework for action is made up of 37 recommended actions structured into six integrated themes: Governance; Sustainable Diets & Nutrition; Social & Economic Equity; Food Production & Urban–Rural Linkages; Food Supply & Distribution; Food Waste Reduction & Management.

Table 1 MUFPP and CRFS framework dimensions and processes

Comparison of MUFPP and CRFS frameworks		
	MUFPP	CRFS
Areas of action	<ul style="list-style-type: none"> • Food governance • Sustainable diets and nutrition • Social and economic equity • Food production • Food supply and distribution • Food waste 	<ul style="list-style-type: none"> • Food governance • Reduce vulnerability and increase resilience • Social sustainability and equity • Economic sustainability • Urban-rural integration • Environmental sustainability
Process guide	<ol style="list-style-type: none"> 1. Preparatory thinking and key questions 2. Developing indication selection criteria 3. Final selection of indicators 4. Working with selected indicators 5. Challenges of using MUFPP indicators 6. Signing the MUFPP declaration 7. Regional collaboration & cross-scale governance 	<ol style="list-style-type: none"> 1. Getting prepared 2. Defining CRFS 3. Vision 4. CRFS Scan (and collect regional data) 5. CRFS Assessment 6. Policy support and planning 7. Governance

In signing the MUFPP declaration cities commit to the following: *“We will work to develop sustainable food systems that are inclusive, resilient, safe and diverse, that provide healthy and affordable food to all people in a human rights-based framework, that minimize waste and conserve biodiversity while adapting to and mitigating impacts of climate change; [...] We will encourage interdepartmental and cross-sector coordination at municipal and community levels [...] We will engage all sectors within the food system”* (MUFPP 2015).”

The CRFS and MUFPP methodologies are complementary and exhibit similarities, as they are both based on goal setting and pathway development entrenched in city-region networks and information. Table 1 provides a comparison of the two frameworks in terms of the indicators and processes used. The MUFPP provides a detailed process uses guiding research questions. It couples food system transformation dimensions with goals, outcomes, impact areas and indicators. The CRFS framework is a demanding approach for its followers, due to its definition of the region. Rather than cities, who have clear and uniform geographical borders, CRFS requires city-regions to be defined according to its functional units (i.e. a system of systems with multiple and varying overlapping boundaries). The CRFS approach has been promoted by the Food and Agriculture Organization (FAO, 2023) and now forms part of FAO’s “Urban Food Actions Platform” (FAO, 2023). The platform is fully aligned with the MUFPP topics. Thus, the CRFS approach and toolkit can be considered a deep-dive into the Food Production and Ecosystem management dimension of the MUFPP, rather than a stand-alone framework.

2.5 Policy Labs

Living Labs are widely used to assess issues embedded in society, yet the policy lab concept lacks a uniform definition across food system actors. The term can refer to various elements that support policy making; ranging from organizing partners for innovation-stimulating activities, to physical spaces to conduct interactive events -such as focus groups or workshops activities- (Hinrichs-Krapels et al. 2020). WP4 embraces the variation in perception as it facilitates the adaptation of policy measures to a wide variety of CRFS contexts, and it particularly values the elements of open policy making and design thinking.

Policy labs require a policy creation process that can be tailored to their regions due to the wide variation in CRFS. Policy making is traditionally approached through the policy cycle; a cyclical process initiated by the identification of a problem and continued into the formulation of a policy response, implementation of the policy, subjecting the policy to monitoring and finally evaluation to determine if it has been successful. This leads to the identification of new challenges, thus initiating a new cycle. This approach has been dominant across multiple areas, including food governance. However, policy assessment and development in a policy lab requires a method that is iterative and adaptive in character and can support the inclusion of multiple stakeholders into the policy creation process while adhering to design thinking.

The WP4 approach towards CRFS lab policy creation processes builds onto system thinking and design thinking. The complexity and interlinkages across food systems with multisectoral structures led to the recognition of the potential of system thinking in identifying food policy that supports sustainable and inclusive food systems across regions (Monasterolo et al. 2015). Design thinking supports application of the systems approach in food systems through three elements; (1) consumer inclusion, (2) rapid prototyping and (3) collaboration (FAO 2023, Olsen, 2015).

The integration of systems and design thinking is reflected in the WP4 policy design model, as each of these elements is utilized in CRFS pilots, particularly through stakeholder inclusion, citizen engagement and piloting policy solutions in CRFS contexts. Open policy is an alternative policy creation process that provides the adaptability necessary within CRFS labs, as it aims for policies that are suitable to a fast-paced and information-driven society. Open policy takes on a collaborative approach, aims to be data-driven and is based on a process of iteratively trailing and improving policies, thereby supporting agile policy making. Open policy is therefore deemed a suitable approach to policy making in CRFS labs.

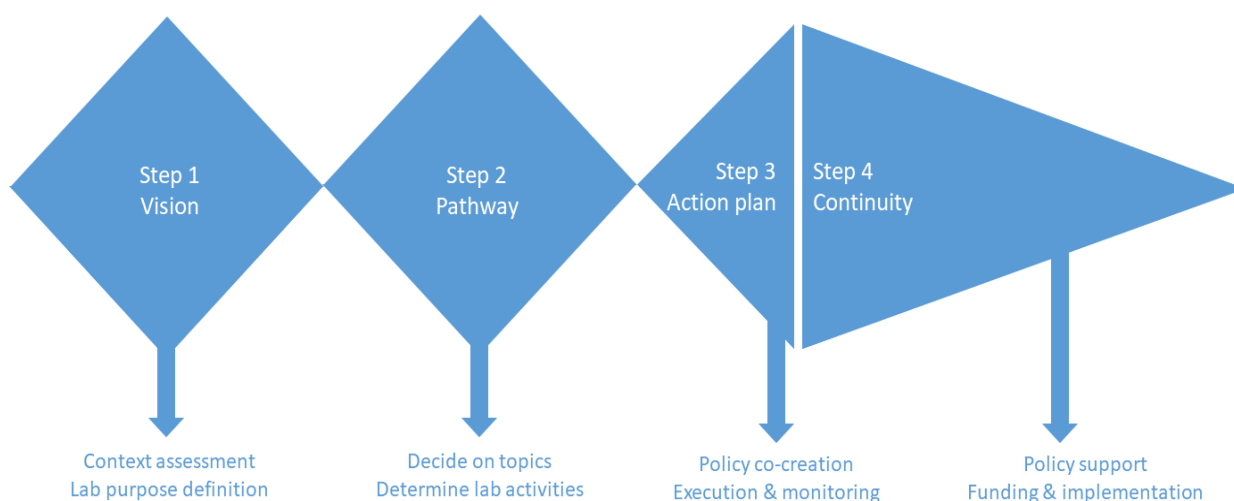


Figure 3 CRFS Policy Lab Open Policy Making Process
Source: Policy Lab Seminar series 2022 (van Osch, 2022)

The double diamond design process is used to visualize the process of open policy making, as illustrated in figure 3. The model divides the piloting process into four steps. Activities in the first step focus on vision-creation; the scope and context of the lab is assessed and the purpose of the lab is defined. The second phase consists of developing a pathway to work on these topics, which consists of policy actors narrowing down the work field on topics relevant to the CRFS and determining the type of activities the lab should focus its efforts on. Based on this knowledge, an action plan is developed, and the execution phase begins. The final step is about finding policy support and structurally implementing the newfound policies.

Despite what the visualization of figure 3 suggests, the lab creation process is not necessarily linear. Interaction between the phases is expected, as policy creation phases will exhibit a certain degree of overlap and flux. Additionally, the elements of co-creation and stakeholder inclusion introduce an element of continuous inflow of interests and initiations into the policy creation process. This model therefore serves primarily as a guide for the CRFS pilots to structure their efforts, rather than an ideal policy creation process to work towards.

2.5.1 The Relationship between Policy & Living Labs

The double diamond model for work package 5 describes a similar process. The overlap between the WP approaches is deliberate and allows activities of CRFS labs on WP4 and WP5 to be integrated. It is essential for all parties to understand the concept of City-Region Food Systems and to be aware of related good practices. This allows the CRFS to be analysed within the local context of the cities and regions involved. Next, potential challenges are identified, after which objectives are fixed and visions are shared. Then, before piloting and delivering the test experiments and final solutions, scenarios are developed and designed.

The co-creative processes in policy labs connote the broader notion of *living labs*. A living lab is about co-creating new innovative solutions following principles of using multiple methods, including more stakeholders and working in a specific “living” context. A policy lab, like a living lab, is thus characterized by how policy making takes place – it is a methodology.

An interesting perspective is that of policymaking as a tool to stimulate the innovation of new solutions and support its uptake, be it public services or commercial products. Open policy and policy labs can provide insight into *how* and *where* policy, in interplay with innovation, addresses barriers. Depending on the mandate to experiment in the policy lab, it is possible to test the “what if” scenario – the very starting point of the design thinking approach.

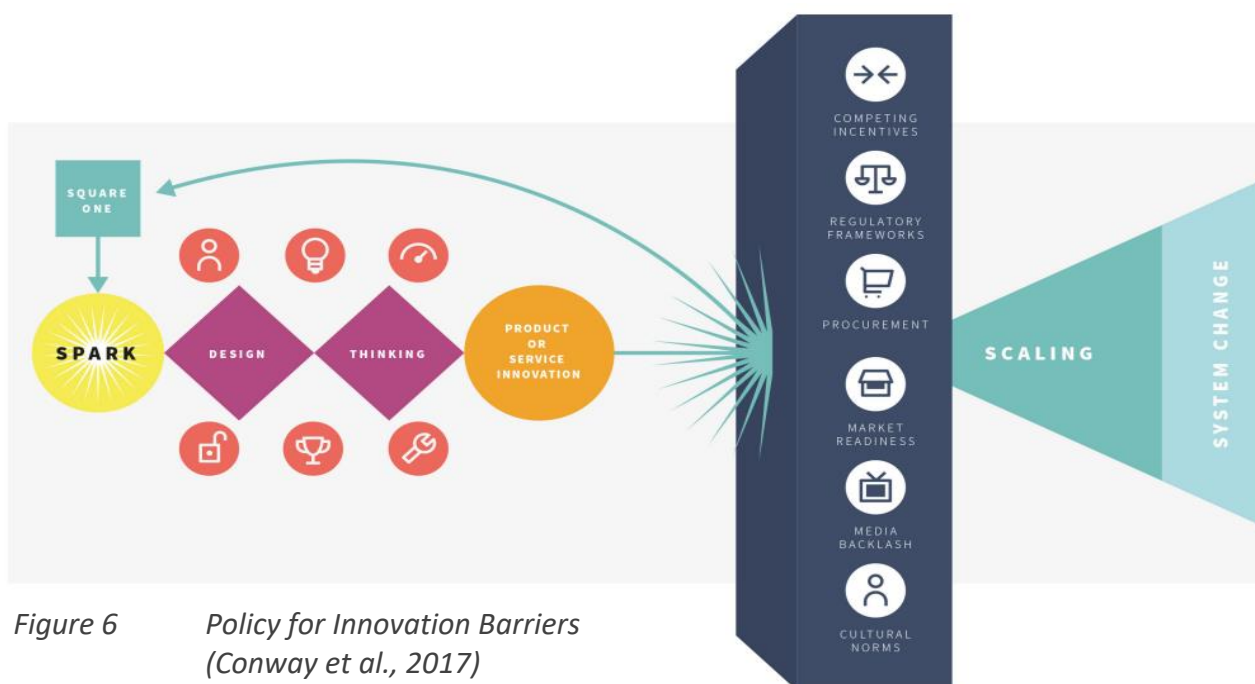


Figure 6 Policy for Innovation Barriers
(Conway et al., 2017)



Figure 7 Roles of CRFS Policy Actors across System Transformation Stages (policy method toolkit, 2018)

	Early stage intervention	Framing Pilotting and market forming	Scaling Mainstreaming and market building	Moving into mature markets and policy ecosystems
Collaborator Working with others to build evidence and develop ideas	Champion Build a case for change and retain alliances for action	Convening power Combine expertise from across systems	Connecting networks Encourage government experts and citizens to co-create change	Co-producing Co-deliver by steering actors across the system to deliver outcomes
Steward Steering a sector through influence and information	Agenda setting Build awareness and confidence in new opportunities by providing thought leadership	Strategy & skills planning Prepare for changing workforce demands and consequences of change	Educating & informing Ensure regulation is sufficiently understood and citizens know what's available to them	Giving a voice Create platforms for citizens and stakeholder to protect bested rights and interests
Customer Buying goods and commission services	Catalyst Review, identify and invest in key opportunities with strategic values	Standard setting Develop standards for data collection and presentation	User centered commissioner Understanding citizens needs and contracting best impact services	Leverage buying power Utilize public procurement to encourage investment, innovation and protect consumer rights
Provider Designing, providing and modifying public services	Innovators Create test beds, sandboxes and trials in real world settings	Service redesign Establish legitimacy for more human-centered services, harnessing political will for change	Service provider Provide services directly or indirectly through funding and target setting	Choice architect Nudging behavior so that the default is both attractive and easy
Funder Stimulating or leading investment	Early adopter Invest in the exploration of new opportunities with strategic value	Fiscal incentives Direct finance to stimulate new thinking that can drive future opportunities	Grants & subsidies Incentivise behavioral change through grants or other incentives	Platform provision Scale up proven ideas through existing infrastructure and public services
Regulator Regulating a sector and coordinating enforcement	Encourage voluntary code Self-regulation, without legislation, allowing for greater flexibility	Governance Ensure regulation supports the conditions for change and delivers the policy intent	Build regulatory environment Ensure regulation enables the intended policy outcomes	Compliance Support enforcement and harmonize regulatory compliance environment
Legislator Making laws and amending legislation	Green papers Publish proposals for discussion with stakeholders and the public	White papers & draft bills Publish proposals for consultation and pre-legislative scrutiny	Legislation Support a bill through parliament and enact legislation (primary & secondary)	Amend rules Statutory instruments: rules, orders, created by delegated authorities (e.g. Secretary of State)

The connection between policy and innovation is illustrated in figure 6 (Conway et al., 2017). CRFS labs can be applied to incentivize and create the necessary framework conditions to pilot new solutions. Such a supportive context is a necessary basic condition to alter the well-established food systems, as it provides access to all instruments and *levers* to impact production, consumption and re-valorisation of food and biomass. These pilots are a requirement to create support within the CRFS to scale up instruments that have proven to be successful within the CRFS (Conway et al., 2017). It is this process of continuous piloting, identification of achievements and scaling up solutions that are effective to the CRFS that leads to system transformation.

2.5.2 Policy Means

The policy lab method can be applied to different types of policies and government levels. CRFS exhibit variation in the type of hurdles they face and the type of responses available to them. The sphere of influence and available means varies for policy instruments, as they can be applied by national and local government levels. Though different framework conditions entail variations in policy impact, it is still possible to incentivize and create direction with lighter (policy) means. Barriers to adoption can vary strongly in nature, but include competing interests, regulatory frameworks, procurement practices, market readiness, media backlash and cultural norms (Conway et al., 2017). Actors across governance levels address these barriers within their mandate, whilst coordinating and aligning vertically.

However, large variation exists across countries, regions and cities with regards to available mandate and policy instruments. Mandate is a common limiting factor, as CRFS regional governments seldom have direct legislative powers. However, local CRFS governance can take place through softer instruments; for example, the “purchasing muscle” of public procurement can be used as an efficient lever. The selection of suitable policy instruments requires insight into the role the city-region level actors can play. This entails awareness of the mandate in the CRFS and the maturity of CRFS initiatives. Policy measures effectiveness also depend on the maturity of the agenda and/or initiative. A matrix that visualizes the relationship between the types of policy intervention means and application onto different stages is provided in figure 7 (policy method toolkit, 2018).

The dimensions in this matrix assist in the selection of the most suitable policy instrument for apt governance. The left column lists potential roles of the (local) government, as either collaborator, steward, customer, provider, funder, regulator, or legislator. Which role policy actors take on is dependent on their position in the CRFS, mandate, relation with CRFS and policy actors across governance levels and instrumental means. The rows indicate the different stages of CRFS initiatives; early-stage intervention, framing and market forming, scaling and mainstreaming CRFS intervention. The most suitable policy action is determined by the context that consists of (1) the policy actor role and (2) the development stage of CRFS intervention.

An example

The government can have the role of a customer, in which she can use her purchasing power through public *procurement* to reach a policy goal. Thereby the government stimulates a development that is desirable and in line with CRFS goals.

The government can work as a *catalyst*, taking the first steps and investing in strategic value. This could be the case when no clear market exists, for instance stimulating circular practices.

The government can help in *standard* setting, which is of vital importance in developing maturity within new solutions.

Further steps can be taken to become the *user centered commissioner*, in which the government understands citizen needs and attracts services that deliver best impact.

In the mature stages, the government can leverage the buying power of public procurement and encourage investments in the market and promote consumer rights.

2.5.3 Organizing and Facilitating CRFS Labs

CRFS labs are established to find effective, innovative responses to complex urban challenges. The aim of bottom-up learning in the lab setting is to find responses to these challenges through in practice learning about what works and what doesn't.

Considerable work and preparation go into policy labs; they have been estimated to take between 4-9 FTE of staff time, spread out across a team. Each lab demands a customized design which fits the topic, context and invited participants' views. Experience-based recommendations provide standardized processes for policy labs, ranging from ideation and brainstorming, over limited sprints and to full-scale definition and development through policy labs. Policy labs provide an extensive and comprehensive compilation of concrete methods and processes that can be applied.

Lab-based innovation is unsustainable and inefficient if resources are lacking. This stresses the need for staff with skills that are applicable for each role to coordinate and organize activities, facilitate co-creative processes and to evaluate and communicate results. It is easy to underestimate the amount of thought required to identify the topics to be addressed in the lab. This resonates with the experience of initiatives adopting 'design thinking' for public services; emphasizing that correct problem framing is 'a pre-condition for the effective unfolding of the phases of policy formulation, development, adoption and implementation' (Allio, 2014).

Analysis of living lab experiences reveals that cultural and organizational characteristics of the public sector are key challenges, along with resource constraints. These challenges become adamant when establishing policy lab matters, such as capacity to run a lab effectively, bottom-up processes in political decision making, as well as barriers on implementation of results. To summarize, the organization and facilitation requires commitment as a precondition for allocation of sufficient resources, both in terms of competences and required funding.

Deliverable D4.2_ Facilitation & Guidelines for Policies & Pilots Development

Prepared by P33 | Edited by P33 | Checked and reviewed by P02 EPC | Approved by P01

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2.5.4 Know the Starting Point & Context

CRFS policy labs are place-based, context-rich and depend on both national frameworks and local-regional contexts. An important starting point for setting up the lab is to create an understanding of the local interest and maturity of food system transformation in relation to local interest, focus and mandate of local policy actors. There is a fundamental need to obtain, leverage and sustain political commitment to the policy. Particularly strong actors in the CRFS context are local champions; CRFS actors who actively support a policy instrument by framing it around regional priorities. However, institutional support from higher administrative or political levels can have different levels of formalization (for example the signing of the MUFPP). The inclusion of local actors and multilevel governance actors in the CRFS lab will support the implementation of policy solutions for CRFS transformation.

Policy labs tackles issues at *any stage* of the policy making process, as the model supports the iterative nature of open policy making and provides flexibility in the selection of most suitable policy instrument (as provided in the matrix of governance) (figure 5 and 7 respectively). Policy lab activities can address action in the phases of policy problem identification, policy formulation, implementation, or evaluation of policies, or any of the steps in between these stages. The selection of the issue to be addressed by the CRFS lab is dependent on the stage of development of the public policy area and whether there is existing evidence to support this stage.

2.5.5 Know the Stakeholders

There are several relevant approaches to determining the right stakeholders of a policy lab. One such perspective is given by the CRFS framework that lists who may (or should) be involved in engagement processes.

- Various types of actual rural, peri-urban and urban farmers / groups / organizations.
- Actors involved in different parts of the food chain including processing industry, wholesale and retailers, input supply, restaurants, markets, waste management etc.
- Different municipal, metropolitan and provincial departments, NGO's, universities/research institutes, community-based organizations and support organizations dealing with food and related areas (transport, health, agriculture, economic development, land use planning, parks and green spaces, social and educational programs etc.).

This approach does not reflect citizens' involvement, which could indeed be relevant in issues like dietary habits and consumer behaviour as well as broader social innovation. In the analysis by World Bank (Acharya, 2021) the value and focus of engaging different stakeholders have been described. It is highly important to consider the value for participants – especially when engaging them and committing them to be active participants. In approaching potential participants, one should keep in mind the interests of potential partners in participating - whether it is a learning experience, an opportunity to build a network or a chance to increase influence in areas of interest. These types of motivations and interests can vary greatly. This consideration is useful both for 'pitching' collaboration to the stakeholders but also for understanding in the co-creation process what each can get out of it and not least where stakeholders may differ.

2.5.6 Know How to Facilitate

'*Relational leadership*' is a key concept in understanding the skills that are needed to design policies through co-creation. When working with different stakeholders and methods, it is important to actively facilitate the process to get to useful results and ensure good ethics in the involvement, considering the most vulnerable participants.

The selection of facilitator is vital to navigate various perspectives and group dynamics, particularly in the CRFS lab context that stimulates participatory decision-making (Kaner, 2014). The facilitator can be embodied by, amongst others, city representatives or process experts. They need not be experts in the topic directly discussed but they should however have the necessary skills and expertise in engaging with people, sympathizing with their views and moving the discussions forward in a productive manner to activate actors. Relational skills are key to unleash co-creation potential, create an appropriate atmosphere of trust and complicity and facilitate relationship building. In addition to soft-skills, facilitators should master various co-creation tools to advance CRFS transformation regardless of the lab composition: there is no one size fits-all solution, but tools are to be implemented on a tailored basis.

The policy lab facilitators -*the front-end employees*- should aim to be relational leaders to spur co-creation. If facilitators lack specialized knowledge process consultants can be involved (Fuglsang and Hansen, 2019b). Therefore, capacity building is of utmost importance to be able to create results. Multiple guides and approaches are available to support labs with inspiration and step-by-step guides. D4.3 consists of a detailed description of steps and outcomes from setting up the lab to creating results, based on multiple existing frameworks, and designed specifically for policy initiatives of Cities2030 CRFS labs.

2.5.7 Know How to Communicate & Implement Results

CRFS are characterized by a unique blend of perspectives, values and experiences that have a combined influence on decision making practices for local level policy creation. The purpose of policy labs is to pilot CRFS activities, solution and tools and assess their effectiveness, ultimately bringing this new knowledge into the policy making process. The quality and validity of pilot results are therefore vital to the acceptance of these results in CRFS governance practices. It is essential for CRFS lab actors to understand the proper use and outcomes related to activities in each of the policy phases. Observing and field methods like ethnographic approaches gives one type of result, whereas more structured ideation sheets provide a different type of knowledge.

Considering the type of result and the aptness to communicate to decision-makers, it is important to provide support to active labs, through funding activities and implementing new solutions. Implementation relies on an operational strategy along with understanding the local conditions such as resources and starting point. The implementation of policy interventions is integral to CRFS development.

3 CITIES2030 PILOT LABS

The Cities2030 consortium contains 16 CRFS pilot labs that have been part of the project since its inception and additional *follower cities* labs are joining the Cities2030 network. Activities in WP4 have aimed at directly supporting the piloting process of both the original pilot labs and the follower cities. WP4 activities consist of an elaborate support model.

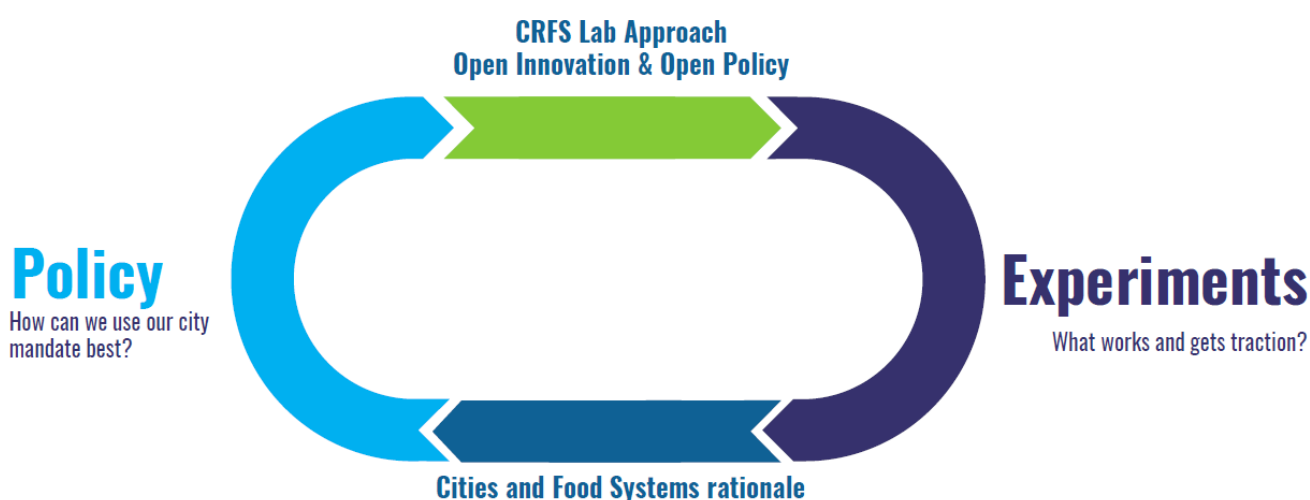


Figure 8 Cities2030 Labs Framework

The policy labs in Cities2030 are implemented alongside living labs and promoted by the local pilot cities. Living lab experiences across several areas have demonstrated a direct relation between innovation experiments and policy lab activities. This relation is driven by the parallel nature of policy and innovation stimulating activities, as well as the overlap in CRFS actors involved (fig.8).

The policy lab is concerned with effective utilization of the CRFS' mandate and policy levers towards the local vision for CRFS transformation. This happens in close interplay with actual experiments, trying out new ideas and scaling viable solutions. The utilization of the living lab methodology and the principles of open innovation and policymaking demonstrates synergy between local/regional policy and experiments.

The role of a living lab is to spur service co-creation based on the interactive nature of labs. Traditionally, service co-creation has been addressed from a user-centric perspective. However, the contribution of front-end living lab employees in leveraging co-creation has not been properly addressed, especially in terms of the required skills and the role played by public leadership (Gago 2020).

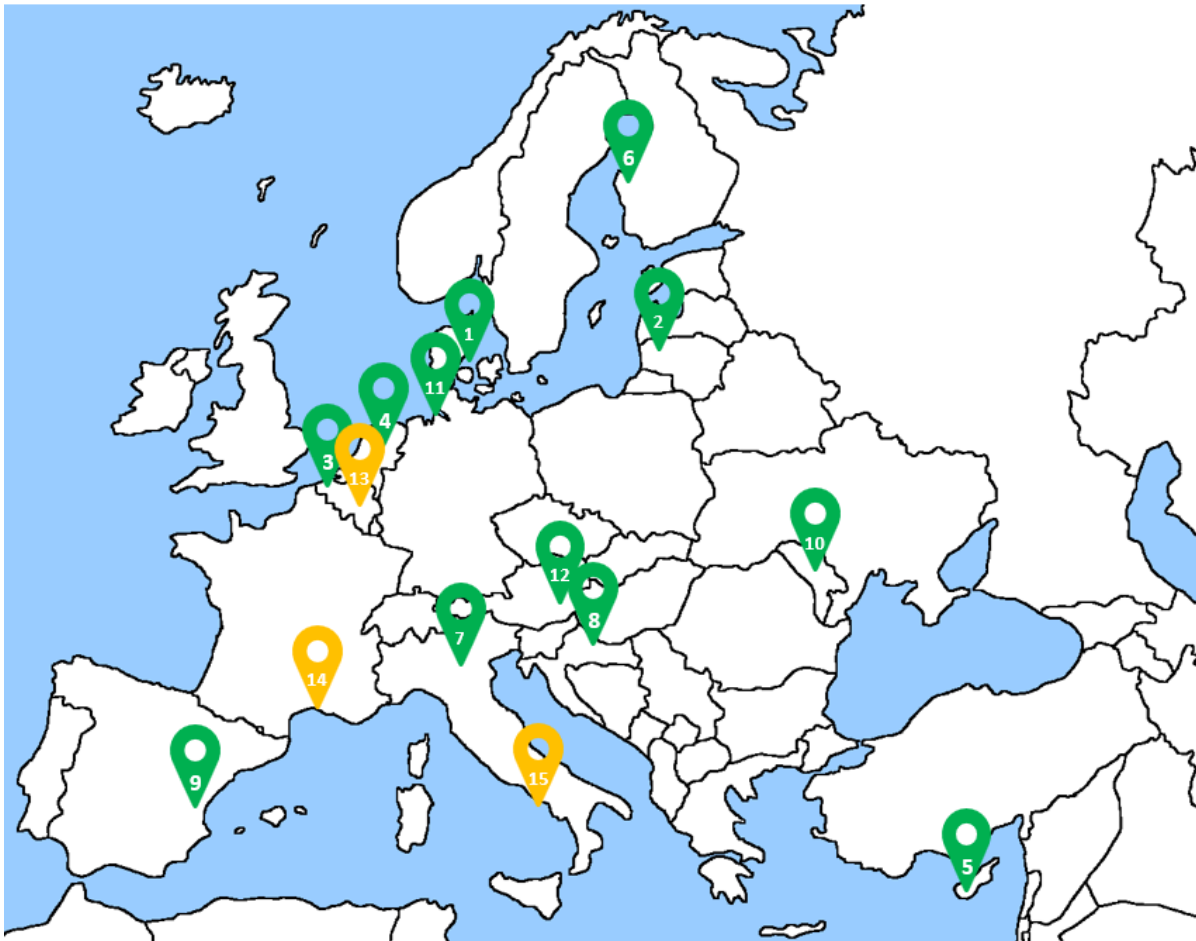


Figure 9 The location of CRFS Labs in Cities2030

The cities to pilot the CRFS labs as part of the Cities2030 project are distributed across Europe, as depicted on figure 9. The 16 pilot labs have been initially described and assessed through a three-step process. A bilateral meeting was held in the beginning of the project to establish their initial ideas and starting point. The second step consisted of a survey as part of the lab prototype report, indicating their focus in a more structured way. Lastly, the labs presented themselves on the Cities2030 Forum and during a policy lab kick-off seminar session.

The latter activity fulfilled a dual purpose. First, it allowed work package leader and project management to gain an overview on the CRFS involved, which supported the tailoring of the WP4 support model to CRFS lab needs. Second, it provided the opportunity for labs to start building relationships with other labs, particularly though identifying key thematic addressed and identify fellow CRFS labs that were tackling similar issues. Third, this session provided an opportunity to collect lab information to facilitate public information dissemination which can assist potential follower labs to gain an understanding of CRFS policy lab activities.

Do you have any experience in Living labs or Policy lab development?

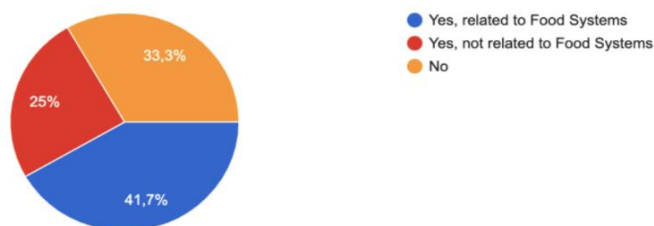


Figure 10 Cities2030 labs experience (Source: Cities2030 Survey)

The interviews and surveys of the CRFS labs show a mix of experienced and less experienced cities and partnerships. Around 66% of participants indicated to have experience with living labs whereas 33 percent of participants are new to living labs as a way of fostering innovation. The combination of experienced and less experienced labs creates good foundations for peer learning, but also emphasizes the need for capacity building at local partnership level. Some labs expressed that they want to learn to work with multi-stakeholder integration and go beyond their usual scope of collaborative partners.

The content and focus of the Cities2030 pilot cities demonstrate an even distribution across the project themes. The themes of production, markets and decision making were higher level interest subjects. The pilot cities have continued to develop the scope and prioritization of focus areas since the survey was carried out, using the growing knowledge-base and stakeholder networks.

Table 3, Surveyed areas of interest/ expected CRFS Lab focus (Source: Cities2030 survey)

	P3 BRUG, BELGIUM	P5 IAAD, TURKEY	P8 VEGO, CROATIA	P12 INTO, FINLAND	P15 BRH, GERMANY	P18 QUAR, SPAIN	P32 VIZ, ITALY	P23 FFI, ITALY	P24 VPR, LATVIA	P28 IASI, ROMANIA	P40 CITAG, FRANCE	P10 VEJLE, DENMARK
Production		L&PL	LL	L&PL	LL	L&PL		LL	LL	LL	L&PL	
Processing	LL	L&PL							LL	LL		
Distribution	LL	L&PL			LL				LL	LL	L&PL	
Markets		L&PL	PL	L&PL	LL	L&PL		L&PL		LL		
Consumption	LL	L&PL		L&PL	L&PL	L&PL		L&PL		PL	L&PL	
Waste		L&PL	PL	L&PL	LL	L&PL		L&PL		PL		
Security		L&PL			LL					PL		
Ecosystem services		L&PL	PL		LL			PL	L&PL	PL	L&PL	
Livelihood, growth		L&PL		L&PL	L&PL					PL		
Inclusion, equality	LL	L&PL		L&PL				L&PL	L&PL	PL	L&PL	
Policy/decision making		L&PL		L&PL	L&PL	L&PL		PL	L&PL	PL		
Other		L&PL										L&PL
Don't know yet	PL						L&PL					

LL – Living Labs; PL – Policy Labs; L&PL – Living Labs and Policy Labs

3.1 Pilots' Initial Description

The following descriptions of the pilot sites include a general description of place-based characteristic and initial reflections of possible focus and outcomes. These descriptions of starting points and initial reflections have been provided by the local pilot sites and are supplemented by the dynamic updates in the online forum of Cities2030.

3.1.1 Vicenza Lab

The recent updates and upcoming events related to this lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/page/3-welcome-page/>

With about 110,000 inhabitants, which becomes 270,000 if we consider the entire hinterland, Vicenza is one of the main cities of the Veneto Region. It is located about 60 km from Venice and just over 40km from Verona. Founded in the 2nd century B.C. in Northern Italy, Vicenza prospered under the Venetian rule from the early 15th to the end of the 18th century. In 1994 the city was designated a UNESCO World Heritage Site. Most of its urban attractions are grouped within what were the ancient walls, while attractive villas dot the landscape of the nearby hills. Vicenza is famous throughout the world as a city of gold: one third of gold processing in Italy is produced in this Province, so much so that the most important trade fairs in the sector are held here.

Food is on the agenda in Vicenza. The province is traditionally linked to the breeding of dairy cows and the production of typical cheeses, and high-quality winemaking testified by the production of

Vicenza Labs focus areas

- Governance- Through the exchange of information, the involvement of all the actors of the local food system until to the establishment of the Food Policy Office at the Municipality
- Sustainable diets- With activities such as the development of guidelines on healthy nutrition, promoting sustainable choices when shopping for food.
- Social and economic justice - Which includes support for the most vulnerable through the creation/ improvement of community canteens, kitchens and food emporium for all, the promotion of social inclusion activities such as shared vegetable gardens and specific initiatives to give a chance to people living at the borders of society
- Food production - With interventions to support urban and peri-urban production, the recovery of traditional food, the conservation of food knowledge
- Food distribution - Through the planning of better logistics systems with low environmental impact, supporting farmers markets in the cities and improving the fleet of electric vehicles available to distribute food from the municipal fruit and vegetable market to the city's neighborhoods.
- Food waste - The adoption of policies favouring surplus reduction and losses along the entire food chain and increasing awareness of the need to reduce waste, the promotion and support of new circular and social entrepreneurship for a better food consumption

DOC wines. In the area of CRFS and local food systems Vicenza has shared vegetable gardens: 132 urban gardens owned by Municipality of Vicenza have been assigned to a civic association and then to citizens by means of a public call – they are currently run by citizens. The main targets are: retirees, families, and couples of young people.

Another initiative is the Food Emporium for all, which is located in 400 square meters at the fruit and vegetable market. This provides economical, human, and technical resources – from the recovery of surplus food to donations integrations, and with fundamental support of the voluntary sector it managed to respond effectively and efficiently to the needs of the most vulnerable fellow citizens during COVID-19. Approximately 3.000 people, 25% of which are minors, receive food bags by Vicenza Social Services and the network of volunteers at present.

Vicenza is partner of Cities 2030 project and aims at establishing a new FOOD POLICY OFFICE and signing the Milano Food Policy Pact. The final scope is to improve the sustainability of the local food system.

The aim of the policy lab is to improve CRFS sustainability and related urban policies. The intent of the Lab is to give life to a network of stakeholders committed to implementing sustainable food policies and practices, also through the exchange of ideas and suggestions on how to concretely address current challenges of global sustainability

3.1.2 Bremerhaven, DE

The recent updates and upcoming events related to this lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/page/2-welcome-page/>

Welcome to Bremerhaven, the largest German City at the North Sea coast with about 119.000 inhabitants. Bremerhaven offers a vivid port and seafaring history, modern fish experience and an inspiring variety of science and knowledge. It is part of the European Metropolitan Region Bremen / Oldenburg, surrounded on the landside by the county of Cuxhaven. Bremerhaven is the centre of the region - an attraction for culture and shopping, a place for education and training as well as an economic powerhouse. In order to better meet this demand, the City develops a culture of welcome for new citizens, students, specialists and executives and companies as well as an

Bremerhaven focus areas

- # socially disadvantaged neighbourhoods / socially deprived districts
- # Networking to improve community catering (children and/or hospital, elderly care)
- # Increasing the supply of nutrients, vitamins and minerals, for example through the targeted cultivation of plants/herbs in urban gardening
- # Combating the nutritional poverty of children
- # Regional supply chains

inclusive approach as a city for all. As a regional major centre, the city of Bremerhaven is closely linked to the surrounding Lower Saxony's immediate suburbs or surrounding countryside. Since 2003 the districts of Cuxhaven, Wesermarsch and the city of Bremerhaven have been part of the "Regional Forum Unterweser". For CRFS we will use thus already established communication channels and existing, thematically relevant working groups.

Since its founding in 1827, Bremerhaven has been shaped as a maritime business location. Thanks to its favorable location on the Weser River and North Sea and centuries of history as a maritime trading center, Bremerhaven has become one of the most important locations in Germany and around the world for the maritime economy. The port of Bremerhaven is the sixteenth-largest container port in the world and the fourth-largest in Europe, one of the world's leading automobile transshipment hubs, and an attractive logistics center. The modern fish and food industry, with internationally known brands, together with a complete value-adding chain for the entire fish and foodstuff segment, have been the hallmark of the city for decades. With its green ports, the sustainable food industry, the offshore wind industry and its small and medium-sized enterprises, Bremerhaven's economic structure offers an ideal framework for the settlement of companies from the green tech sector.

The expansion of an internationally recognized research and development landscape coupled with investments in highly attractive focal points for tourism, have complemented trade and industry and provide a promising outlook. The city council has initiated structural changes and increasingly focused on the expansion of scientific research capacities, the promotion of new technologies, especially in the area of climate protection, and the expansion of tourism offerings. The close dovetailing of industry, science and education is a core issue of our cities' future development. Closeness and cooperation with local enterprises is a matter of course for the scientific and educational facilities in Bremerhaven. Bremerhaven is recognized as having an above-average number of scientific institutions.

In Bremerhaven, the food industry has traditionally been very important. In fish processing, Bremerhaven holds a top position nationwide; the large number and diversity of start-ups prove that the food industry is a highly innovative field of the future. However, the topic of food goes far beyond the borders of our city. As a regional centre, Bremerhaven has a large number of commuters from the region who work in Bremerhaven's food industry, shop here and use the city's leisure facilities.

Especially with regard to future-proof and consumer-cantered food supply systems, the Horizon 2020 project CITIES 2030 can contribute to creating short food supply chains between cities and regions in which consumers are also involved and encouraged to become actively engaged. The project also strengthens Bremerhaven as a science location, which is characterized by close cooperation between business, science and culture and whose special competence is the comprehensible communication of research to society via various innovative information formats and events.

Every CRFS activist faces the challenges of networking between actors, handling a multi-disciplinary innovation room, pricing and access to quality food, education and appreciation ... in

Summary: Fair access for all citizens to high quality food. Every region has its own challenges. We have to learn from each other. But we will also go our own way. It is important to know who to ask for advice and exchange information.

3.1.3 Pollica, IT

The recent updates and upcoming events related to the Pollica lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/page/2-welcome-page/>

Pollica, a rural village of 2.268 inhabitants in the south of Italy, is the epicenter of Mediterranean lifestyle and the crossover point of history, culture and anthropology of this ancient heritage. We have decided to restart: To invest in our future: YOUNG PEOPLE, focusing on essential values, specifically the balance between MAN-NATURE, from the cradle of our culture: THE MEDITERRANEAN.

In Pollica (SA), capital of the Mediterranean Diet, Future Food Institute has inaugurated the Paideia Campus, a 12-year impactful project, where one can learn a new type of sociality and live the concept of integral ecology, a fundamental approach to face the transition necessary to achieve the Goals of the 2030 Agenda, in lifestyle and development models of which the Mediterranean Diet is the most concrete example.

The mission and thus the activity of the Future Food Institute concentrates on three dimensions: We begin with KNOWLEDGE, organizing not only international research projects but also training programs that welcome people from all walks of life from students to teachers and from start-uppers to industry leaders from all over the world. Then the theme of INNOVATION: today you can no longer think of innovation without thinking of sustainability and this is a perfect place to test and prototype innovative solutions for sustainability, sustainable fishing and agriculture, slow tourism, repopulating the villages and making liveable the inland areas of Italy that today must be enhanced and protected. Finally, the involvement of the COMMUNITY, without which these places do not live. The community is a heritage that must be involved, preserved, and regenerated so that it can hand down these millenary traditions over the centuries. And this community is

Pollica focus areas

- #Mediterranean diet
- #Territorial Development
- #Experiential Tourism
- #Research
- #TERRITORIAL REGENERATION
- #CLIMATE ADVOCACY, AWARENESS AND EDUCATION THROUGH ART & CULTURE
- #YOUTH AS PROTAGONISTS OF THE CLIMATE CONVERSATION
- #valorize our heritage

magical, it welcomes you by showing you that the land must be cared for, it teaches you to appreciate the slow pace, the care of the soil and of the territory.

In Pollica, Future Food Institute is fostering a prototyping, in collaboration with local institutions and - more importantly - through a process of co-design with the local community, an historic change of perspective, from linear to circular systems, from reductionist to complex and holistic paradigms, from an ego-centric vision to an eco-centric vision of the role of man in the complex system that links environment, society and economy.

Eleven years after the appointment of the Mediterranean Diet as a UNESCO Intangible Cultural Heritage of Humanity, the awareness of how it is much more than a simple food model, but a wealth of science, traditional knowledge, skills, and identity values generated by a territory, continues to grow. Cilento, which can be considered as a real laboratory of land and marine biodiversity, is capable of releasing unique natural wealth in the world.

As a part of the Cities2030 project, Future Food Institute is working towards developing a MEDITERRANEAN LABORATORY - a Living Lab where we are prototyping models and personal services aimed at combating the depopulation of villages and inland areas, enhancing the Italian cultural, historical, artistic and environmental heritage by following the integral ecology approach, and creating new businesses.

The Campus will host hackathons and acceleration calls co-organised with the numerous partners of the Future Food Institute. A Living Lab will also host innovation programmes to give life to business projects in the following areas:

- Dissemination of the Mediterranean diet
- Sustainable agriculture, fishing and zootechnics
- Blue economy
- Circular economy
- Climate-smart living
- Hospitality and sustainable tourism
- Enhancement of the territory's cultural and environmental heritage

Everything is connected (environmental protection and human health, territorial regeneration and citizens' wellbeing, social justice and climate change). The Paideia Campus Pollica project was created to teach people how to see these connections and thus design a better future for the local community, for Italy, for the Mediterranean and for the whole world.

3.1.4 Murska Sobota, SL

The recent updates and upcoming events related to the Murska Sobota lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/page/15-welcome-page/>

Murska Sobota is the largest town in Pomurje and the northernmost town in Slovenia. It is a typical sub- Pannonian settlement at an altitude of 190 meters. It is located not far from the

border with neighbouring countries Austria, Hungary and Croatia. It developed in the plain world on the left bank of the Mura River. The name "Sobota" originates from Saturday fairs, and later the adjective "Murska" was added because of the Mura River. It is the administrative, economic, cultural, educational and health center of the Pomurje region.

The region of Pomurje covers 1.337km² of land and has 122.068 inhabitants (roughly 5% of Slovenian population). The region has preserved an unpolluted and untouched environment with vast fertile plains. At present sustained agriculture employs 8% of the working population. Among the most prosperous industries there are textile, agri-food, metal-processing and chemicals. Pomurje is a typical rural area with villages spread around flat areas and small hills. It is the most important area in Slovenia for food production. The majority of farmers are small and specialized, focused on low-volume/ high quality produce. Farm tourism is very popular, i.e. farms, vine-shops and gastronomy.

The main needs of the region in terms of Smart Transition:

- New/smart technologies to be implemented for smart farming
- New/innovative (disruptive) business models following rural development goals
- New markets (customers) with higher profit margins, transformation to agricultural tourism
- Transition to eco-friendly, zero waste, healthy, socially responsible environment

The city of Murska Sobota cooperates closely with Green Point (Zelena točka) Short Food Supply Chain (SFSC), incorporating more than 70 local farmers, food producers and cooperatives. Together they cover the production processes in greenhouses and open-air fields and with logistics from their own distribution center. They have different means of sales such as public bodies (schooling sphere, retirement homes), private (restaurants, health resorts), own retail stores and online shops.

Green Point is located in Pomurje region (Slovenia). Its mission is to

- (i) empower cities and regions as agents of food system transformation by providing a demo-based environment for social change and
- (ii) provide end-to-end technological and collaborative environment where SFSC actors and solution providers (SMEs, start-ups) could meet and use the living lab for systemic innovation in the areas of food production & processing, distribution, marketing, access and food consumption.

The Green point SFSC is continuously implementing innovative business models and technologies while actively contributing to increasing the proportion of local and safe food through awareness raising campaigns. Moreover, the GREEN POINT (under the umbrella of ITC) is providing innovation infrastructure to test technologies and demonstrate new value chains developed within the food supply, with multi-actor based approach, involving: policy makers, local governance, academia, business actors, food actors, consumers / consumer organizations, civil society and NGOs.

Last but not least, the Murska Sobota pilot will be supported by the digital innovation hub for agriculture and food production (DIH AGRIFOOD), managed by the ITC – Innovation Technology Cluster, thus it will be fully incorporated into the DIH AGRIFOOD service portfolio, especially into awareness creation, technology transfer and living lab environment-based services. Living lab ecosystem is one of the most important services provided by DIH AGRIFOOD, since agriculture is a traditional sector and farmers are even more cautious when implementing novelties into their production processes. This way they can observe, test, feel and touch the product/service within the living lab, before implementing it into their own operation.

Within the CITIES2030, Murska Sobota pilot will provide a solution for optimization of multi-stakeholder dialogue processes, in which blockchain will be employed to provide some proof of concepts of monetization processes, in a reliable and transparent way. This is in order to ensure transparency, traceability and trust of the local food production, blockchain technology (BC) presents the natural technology fit in the so-called SFSC.

Mid to long term strategic plan is to establish the “Pomurje – Sustainable Rural Community”, which shall build a system where farmers, food processing organizations, short food supply chains, retailers, and consumer organizations (restaurants, schools, elderly homes, kindergarten, ...) will be connected to an overall community based SFSC data collection, transparency, forecasting, monitoring and management IT infrastructure / system. Development and implementation of such a complex system will be directly supported and coordinated by the DIH AGRIFOOD, making sure that the approach will follow participatory, Multi-Actor Approach (MAA), where all relevant food supply actors and consumers are joined in the co-creation process (Living lab principle).

In such a community, decision making, systemic innovation, optimization of food supply chains, development of new value chains and support for policy makers will be driven by data collected from all food supply actors and third-party sources (Earth Observation, open data sources). Moreover, the DIH AGRIFOOD will implement a systemic innovation approach on the successful legacy of DIH AGRIFOOD services, which include Innovation scouting, Technology transfer and development of Living lab environment, where all stakeholders work together on “interconnected innovations”.

3.1.5 Velika Gorica, HR

The recent updates and upcoming events related to the Velika Gorica lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/17-velika-gorica-lab/>

Velika Gorica is a Croatian municipality of 63.500 inhabitants of which almost 32.000 live within the city center. It is the 6th largest city in Croatia, and largest city in Zagreb County (284.000 inhabitants).

Velika Gorica is well connected via roads, airport and train due to the closeness to the capital of Croatia, Zagreb city.



From the ecological point of view, the city of Velika Gorica is a traditional fruit / vegetable production area with the possibility of growing a large number of species and varieties of fruit trees and growing a variety of vegetables. There is a high number of small food businesses (agriculture producers) which have small family businesses. The city of Velika Gorica covers an area of 32,915 ha, of which 10% is used as agricultural land. About 40% of the population still lives in the rural part of the city, and they are fully or partially connected to agricultural production. It is estimated that there are about 5,000 agricultural holdings in the City, with about 3,000 engaged in agricultural production.

Also, it has outstanding transport connections with the entire Republic of Croatia allowing for both food production and distribution as well as closeness to the largest national market (Zagreb). Together, the geographical position, natural and social resources of Velika Gorica as an integral part of Zagreb County, rank it among the leading cities in terms of development potential for agricultural production. This is largely due to the proximity of Zagreb, i.e. a large market for agricultural products. This is especially true for fresh products that do not tolerate longer transport, as well as for products of higher value and a higher price segment that are more difficult to find customers in less differentiated markets.

The challenges to be addressed in Velika Gorica is the fragmentation of land plots along with low level of technology use in the agriculture industry. Also, in spite of the high potential for distribution and sales there is a lack of a well-equipped market as a center for selling local products.

Since Croatia has high potential for production (land and agriculture producers) it can be more self-sustainable than the current state. There is a need for a systemic analysis approach toward all food actors and all actions in the food supply chain to build attractive scenarios for sustainable growth on the basis of this potential.

Velika Gorica focus areas

- # Short value chains (e.g. school scheme and city market)
How can the city procurement be a lever for more consumption of local food?
- # Connecting food producers by showing them the benefits of collaboration
- # Creating a plan for self-sustainability and connecting that plan/strategy of Velika Gorica city with Zagreb county's policies and goals
- # Creating momentum with other stakeholders which can produce food by themselves (e.g. kindergartens)
- # Fostering new start-ups in the FOOD2030/city region food system framework, e.g. circular economic business models, Smart Food etc.
- # Exploring the potential for circular economic business models

3.1.6 Quart de Poblet, ES

The recent updates and upcoming events related to the Quart de Poblet lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/page/1-welcome-page/>

Quart de Poblet is a small city in the Valencian region (Spain) that has more than 24.000 inhabitants and its area is 19,6 km². The City Council aspires to put food systems transformation at the heart of its policy agenda. To this end, it has 55,000m² of land near the metro station "Faitanar", which the local government intends to convert into organic urban gardens. The municipality also has an industrial park with a high concentration of factories in the food sector. There are more than 30 producers in the municipality dedicated to the production of a wide variety of food products such as bread, nuts, eggs, meat, honey, beverages, etc. In addition to a municipal fresh food market, Quart de Poblet has more than 200 retail shops selling fruit and vegetables, fish, bakery, meat, etc.

In the framework of the Cities2030 project, QUAR contributes with the establishment of a policy and innovation lab. It will consist of a Food Lab led by the City Council of Quart de Poblet, with an active involvement of public representatives.

The local government does not have a consolidated food policy, but it has taken occasional initiatives, especially, actions aimed at mitigating food poverty:

- Assistance to families who cannot afford basic necessities, through vouchers, cards, subsidies, etc.
- Establishment of soup kitchens.
- Dairy products and benefits for breast-feeding mothers.
- Home care for the elderly and sick persons, including shopping and cooking support.

Our expectations from Cities2030 projects are establishing a consolidated local food policy and transforming our food system towards sustainability through three processes:

- Cities2030 will provide us with the basis for developing a sustainability-oriented food policy

Quart de Poblet focus areas

- # Protecting and preserving natural resources
- # Food security
- # Connecting urban-rural linkages
- # Circularity
- # Social inclusion and labor insertion
- # Fair commerce
- # Start-ups and leisure spaces creation

- Obtaining support in terms of knowledge, expertise and innovation
- Interacting and co-creating with other European cities and partners from different sectors will be a great contribution to have a clear vision of the objectives we will have to set around our food system.

We find that food sustainability is a key challenge to face at the local level due to the amount of food waste, unhealthy diet habits, the high rate of CO2 emissions and food poverty level.

3.1.7 Seinäjoki FI

The recent updates and upcoming events related to the Seinäjoki lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/19-sein%C3%A4joki/>

Seinäjoki is one of the top growth centers in Finland and the center of the province of Southern Ostrobothnia, which is growing and developing rapidly. There are already more than 60,000 inhabitants and 140,000 inhabitants in the urban area. As the center of Finland's sixth largest market area, the city also offers very competitive and attractive trade services. The dynamic and developing Seinäjoki offers for companies a competitive business environment.

There is a high concentration of food business companies and a strong network of researchers and developers in the Seinäjoki area. Effect on the regional GDP is relatively higher than elsewhere in Finland. Agriculture and food industry together, comprises 15 % (Finland average 9 %) of the total GDP of the region. 20 % of Finnish food industry is located in South Ostrobothnia when measured by turnover. Almost 30 % of Finnish agrotechnology companies and food sector machine construction is located in South Ostrobothnia. The area's specialization is in product R&D services, research facilities and equipment, development and testing platforms, user networks and business support services.

Finland is the northernmost country to practice versatile agriculture, farming and food production techniques. Our long summer days and arctic midnight sun enhance the unique taste of grain,

Seinäjoki focus areas

- # Living Lab Restaurant
- # Healthy Snack Box
- # Food Business Club
- # Educational workshops
- # Community supported agriculture / school gardens
- # Reducing the environmental impact of food, waste management
- # Innovative public procurement
- # New business models

berries, vegetables, herbs and other ingredients. Northern cold climate allows farmers to use far less chemical pesticides than in most countries. Sustainability, environmental safety and health of all citizens are at the core of constant development in Finland. Strong primary production and active investment in industrial production forms the bases for our food business. Significant investment in the innovation environment and a wide cooperation network, development platforms and genuine user networks brings added value for the whole sustainable food system.

One of the relevant food policy topics in Seinäjoki is promoting a healthy lifestyle, starting with school children. Finland was the first country in the world to serve free school meals, and it is a world leader in nutritional expertise. Finnish food education is integrated into the early childhood education plan. During the comprehensive school children learn the basics about the Finnish food culture and food education. School meals and food education are defined in the comprehensive school curriculum. Every school makes an action plan for food education individually taking into account health, nutrition and behavioural education.

The Healthy Kids of Seinäjoki operating model has been developed over the years, nutrition as a starting point. The concept includes a well-being and health promotion perspective, targeting children, young people and families with children. Decision makers are involved in the development of the model, professionals in various fields, as well as training, research, representatives of the third sector and companies. Healthy Kids of Seinäjoki aim is also to develop the city as a living environment that supports children and families holistically.

In this Cities2030 pilot project, we want to achieve strong cooperation for knowledge sharing for good practices, and mutual learning and inspiration about the challenges of the food system transformation and the way other cities in Europe are facing this challenge. The Seinäjoki pilot implements themes; nutrition for a sustainable and healthy diet and community innovation and empowerment. The pilot is linked to the Healthy Kids of Seinäjoki concept, where the activities aim to promote the health and well-being of children and young people.

In the framework of Cities2030 we will continue to expand the Healthy Kids of Seinäjoki living lab that connects different stakeholders. Our aim is to develop and enforce principles of engagement for children, but also public actors and the private sector actors that produce food and beverages, to identify the incentives and disincentives that encourage actors across food supply chains and food environments to protect, promote and support healthy diets for children and adolescents. Also to research priorities and information gaps related to what children and adolescents eat and prefer, how they make their food choices, in addition to documenting better practices and lessons learned promoted by children themselves.

3.1.8 Vidzeme, LAT

The recent updates and upcoming events related to the Vidzeme lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/page/32-welcome-page/>

Vidzeme Planning Region (VPR) is a public regional development and coordination institution, established in 2006 by the Latvian Law of regional development, and acts under supervision of the Ministry of Environmental Protection and Regional Development. The main functions of VPR are to ensure regional strategic and spatial planning and coordination, as well as cooperation between municipalities and governmental institutions. VPR provides planning services on national, regional, and local level, it ensures regional and local level representation in elaboration of national policies.

The mission of the VPR is to coordinate and promote long-term and well-balanced development of the Vidzeme region. VPR is responsible for the elaboration and implementation of the long-term sustainable development strategy (2030) and medium term (7 years) Development Program of the region. The Strategy and the Program are focused on the development of the selected priority areas of the region: human resources, economic development and innovation, and territorial development. Until the 1st of July 2021 Vidzeme region consists of 26 municipalities. The administrative-territorial reform in Latvia is currently underway. The existing municipalities will be merged, their number will decrease, but the area of influence of the Vidzeme Planning Region will expand.

As a regional level institution VPR has a wide expertise in many cross-border Projects (in many different areas – tourism, innovation, business development, geospatial planning, ICT, energy efficiency, social services etc.), most of them being large scale Interreg Program funded projects. VPR has implemented more than 70 international projects and has developed a significant experience in project management, as a project partner, work package leader, lead partner, policy development and good practices transfer, stakeholder management, dissemination, and strategic communication. Below we provide information on the RIS3 priority areas of the region, as they are defined in the current strategic documents of Vidzeme. VPR is one of the first organizations in Latvia that is working in the field of bioeconomy, and in 2019 has elaborated and adopted an Action plan for the development of a knowledge driven bioeconomy innovation ecosystem development in the region.

The food sector plays a significant role in the economy of Vidzeme, which is why the VPR is introducing and supporting initiatives promoting food innovation, particularly at SMEs. VPR is a founder and member of the Latvian Food Bioeconomy Cluster, which is a registered membership

Vidzeme focus areas

- # Food system resilience
- # Food system sustainability
- # Regional food systems
- # Direct local engagement
- # Community supported agriculture / school gardens
- # Short supply chains
- # Integration of local initiatives into (supra)national policies

association, one of the most developed and internationally active bioeconomy clusters in the Baltic countries. The cluster fosters cooperation between its 15 members and external partners to promote knowledge and technology transfer, develop new products, technologies and innovative solutions, to promote a modernization, competitiveness, growth of export capacity and innovation capacity of the cluster members.

More information can be found on <https://www.linkedin.com/company/latvian-high-added-value-and-healthy-food-cluster/>

Since 2017 VPR is organizing measures, promoting food innovation. E.g., a) bioeconomy forums with focus on food technologies, b) foreign study visits of food enterprises to RTDs and enterprises dealing with food issues in the different steps of food production chain, e.g. processing, packaging, logistics, c) hackathons for food processing companies, and other.

CITIES2030 project thematic

- to improve food system resilience and sustainability is on the agenda of VPR and the region's municipalities as a whole. The region has intention and strives to ensure accessible, safe and healthy food for its inhabitants today and in the future, and to have systemic solutions for farmers, producers and processors to have secured a place in the local food chains. Latvian pilot will tackle the existing challenges in the REGIONAL FOOD SUPPLY SYSTEM for public sector institutions in the territory of the Vidzeme Planning Region. It will identify the most efficient ways to establish and maintain a sustainable and resilient regional food system and to strengthen ties among the food chain stakeholders (producers, processors, traders, logistic enterprises, catering services providers etc.) in order to increase availability and use of locally produced food, especially healthy food. Especially between producers, processors and consumers – to develop, implement and strengthen sustainable and resilient short food supply chains.
- To engage local society, communities, organizations, and companies in identifying their needs and abilities towards a sustainable and resilient food system.
- Identify good practices and challenges regionally, nationally, and internationally for the development of efficiently functioning regional food systems and short food chains.
- To develop and test new methods and tools for establishing and strengthening resilient regional food systems and short food supply chains in close cooperation with local communities.
- To mainstream FOOD2030 framework interests into national, regional, and local strategies, plans, initiatives, and actions.

Possible solutions within the CITIES2030:

- Green public procurement adapted to needs of sustainable and resilient regional food chains (already on national and EU political agenda; provided financial support within EAFRD LEADER program).
- Smart villages and towns – local initiatives facilitating the development of short food supply chains, diverse forms of cooperation and positive changes in inhabitants/consumers consumption behaviour.

Deliverable D4.2_ Facilitation & Guidelines for Policies & Pilots Development

Prepared by P33 | Edited by P33 | Checked and reviewed by P02 EPC | Approved by P01

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- Public –private partnerships creating favourable preconditions for existing and appearing food chains in the regions.
- Promoting development and introduction of innovative/new business models, production, storage, and delivery solutions based on territorial uniqueness.
- Other to be identified within the implementation of the project

3.1.9 Troodos, CY

The region of Troodos in Cyprus enjoys a unique traditional culture and lifestyle with distinct characteristics (climate, less polluted environment, local food, agriculture and processed agricultural products). People in the area live longer and lead healthier lives than people living in other parts of the island.

Much like other rural and mountainous areas, in Troodos, there has been a 50% reduction in population. The Government has started some actions to promote sustainable development in the Troodos region, in an effort to revert the migration of the population in the region. One approach is to explore the unique diet and lifestyle of the Troodos region, export good practices to the urban areas and support the sustainable development and boost the economic environment and livelihood of the Troodos region.

There are two complementary goals for the collaboration into Cities2030 and the pilot project:

- a) The sustainable development of the Troodos Region and
- b) Carry out meaningful research in the areas of economic sustainable development and wellbeing (healthy lifestyle and eating habits).

Food is critical for the region as a producer and a consumer. The region grows and exports fruit, vegetables, wine and olive oil and dairy and processed meat products all over Cyprus and

Troodos focus areas

- The production, marketing, distribution, exporting and selling of agricultural, dairy, meat and processed meat products.
- Possible new agricultural and foodstuffs that can be cultivated and produced locally for the local population or for export to urban areas and beyond.
- Diet and lifestyle of the people in the region and find what contributes to their longevity and good health. Try to transfer these to the urban areas if possible to help city folk improve their lifestyles and health.
- Promote the sustainable development, growth and employment opportunities in the region as a tourist destination and as a place where people choose to live and raise a family or retire.

internationally. Some of these products are exclusive to the region and carry out the protected Designation of Origin (PDO) label. In general, processed meats aren't considered very healthy but in the case of these traditional products because they use natural additives they are not considered as harmful. Producing and exporting these products is very crucial to the survival of the region. The other important issue is that the people who live in the region live longer and have less health issues. This can be attributed among other factors to the diet of the people, the less polluted environment and the reduced levels of stress. We would like to study these factors and add to the body of knowledge of what are the factors of this apparent healthier lifestyle.

3.1.10 Bruges, BE

The recent updates and upcoming events related to the Bruge lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/13-brugge/>

Bruge is a Belgian city in the region of West Flanders where the city of Bruges is the capital. It has a surface area of 138 km² and population (2021) is 120.000 people. The city center is UNESCO protected. The local economy is closely connected to the port of Zeebrugge, which is one of the main car handling ports in the world and a center of excellence. Bruge is also characterized by mechatronics, 'Handmade in Bruges' as well as the healthcare and IT sector. The knowledge institutions in Bruge include Katholieke Universiteit Leuven, the VIVES University of applied sciences and HOWEST University of applied sciences.

The food system related challenges and agenda in Bruge is to ensure sustainable urban development, climate adaptation/ local resilience and sustainable tourism. Co-create a better meal service for vulnerable elderly (65+) people living at home and visiting social service centers in the Bruges region by integrating a selection of the SDG's

The major project objectives for the Cities2030 collaboration and pilot are to:

- Enhance circularity and local food belts
- Protect & preserve natural resources
- Secure healthy and sustainable food
- Stop food poverty and insecurity
- Develop food culture and skills topics included in the lab

Bruge focus areas

- # Farm to fork aspects
- # Personalization of diets
- # (Care)-network aspects of the 65+ individual
- # Food technologies
- # Sustainable delivery system
- # Smart food related technologies at home

3.1.11 Agrotopia, BE

The recent updates and upcoming events related to the Agrotopia lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/page/41-welcome/>

Inagro is based in Belgium close to the city of Rosslare which is a Belgian city and municipality in the Flemish province of West Flanders. The municipality comprises the city of Roeselare proper and the towns of Beveren, Oekene and Rumbeke. Rosalare municipality comprises an area of approximately 59 square kilometers and has a total population of 62.000 people.

Inagro is the knowledge partner of agricultural and horticultural businesses in the areas of innovation and sustainability. Within its own optimized professional research infrastructure, Inagro's scientific and technical teams devise farming and cultivation techniques ready for practical use. Our partners in these endeavours are universities, university colleges and businesses. Inagro's advisers take the new know-how to the agricultural and horticultural businesses and guide the businesses in how to implement these insights, all of which is supported with professional communication tools. Geographically speaking Inagro is located in the very intensive and innovation-driven agricultural and horticultural heart of the province of West Flanders in Belgium.

Inagro is finalizing Agrotopia, an inspiring research rooftop greenhouse of approximately 9000 m² where co-creation and demonstration will stimulate innovations to address the challenges the greenhouse horticulture and high technological urban farming sector is facing. Read more on what Agrotopia can do for your agribusiness. Approximately 6000 m² will be dedicated to soilless cultivation of leafy and fruit vegetables, allowing to develop best practices for hydroponic systems. The rooftop greenhouse integrates 3 functions: research, demonstration and communication towards the growers and the general public and, a living lab.

The greenhouse has been designed to maximize integration and use of resources from the city environment such as energy and water. Residual energy for heating is delivered by a cogeneration installation that primarily serves the warehouse of the agricultural auction market. Residual heat

Agrotopia focus areas

- # Innovation
- # Food system sustainability
- # Farming and cultivation techniques
- # Greenhouse horticulture
- # Urban farming
- # Rooftop greenhouse
- # Hydroponics
- # Vertical farming

will also be supplied by the city waste incinerator which is located close to the city, at a short distance from the Agrotopia site. Additional research will be performed to close the circles of waste streams and energy as much as possible.

Approximately 6000 m² will be dedicated to soilless cultivation of leafy and fruit vegetables, allowing to develop best practices for hydroponic systems. Five compartments for the cultivation of fruit vegetables are separated by a technical corridor from 5 compartments for leafy vegetables. In addition, new innovative systems will be tested and/or demonstrated. Several compartments will be equipped with LED artificial lighting. Double energy screens and Ventilation Jets will be installed to gain experience with the principle of Next Generation Growing to save energy. Attention will be paid as well to integrated pest management practices and the reuse of waste nutrient solutions to close the water loop.

Not only will we gain experience in vertical farming in rooftop greenhouses and the challenges associated with the construction of a rooftop greenhouse, other forms of vertical farming are addressed as well. A 12 m high vertical compartment will allow to explore the potential of growing vegetables along high walls in the city and of maximizing the cultivation area in greenhouses. In addition, one compartment will be equipped to explore multilayer indoor growing with artificial lighting.

The greenhouse will be open to the growers and the general public. Via public corridors people will be able to see the technologies applied and demonstrated in the greenhouse compartments or our expo zone. The close proximity of Agrotopia to the agricultural auction market constitutes a unique opportunity to demonstrate best practices and innovative techniques or installations in the greenhouse to growers and to support on-farm implementation.

Agrotopia's interest and expectation from Cities2030 collaboration is knowledge exchange on technological living labs and experience on greenhouse horticulture as part of the food production system and professional urban farming. The initial idea and focus of the pilot is to co-create to innovate the Agrotopia living lab. Living labs are user-centered, open innovation ecosystems based on systematic user co-creation approach, integrating research and innovation processes in real life communities and settings (as defined by ENOLL, the European Network of Living Labs). The location of the rooftop greenhouse next to the agricultural auction market, where vegetable growers and buyers meet on a daily basis, offers a unique opportunity towards interactions. It will allow researchers, growers, technology providers and knowledge institutions to meet and collaborate.

In the Agrotopia living lab we can involve end users and greenhouse horticulture experts via the set-up of co-creation groups. Throughout the innovation process, from the early phase of exploring, to testing and/or validating. For this we can build on our extensive experience in greenhouse horticulture and use a range of tools including brainstorm sessions and workshops. In addition, the greenhouse infrastructure allows () real life testing and co-creative validation. This can speed up the innovation process and target new products to its end users and the market.

Altogether, Agrotopia will constitute an inspiring research environment, resulting in innovative solutions for high technological greenhouse horticulture and urban farming. The infrastructure will be operational September 2021.

3.1.12 Vejle, DK

The recent updates and upcoming events related to the Vejle lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/9-vejle-denmark/>

Vejle is a Danish city and municipality. It has 115.000 inhabitants, of which 55.000 live within the city. Our city is growing and our aim is to attract more citizens and students, foster new businesses and ensure that new local jobs are created. By 2030 we want to reduce our Co2 emissions by 70% in alignment with the goals set out in the Paris agreement. We believe that ambitions on growth, attractivity and climate neutrality go hand in hand as part of being a resilient future-fit city. Partnering with the food industry is an important contribution to realizing this ambition. Our location within Denmark is central - geographically and logistically we connect North, South, East and West. For centuries, Vejle has been an important center for trade and commerce and today it continues to be both a relevant hub for businesses and a vibrant place for city shopping.

The area around Vejle is known as the Danish manufacturing center and in Vejle this is particularly related to the food sector. Of the total private employment, 20% (8.000 jobs) are related to food industries - across agriculture, industrial processing, food service or related industries such as packaging and process equipment. Privileged with access to water, a rich nature and historic and cultural sites, tourism is important in Vejle. Gastro-tourism is gaining traction with small-scale producers collaborating, and also the city food scene is on the rise with Michelin star level restaurants.

In the local business park, Food Innovation House, we facilitate the collaboration with and continued development of the food industry in our area, including supporting new start-ups. The municipality has created the Culinary Institute by Vejle, which aims to support the positive development around food production and food as service and experience. The Culinary Institute

Vejle focus areas

- # Short value chains
- How can the city procurement be a lever for more consumption of local food?
Fostering new start-ups in the FOOD2030/city region food system framework,
- e.g. circular economic business models, Smart Food etc.;
- # Welfare with food
- e.g. food as school and life skills, food as health etc.
Climate action and sustainable food production, i.c.e. plant based diets;
Food as social glue, i.e. integration of city-region community

by Vejle works broadly, also towards the public service and the broader role of food in connection with health and wellbeing, education and culture.

Vejle is part of the Cities2030 project to support our ambition of a prosperous and sustainable future. We see food as much more than nutrition - it feeds not only the people of our city, but is central to our growth and attractiveness. Also, the food production and agriculture in our area accounts for about 35% of the Co2 emissions and with our climate action plan we will also be looking to find new solutions and grow new partnerships with the food sector. We believe that the framework of the Milan Urban Food Policy Pact provides an important framework for our city focus and also partnerships with i.e. food industry.

In the framework of Cities2030 we will set up a temporary policy- and living lab that connects our businesses, citizens, knowledge institutions and the municipality itself to explore how the food system affects our city and experiment with new solutions to improve status-quo. We believe the living lab concept will bring us value and the prospect of working together with other cities and gaining network and learning is a big motivation for Vejle as our capacity as a mid-sized city is limited.

Our ambition is to explore the full scope of our city-regional food system to look for opportunities. We will in particular be working with the Food2030 agenda towards our climate plan, our resilience strategy and our policy for business and economic growth to see how we enhance our efforts with the food focus. We want to see how we as a city and municipality can create the best conditions for existing and new businesses to capture value from some of the current challenges in the food system – in Denmark and beyond.

3.1.13 Marseilles, FR

The recent updates and upcoming events related to the Marseille lab can be seen on the online lab page, accessible here: <https://cities2030-community.gisai.eu/labs/6-marseille/>

Marseille is the second largest city in France (860,000 inhabitants), geographically characterized by a massive urban sprawl and a strong presence of natural areas right next to the City (National Park

Marseille focus areas

- # Sustainable food access for deprived populations
(access devices and sensibilization in a logic of empowerment)
- # Mutualization among urban agriculture
(agro-ecological skills, material, human resources)
- # Foster cooperation on the whole food chain for a drastic change.
- # Create vocations and train for new professions.
- # Develop land access to facilitate installation of new producers, transformers etc.

of Calanques). Since the 60s, the city has been experiencing an economic crisis that led to a strong social crisis dealing with weak public policies to face it. The city is fractured between a "poor" North (40% of people living under the poverty line in 5 districts) and a "rich" South.

Marseille's region is traditionally a region of fruits and vegetables production and was self-sufficient in the 1950s. Today, Marseille's food autonomy is 2,22% (UTOPIES, 2018). 90% of the local production is dedicated to exportation, whereas 90% of what is consumed is imported (Chambre d'Agriculture 13, diagnostic PAT). Marseille still has a great potential for a local production both in terms of pedoclimatic conditions but also in terms of available land (around 230 ha, CA13 + CITAG, 2018). The city itself is also characterized by huge disparities in terms of access to sustainable food (geographical and economical access) with multiple urban food deserts localized in the north of the city.

CITAG observed a strong mobilization among civil society and economic development about sustainable food and agriculture subjects in the last few years. In 2019, we identified 333 initiatives inside the city connected to the agr-ecological transition (retail, community gardens, restaurants, NGO's, urban farming etc.). Marseille signed the Milan Urban Food Policy Pact in order to pursue the agenda of sustainable food system and leverage the city's potential to positively influence the development.

La Cité de l'agriculture (CITAG) is part of the Cities2030 project to support our ambition and our actions towards more resilient and sustainable cities through the transition of our agriculture and food systems. To develop access to sustainable food has major benefits in different fields, i.e. health, social link, economy, job creation etc.. The development of urban farming also has a lot of benefits in order to adapt cities to climate change and make urban spaces more resilient, for example improved air quality, health, social link, heat islands, biodiversity etc. Food is a great vehicle for a major change towards ecological transition.

For CITAG, the Cities2030 collaboration and pilot project is a great occasion to connect and discuss our actions with other cities across Europe. It is always a good way to exchange good practices and improve our impact on food systems. As the EU has a significant weight in terms of public policies in the agricultural and food sector (CAP etc.), it is very interesting to think of the CFRS at this level.

3.1.14. Other labs

There are several other labs developing in the Cities2030 project, including in Turkey, North Macedonia and Iceland. These labs have emerged after the start of the project and their description, activities and progress will be described on the online platform for the labs.

4 Pilot Lab Support Model

The pilot cities demonstrated large variation in the starting point of their CRFS, which indicates an equal variation in partners' needs for project-facilitated support. Therefore, it has been considered how different elements and types of support are implemented over the course of the project period and how the development of the pilots and the collaboration takes place. Table 4 provides an overall view of the different support elements presented over the project time span (Y1-Y4).

Table 4 Overview of WP4 Support Model

Support	Y1	Y2	Y3	Y4
Guides & Program	D4.1, 4.2, 4.3	D4.5		
Facilitation (seminar series)	Lab to Lab meetings (x3)	x6 (on lab request)	x6 (on lab request)	x3 (on lab request)
Peer-to-peer network	Private Facebook Group	Peer group formation	Peer group activities	
Mentor 1:1		Expert group (project wide)	1-1 assigned mentors	
Monitoring and reporting		(M24 onwards)		D4.7

The support is made up of several elements; provided templates, guides of facilitated seminars, peer-to-peer knowledge exchange, networking and 1:1 mentoring of labs. This support is developed over time and can change in prevalence and importance over the course of the pilot implementation. In year one, the project's program guidelines, described in deliverable 4.3 *Policy Lab Action Plans* are of special importance for labs. This deliverable includes a how-to guide on setting up a policy lab and organizing the activities.

The Peer-to-Peer network is an emerging support tool, with which labs help other labs. The facilitation of peer-to-peer support lies in the provision of platforms such as Facebook groups and the Cities2030 Labs forum.

In year two, 1:1 mentoring is developed, with the necessary knowledge about what labs are focusing on and thus what type of expertise is needed. This also requires a specific match with the best available resources within the overall project consortium.

Monitoring and reporting is also constructed in the second year, as a support function to assist labs in documenting activities and monitoring progress. The reporting is supported by shared templates and formats within deliverable 4.7 *Monitoring and Impact Assessment*.

The decision on the support model element was discussed with labs and qualified through several discussions and iterations and continues to develop dynamically with the needs and progress of labs. The following sections describe each of the support model elements.

4.1 Seminar Series Themes

The series of seminars were developed in the initial phase of lab setup and is meant as a guiding tool to follow the pace and topics of implementation. The structure of the seminars is as follows:

- The seminar is initiated by a presentation from the work package coordinators on a time relevant theme. This consists of a more formalized and detailed guide to a specific process. These presentations discuss the methodology of applying the MUFPP framework or specific processes of CRFS lab creation or execution, such as vision or stakeholder engagement.
- Secondly an inspirational session with lab inputs or external experts is held. This is done to give perspective on the topic at hand. This could be based on concrete experience, plans from the labs or engagement of someone with deep topic knowledge.
- Finally, the seminar always includes interactive break-out sessions, where labs get to discuss the topic in smaller groups and exchange progress, doubts and good practices.

This is an aspired structure that is adapted from time to time. For example, the amount of small break-out sessions has been reduced with a better experience of plenum discussions. Also, the topic series of seminars has changed from the initial idea to the experience of labs' actual starting point and needs.

Table 5 Sessions of the Policy Lab Seminar Series (2021-2023)

Seminar	Title	Topic
Seminar 1	Policy Lab Kick-Off	Kick-off with lab introductions and presentation of the Cities2030 policy lab prototype
Seminar 2	The Policy Lab Approach	The WHY, HOW, AND WHAT of policy labs with a focus on the approach and value for cities
Seminar 3	CRFS Vision	A guide on establishing a local vision for policy lab with focus on the process of defining lab ambitions and goals
Seminar 4	MUFPP	Deep dive on the MUFPP; how to apply the MUFPP framework and the process of joining the MUFPP
Seminar 5	Pathway & Action Plan	Setting out the process of action plan development
Seminar 6	CRFS Policy Action Plan	Setting out the action plan steps and instructions on using the action plan templates
Seminar 7	Peer sharing	Sharing lab development paths across consortia – a workshop with Fusili and Cities2030 labs
Seminar 8	Lab Festival	In-person event in Haarlem where CRFS labs present 1 st year activities and progress

The topics and dates have thus been planned with a 1-year perspective and the following year's program will be proposed and discussed at the lab festival based on progress as well as learnings from year 1. The seminars will be planned according to the needs of the CRFS lab partners, so alterations from this schedule may occur.

4.2 Lab-to-lab Collaboration

It is central to Cities2030 and a part of the MUFPP commitment to stimulate collaboration between cities, to share knowledge and promote sustainable food systems to more cities.

The premise for lab-to-lab collaboration is the shared experience of the process of applying the MUFPP and in general following the programmatic approach of Cities2030 pilot policy labs. Furthermore, it is highly likely that cities will be focusing on some of the same policy areas and indicators. One such probable area could be healthy diet such as the case in both Seinajoki and Bruges, or the focus on public procurement policy in relation to food as is the case for both Vidzeme and Vejle. These similar interests are however becoming clearer as labs progress and define the actual focus areas. Hence the lab-to-lab collaboration is expected to intensify during the project and become more important from year 2 onwards.

4.2.1 Facebook Group

There has been an initial interest to be able to share more day-to-day and with pictures what goes on locally to which it was decided to try out a private facebook group for labs.

The premise for this informal forum is to keep in contact in between project wide meetings such as the seminars. The desire to share events or updates is facilitated by the Facebook group structure, which further brings the intimacy and trust to share also "half-baked" ideas among the labs.

The set-up of a Facebook group was done prior to the establishment of the lab forum (see next section) and most of the labs have created an account to sign up. It was however agreed from the beginning that Facebook group might be an intermediate tool for peer-to-peer communication due to hesitation among several labs to use this platform.

4.2.2 Lab Platform

In the beginning of the second project year an open platform for lab group management and facilitation of group discussions was implemented. Each lab was empowered to create and customize its own display, management of members and tools such as event calendar.

This platform is the preferred and official forum for peer-to-peer connection in Cities2030 and several workshops have been carried out to on-board labs and showcase functionalities.

The lab platform is still in the beginning stages of use, and while most labs have created a local lab page the forums and theme-based groups of exchanges and collaboration are not yet fully implemented. The Cities2030 lab platform is openly accessible via web (<https://cities2030-community.gisai.eu/>). However, not all lab-specific pages and discussion are open to the public.

Management of public and private content is done by the labs. Thus, the platform entails good features to facilitate lab-to-lab collaboration, both as a local partnership and between pilot labs.

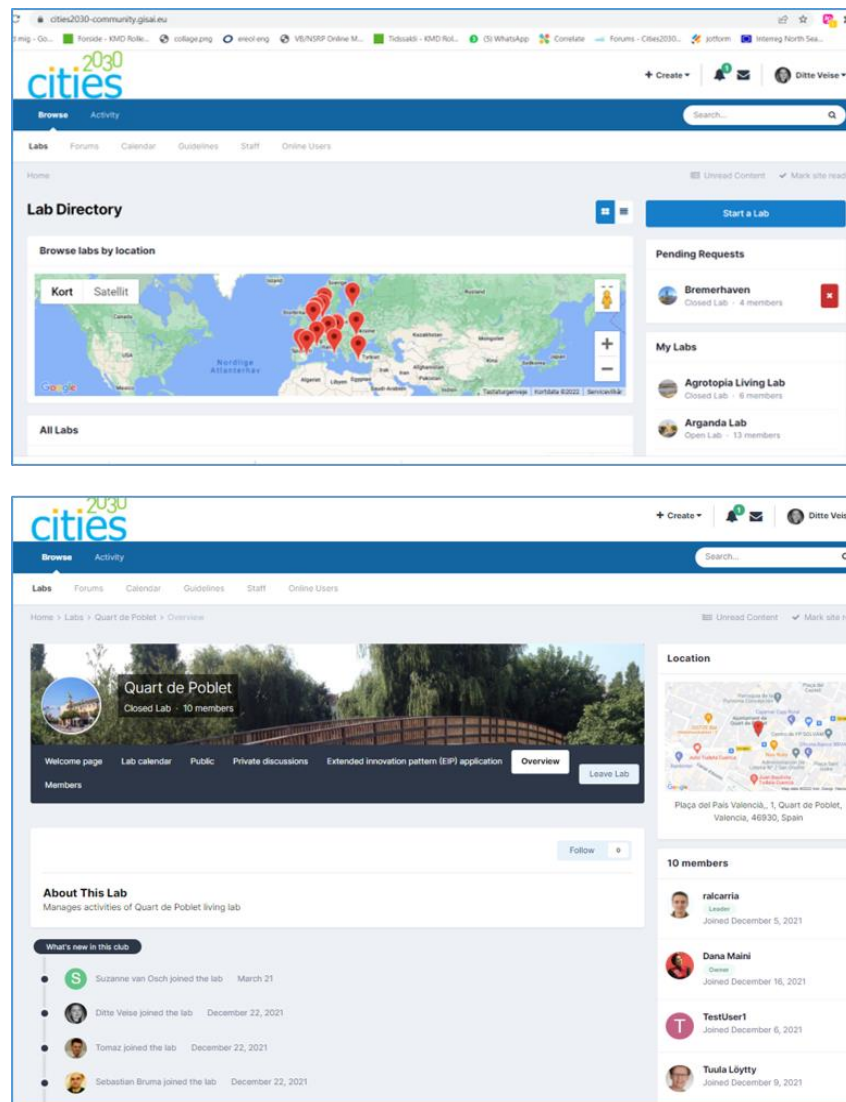


Figure 11 An Impression of the Lab Platform

From the landing page (top picture) the user can access open forum discussions as well as lists of all labs. Each lab manages their own page (bottom picture) including the structure of the theme-bar and member administration.

4.3 Resource Library

Another element in the support model is the access to various knowledge resources. This includes inspirational material as well as supporting project documents. These resources are initially stored on a closed collaborative platform, Correlate, that is also a partner of the Cities2030 consortium. Work package coordinators administer the policy lab pages and curate material relevant to the implementation. All pilot lab partners have access to the board and may request and suggest additions to the document library.

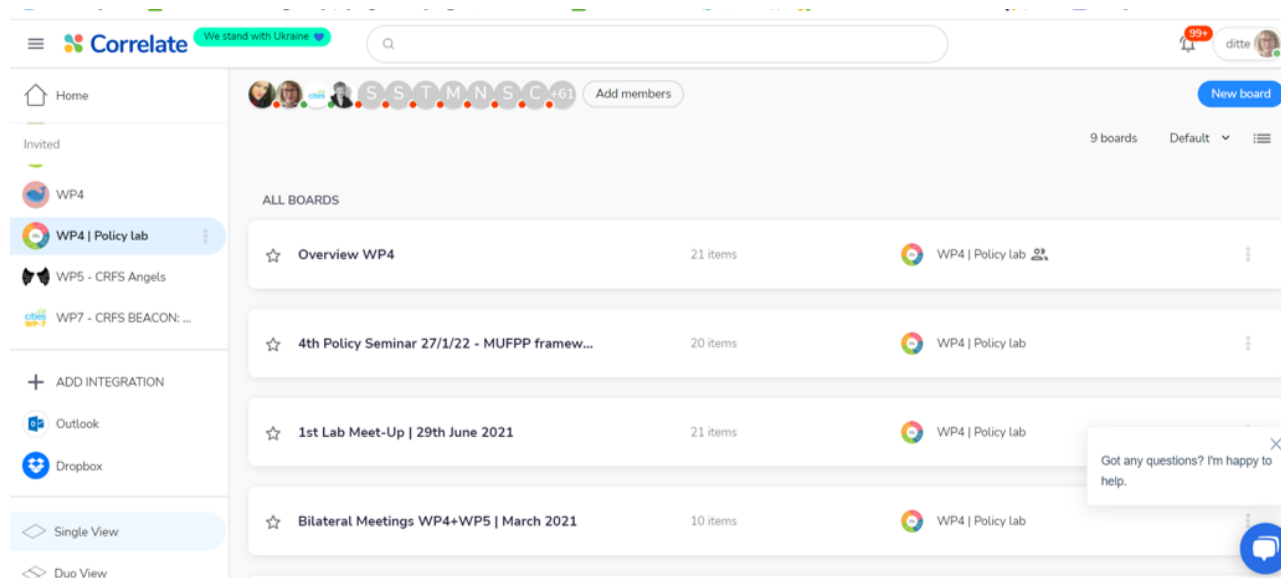


Figure 12 An Impression of the Lab Platform

4.4 1:1 Mentoring

The concept of 1:1 mentoring to labs is based on the vast amount of expertise and resources within the Cities2030 consortium that are not directly related to pilot lab implementation, but still have time and dedication to support the implementation. Taking from the example of the Pollica Lab in Italy, which was presented in the second seminar, it clearly showcased the value of expert facilitation within the city labs. The concrete matching of Cities2030 knowledge partners with the pilot labs is anticipated in the second year. By this point, the labs' focus areas will have become clearer and it will be easier to specify more targeted needs for mentoring.

The amount and specific application of mentoring is case-dependent. An initial proposal of possible ways to use mentoring was presented to the labs as part of discussing the support model. At that stage it was not clear to labs exactly what was needed. Hence the mentoring will be reconsidered and discussed at an upcoming seminar, conveniently in the planning of the second year seminar topics in the realization and organization of peer groups.

Mentoring 1:1

Group of experts

- They offer expertise on topics
- They offer a webinar series
- They are partners of Cities2030

WP Drop-in zoom

- Weekly slot for connecting with WP leads
- Ad-hoc issues

Extra eyes and hands

- Assigned to labs (opt-in)
- Sparring on steps and process
- They are partners of Cities2030
- .. with surplus WP4 time!

(Your idea here)

Ideas

>.8

Figure 13 The Mentoring Options for WP4 as Presented to the CRFS Labs

4.5 Status and Learnings

The facilitation of policy lab implementation is continuously developing with an aspiration to provide a complete and comprehensive support model, comprising both guided and facilitated elements as well as empowerment of labs to learn and collaborate. The status of the facilitation is assessed using the anticipated development and prevalence of support elements over the project course, with high importance and value of the seminar series in the first year of implementation.

The elements of peer-to-peer and 1:1 mentoring are not yet in implementation. However, the preparation and facilitation of these elements is ongoing. Project partners have signed up for these groups and a future seminar will facilitate the activation of the peer groups.

The project-wide support of the lab implementation is dynamic and has taken as point of departure the actual status of labs' capacity and expressed wishes to the support. Adjustments must be made when the progress does not follow the "step-by-step" planning, which has been illustrated by the lack of readiness for step 1 within the labs.

The resources needed for project-wide support are considerable. More 1:1 contact and coaching could improve the support. During the action plan creation phase an open call-in hour was established, in which lab actively shared concerns and lab bottlenecks. This information was not retrieved during seminars, yet provided valuable insight into CRFS processes. Moving forward, WP

leaders will actively engage with peer groups to continuously assess needs and evaluate actions to fulfil these needs.

5 Sources

5.1 Useful sources

The Glasgow declaration builds on other declarations and was formally presented on November 6, 2021 during the UNFCCC COP26. With 100 signees, 14 city cases have described their situation, including enablers and barriers and motivation for joining the declaration. One of the cities is Bruges, which is also a pilot city of Cities2030.

Examples are available

<https://www.glasgowdeclaration.org/resources>

The Food Action Cities platform is promoted by MUFPP with RUAF and GAIN. This gives access to a big repository of case stories of cities along relevant food system themes, showcasing place-based solutions.

The 38 cases for policies and governance are available.

<https://foodactioncities.org/>

Place-based is also informed by national urban policies (NUP). These policies influence the development of the cities' room to influence and manage areas such as economic development, spatial planning, and sustainability. A study of 34 NUP strategies, shows the country's difference in scoping city mandate.

https://read.oecd-ilibrary.org/governance/the-state-of-national-urban-policy-in-oecd-countries_9789264271906-en#page57

A dashboard with classification and representation of national characteristics in terms of food system types, components and drivers is also showing the clear differences and thus context and place-based outlooks on food systems.

<https://foodsystemsdashboard.org/42-food-policies-and-actions>

SmarterLab has developed a toolkit aimed at ensuring inclusion of citizens and vulnerable groups in the lab processes. Citizens lacking these resources will normally not be included as co-creators. The toolkit advises practical ways to effectively anticipate this limitation in the lab approach.

<https://www.maastrichtuniversity.nl/research/msi/research-output/toolkit-smarterlabs>

As part of the CRFS toolkit (FAO) there is a specific guide to analyzing stakeholders and their potential role in the discovery and co-creation.

<https://www.fao.org/3/i9255e/i9255e-CRFS-Stakeholder-Mapping-and-Analysis.pdf>

In the report "Food in an Urbanized World – the Role of City Region Food Systems in Resilience and Sustainable Development " an overview of stakeholders and their possible interest in participation could be. From the city and local government over different industrial stakeholders to consumers and civic organizations.

This overview is presented in the report's annex 2.

[https://www.fao.org/fileadmin/templates/FCIT/documents/Food in an Urbanised World Report DRAFT February 2015.pdf](https://www.fao.org/fileadmin/templates/FCIT/documents/Food_in_an_Urbanised_World_Report_DRAFT_February_2015.pdf)

There are several method toolkits for understanding and mapping stakeholders and ecosystems. IDEO is a renowned developer of tools and methods. One of the methods is Ecosystem mapping which is an exercise to start exploring the context around the target audience, and what that might enable or inhibit their behavior.

[https://design-kit-production.s3-us-west-1.amazonaws.com/Design+Kit+Method+Worksheets/DesignKit ecosystemmapping worksheet.pdf](https://design-kit-production.s3-us-west-1.amazonaws.com/Design+Kit+Method+Worksheets/DesignKit_ecosystemmapping_worksheet.pdf)

A so-called meta-toolbox – a toolbox of toolboxes – can be accessed via OECD in the following link

https://oecd-opsi.org/search-toolkits/?sft_user-type=policy-maker-or-adviser.

Urbact is a European platform for urban development focusing also on processes of development and implementation of solutions for sustainability. The Urbact implementation toolbox includes how to prepare, preserve the participatory approach during implementation and monitor the progress.

<https://urbact.eu/tool-category/implementing>

OECD has several relevant reports and insights available with more specific focus on the innovation dynamics in the public sector and creating the right conditions for the city administrative staff to prioritize and take on such innovation as policy labs.

<https://www.oecd.org/innovating-the-public-sector/Background-report.pdf>

"Sustainable Food Places" offers a guide and toolkit for collating and analyzing strategies, policies and plans that are relevant to the local food agenda. This enables you to see which local priorities can be supported by work on sustainable food systems. You may also identify where there are policy gaps, or opportunities to influence.

[https://www.sustainablefoodplaces.org/resources/files/SFP Toolkit/Food Policy Mapping.pdf](https://www.sustainablefoodplaces.org/resources/files/SFP_Toolkit/Food_Policy_Mapping.pdf)

In the “Government as a System” Toolkit, developed by Policy Lab a framework for determining policy action space is provided, describing in a matrix format different policy instruments/ government roles and the purpose and maturity, i.e. from early stage to scaling initiatives. The toolkit along with other policy lab resources is available online.

<https://openpolicy.blog.gov.uk/2020/03/06/introducing-a-government-as-a-system-toolkit/>

The World Bank report Rich Food Smart City presents a comprehensive analysis of the city policies and benchmark of levers, mandate, existing initiatives and maturity assessment. In particular chapter 3 of the report which is available online

<https://openknowledge.worldbank.org/bitstream/handle/10986/35137/156620.pdf?sequence=7&isAllowed=y>

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