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# **HuMUS**

Healthy Municipal Soils

Overview of best practices for citizen and stakeholder engagement in the implementation of soil health measures at municipal and regional levels

Deliverable 1.3

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## Executive summary

Healthy soil is critical for the public and the planet. The goal of the EU Mission 'A Soil Deal for Europe' (Soil Mission) is to lead the transition to healthy soils via sustainable soil management. This requires knowledge and awareness of the importance and value of soil health and the challenges of implementing the transition and this Mission across Europe.

Municipal and regional authorities are responsible for soil management, regulation, innovation, and community-building, and these administrative structures play a pivotal role in promoting soil health. Therefore, engaging municipalities and regions across Europe to actively protect and restore soil health is vital for the success of the Soil Mission.

HuMUS is the only project that is currently implementing the EU Soil Mission by targeting administrative bodies at local and regional levels. As part of the HuMUS project, this report presents a participatory methodology that will be applied to 34 pilot cases to support the co-implementation of solutions to protect and restore soil health at municipal and territorial (intermunicipal) levels.

The HuMUS methodology ensures increased cooperation between public and private actors, such as municipal stakeholders, policymakers in charge of local and regional strategies, as well as private stakeholders, academia, and citizens. Key stakeholders, including marginalised or vulnerable groups, are consulted to develop a participatory diagnosis to identify the strengths, weaknesses, opportunities, and threats associated with soil health. The co-creation of solutions for the protection and restoration of soil health is based on this process, and it is implemented in the form of Territorial Management Agreements that will be discussed and agreed upon by all the actors involved.

In addition to this, after conducting an in-depth study of relevant literature and carrying out a case study review, fifteen best practices have been selected that describe successful participatory applications that could help the development of the proposed participatory methodology.

Finally, the HuMUS methodology represents a suitable framework for a further development of a living lab and a soil district in the territories where it will be applied.

## 1. Introduction: The EU Mission ‘a Soil Deal For Europe’ and the Project “Healthy Municipal Soils”

The main objective of the EU Soil Mission is to improve soil health, that is, “the physical, chemical and biological condition of the soil determining its capacity to function as a vital living system and to provide ecosystem services.” according to the Directive of the European Parliament and of the Council on Soil Monitoring and Resilience, Soil Monitoring Law (2023). The goal of the EU Mission ‘A Soil Deal for Europe’ (Soil Mission) is to lead the transition to healthy soils via sustainable soil management according to the following specific objectives:

Table 1. Objectives of the Soil Mission
1.- Reduce desertification;
2.- Conserve soil organic carbon stocks;
3.- Stop soil sealing and increase re-use of urban soils;
4.- Reduce soil pollution and enhance restoration;
5.- Prevent erosion;
6.- Improve soil structure to enhance soil biodiversity;
7.- Reduce the EU global footprint on soils;
8.- Increase general soil literacy.

*Source: European Union Mission ‘A Soil Deal for Europe’ (Soil Mission)*

This requires knowledge and awareness of the importance and value of soil health and the challenges faced in implementing the transition and the drivers of this mission across Europe. In order to achieve this, the European Union fosters knowledge exchanges, dialogues, and awareness raising. The inclusion of marginalised or vulnerable communities that have a role in soil management contributes to a shared understanding of the challenges and helps co-create solutions to protect and restore soil health.

## 2. Report Methodology and Best Practice Selection Criteria

The responsibilities of municipal administrative bodies on soil health are not always clear, as agriculture and forestry are normally provincial, regional, or national issues. Therefore, some local governments are not aware of the importance of this commitment. However, their role in soil management, regulation, planning, restoration, innovation, and community building is for promoting soil health. Therefore, engaging municipalities across Europe to actively protect and restore soil health is vital for the success of the Soil Mission.

HuMUS is the only project that is currently implementing the Soil Mission by targeting administrative bodies at local and also regional levels. The main aim of the HuMUS project is to facilitate the deployment of the Soil Mission across municipalities and regions by: (i) creating and experimenting with spaces for social dialogue on soil health which can be shared by European public and private actors; (ii) promoting shared understanding and co-assessment exercises of the challenges faced in process of improving soil health (biophysical and socio-economic factors); (iii) enhancing knowledge sharing between municipalities and regions, including knowledge about the transformations required for the current S4 (Sustainable Smart Specialisation) strategies and the use of the EU funds available for this transition.

As a part of the HuMUS project, this report presents a framework and tools for the implementation of the Soil Mission in European municipalities. It provides information on a participatory organic district approach, the *HuMUS methodology*, that can be adapted to different scenarios to support the co-implementation of solutions to protect and restore soil health at municipal and territorial (intermunicipal) levels.

The participatory methodology proposed ensures increased cooperation between public and private actors, such as municipal stakeholders, policymakers in charge of local and regional strategies, as well as private stakeholders and citizens.

The methodology proposed enables the Soil Mission to be adapted to the social, political, cultural, and environmental needs and dynamics of different territories. Therefore, at a municipal level, the actual inhabitants of the area and the municipal institutions are the actors who can recognise the value of the soil and decide which mechanisms can be used for the improvement of soil health.

This participatory methodology enables a territorial diagnosis to be reached with key stakeholders by identifying the strengths, weaknesses, opportunities, and threats associated with soil health. This process is the basis for the co-creation of solutions for the protection and restoration of soil health in the form of Territorial Management Agreements that are discussed and agreed on by all the actors involved.

In addition to the methodology proposed, a selection of best participatory practices for soil health and territorial management have been identified. These were established several years ago, and they can potentially be replicated in other situations and contexts. The performance of the best practices is inspirational, and they provide participatory solutions and methodologies that can be used to improve the success of both soil health improvement and territorial management.

Finally, the HuMUS methodology represents a suitable framework for a further development of a living lab and soil districts in the territories where it will be applied.

## 2.1. Participatory methodologies and best practice selection criteria

As more than 60% of European soils are unhealthy, it is essential to develop new ways to improve territorial management related to maintaining and restoring soil health. In order to promote new kinds of public policies and to avoid previous errors in the future, this document proposes that participation should be one of the innovative features enabling the overcoming of the current situation. Participation can also help to secure a commitment from municipalities to deploy the Soil Mission. Participation is understood as the democratic involvement of citizens in issues that pertain to the governments (in the widest sense) of different areas. In other words, citizens participate to join in with decision making and in what could be the final outcome of participatory public policies.

Participation relies heavily on the growing predominance of place awareness (DeLind, 2002; Cruz Gallach, 2008; Magnaghi, 2005; Fanfani and Matarán, 2020), meaning that citizens are becoming increasingly involved in issues that pertain to the conditions of the territories that they inhabit, which logically includes soil health.

The three conclusions described by José Carmona Gallego (2004) on the successful participatory experience of Parque Miraflores in Seville has generated a supporting argument for participation as an opportunity: “1) Changing cities (and perhaps also territories) in the public interest is possible”; “2) Public participation is a tool that can be used for the reappropriation of cities (and territories); and “3) collectively patronising territorial transformation requires going beyond demanding changes; sovereign, self-managed spaces need to be established”.

However, there are multiple problems that put the success of these types of projects at risk. One example of a potential problem is if an institution decides to move forward and apply a public policy that is, to a greater or lesser degree “contradictory” and innovative when compared to previous dynamics that have decreased soil health. The issue in this situation is that the new policies challenge the power of those who have the control of territorial management by highlighting that their actions generated the soil degradation processes.

Logic and experience (Matarán, 2013; Mancebo, 2014; Menconi, et al, 2016, Calderón, 2020; Moragues-Faus, 2020) show that in these cases social participation can mean that these types of problems can be seriously reduced because if people and stakeholders who live in and care for a place are involved in decision making concerning their local area, successfully achieving territorial management aimed at improving soil health is easier. The need for participatory involvement is even clearer in the case of agricultural and forestry spaces as they are areas that must be shaped and cared for by the public, unlike other places such as urban spaces in which citizens have very little power to intervene, though there are some noteworthy exceptions which are taken as examples of best practices in this report.

Furthermore, if, as it frequently occurs, problems with the application of public policy is the result of a change in government caused by the electoral dynamic, a lessening of government interest, and / or a change in socioeconomic circumstances. In these cases, participation can guarantee that a given public policy is activated or that it continues to be developed correctly despite the changes surrounding it. In addition, institutional policies might finally become irrelevant for the improvement of soil health. If an improvement in territorial management is developed in a sovereign, or even self-managed, manner, and run by the people and organisations that operate within a territory, accompanied by and promoted by the municipal government, institutional policies could be more reliable. The agrarian parks of south of Milan (see Annex I) and Baix Llobregat in Barcelona are paradigms of this capacity of resistance and the continuity of practices that improve the soil health of the areas in which they are located in difficult institutional and territorial contexts.

Nevertheless, up until now, though with some exceptions, the institutions involved in territorial management have directed participation towards the use of consultation processes on plans and projects that have previously been designed (Cruz Gallach, 2008; Magnaghi, 2005; Mancebo, 2014; Menconi, et al, 2016; Moragues-Faus, 2020). These processes are mainly used to obtain information from stakeholders and citizens, and to build up a consensus that has enabled the institutions to continue with dynamics that degrade soil. This weak participation has not facilitated either social innovation or public and stakeholder involvement.

Traditionally, a wide range of structures and participatory councils have been created that work more closely with institutional ideas rather than social ideas. These structures and councils have mainly dealt with what Magnaghi (2005) defined as strong territorial agents, that is, agents with access to political environments, information, cultural and economic resources, and communication networks. This institutional rigidity has made it even more difficult for many stakeholders, such as farmers and citizens, to actively help to improve soil health, however much they might want to participate in regeneration in both urban and rural contexts.

Reaching a consensus on something that has already been decided is not relevant here, the issue at hand is the development of plans and projects within a territory that are shared and constructed by the majority of society. Achieving this means being able to call upon a wide variety of agents who are on an equal footing, regardless of their strengths or weaknesses, can build scenarios in which soil health can improve.

Extremely interesting strategic innovations have been generated in the participatory processes such as public juries and public assemblies, which have made great strides in democratising participation and making it possible for very different types of territorial agents to be included in these processes. Nevertheless, it comes as no surprise that deliberative structures, even if decision making powers are included, are not enough for improving the situation regarding environmental issues such as soil health, which need a clear commitment and regular strategic action from the actors that influence them, and, to a certain extent, citizens.

Therefore, participatory spaces need to be created and processes need to be generated that can give rise to strategic agreements that can also activate the actions required to improve soil health together with municipal institutions. The HuMUS project defines these agreements as Territorial Management Agreements, and they form the basis of the living labs and soil districts, which are used to start up the specific actions used for the effective implementation of the Soil Mission in European municipalities.

Both the methodology and best practices described here provide strategies and tools for the participatory deployment of the Soil Mission and the future creation of living labs and soil districts that can be developed by using some of the ideas presented here.

## 2.2. Participatory Action Research

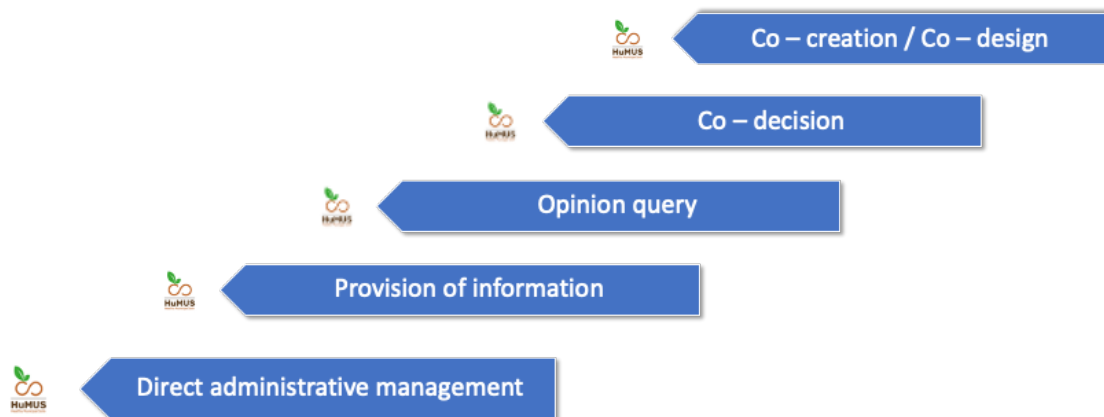
The methodology proposed, based on the organic district approach (INNER, 2020), focuses on active participation, understood as the construction of decisions taken collectively by all the actors involved, particularly those who are most affected by these decisions.

Unlike forms of socio-political production that prioritise political and technical roles, the roles of citizens, and the creation of consultation councils, this project enables processes and, if necessary, participatory bodies and institutions to be developed. This means that virtuous triangles of relationships can be created between the actors that belong to the Quadruple Helix (public authorities, industry, academia and citizens).

The use of this methodology also recognises the limitations and capacities of the sectors and paradigms of public, private, social and community action, as well as the assumption that maximum levels of efficiency and innovation are achieved when complex combinations of interaction are established between these sectors and paradigms.

From the perspective of levels of participation, using this methodology means going beyond the concept of participation as a mere consultation of other actors by those holding the greatest share of power, but rather the elevation of the consultation process so that joint decision-making, co-decision making, and even co-creation can be achieved.

Figure 1. Public Management Participation Ladder.



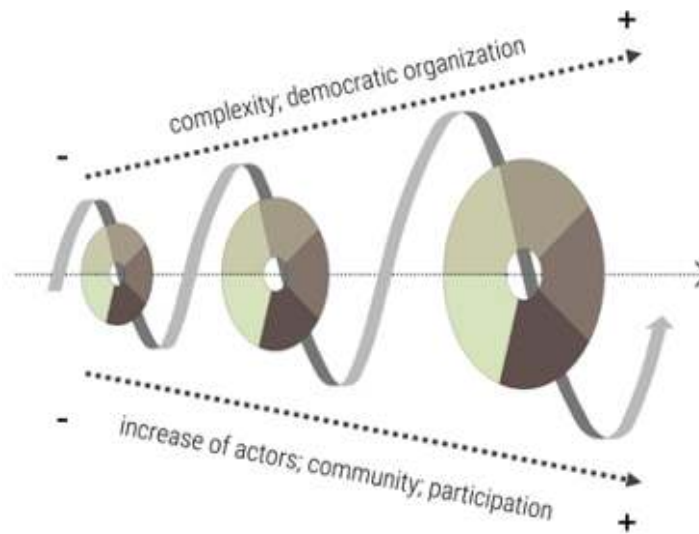
Source. Modified from López-Medina (2012).

As previously shown, the idea of real co-creation includes a proactive perspective that goes beyond deliberation and co-decision making. In other words, co-creation promotes collective action built upon collective agreements and pacts.

The participatory methodology that we have created here, focused on organic districts, is based on Participatory Action Research (PAR), which is characterised as a process that is carried out in a specific territorial area, using a “space-time spiral”. This model alludes to the cyclical and incremental nature of this process over time. The process is *encouraged* -not driven nor managed - by methodological experts. In the HuMUS project, these experts are the Soil Stewards and the HuMUS local teams.

This requires transforming existing participatory institutions or building new ones to create a structure of mechanisms and spaces that facilitate participation. It means establishing a reference point (a body or institution) that can enable participatory decision-making and actions in which stakeholders involved in the improvement of soil health and territorial management can be represented.

Figure 2. Spiral participation model.



Source: López Medina (2012).

### 2.3. The organic district approach

The innovative organic district approach (INNER, 2020) coordinates public-private policy concerning food and agriculture, and it offers a systemic response to societal challenges and transcends the artificial boundaries of policies, programmes, and different levels of governance by establishing bioregions as the main reference of spatial organisation (Fanfani and Matarán, 2020; Passaro and Randelli, 2022). Soil is a key non-renewable resource for the provision of essential ecosystem services, and its health is the foundation of the organic district approach. The INNER-International Network of Eco-Regions (2020) states that an organic district includes a territorial agreement for the sustainable management of local resources, based on the principles of organic agriculture and agroecology, which is the Territorial Management Agreement in the HuMUS methodology.

According to the Participatory Action Research methodology, the initial phase of the organic district approach is based on a multi-stakeholder approach, and it includes the selection of actors, citizens, and stakeholders (e.g. academia, farmers, consumers, associations, and local and regional policymakers) to create participatory groups.

These groups need to be equipped with the appropriate tools and information so that connections with decision-making bodies can be made. These participatory groups also need to be empowered so that they can propose public and private solutions for the improvement of soil health and territorial management at local and regional levels.

Interactive spaces that promote dialogue need to be established, and existing ones need to be strengthened in every territory to generate new ideas, encourage "thinking outside the box", and identify viable solutions and specific actions for promoting soil health so that Territorial Management Agreements can be developed. The co-design of strategies and actions to improve the protection and restoration of soil health are based on these agreements.

## 2.4. Best practice catalogue

This report is based on a collection of EU and international evidence on the implementation of participatory methods, tools, and approaches for the engagement of Quadruple Helix stakeholders in participatory research and action on territorial management to improve soil health. Best practices have been selected to provide useful inputs and direct links to participatory socio-technical solutions whose effectiveness has already been proved. These solutions can be replicated in the 34 pilot case studies that comprise the HuMUS project, as well as in any experiences related to the Soil Mission and other EU public policies on participation at a local level.

Academic and grey literature have been used as information sources, and an online survey has also been developed and will be open in the [HuMUS web page](#)<sup>1</sup> till the end of the project to receive inputs from all over Europe and beyond.

The data on best practices collected and covered by this report are not exhaustive, meaning that a full set of initiatives per category or per country has not been collected. Nevertheless, the best practices selected include an overview of the different land use categories included in the Soil Mission and different regions of Europe. However, the number of initiatives collected varies from country to country, depending on the amount of information available and the level of interest in best practices in each area.

Finally, HuMUS has been adapted to meet the selection criteria applied to good practices in the report "Communication and citizen engagement initiatives in line with the Horizon Europe Mission A Soil Deal for Europe" (European Commission, 2022). The approach used in the HuMUS project focuses specifically on local participatory processes and methodologies implemented to improve soil health and territorial management that have been developed by municipalities or other stakeholders.

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<sup>1</sup> <https://humus-project.eu/catalogue-of-best-practices/>

Table 2. Selection criteria applied to good practices

Criterion	Description
Relevance	<p>The initiative is in line with the objectives of the EU Mission “A Soil Deal for Europe”.</p> <p>The initiative has been developed in response to existing international/national/regional/ local challenges, and it addresses the existing needs of key stakeholders, such as municipalities, farmers, landowners, and the general public.</p>
Effectiveness	The initiative has delivered significant results, as well as achieving some of its objectives.
Participation	Participation is a key issue in the development and/or management of the initiative.
Impact	The initiative has or will have a positive impact on soil health and territorial management, or it has raised awareness about soil health.

*Source: Adapted from the report on “Communication and citizen engagement initiatives in line with the Horizon Europe Mission A Soil Deal for Europe” (European Commission, 2022).*

### 3. The HuMUS Methodology in detail

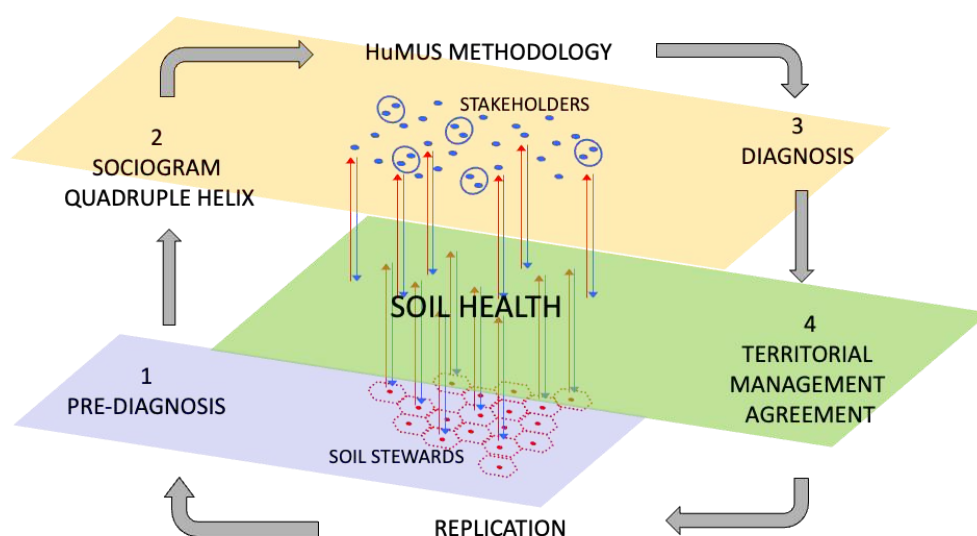
The HuMUS methodology uses the organic district approach and the Participatory Research and Action methodologies for municipalities, and it includes examples of best practices.

As presented in Figure 5, preparatory activities in the HuMUS methodology start by carrying out a pre-diagnosis, which is theoretical in nature, and then a sociogram to map the actors involved in the second step is created. The third step is a participatory diagnosis to establish how soil health is being considered in the field, and this diagnosis identifies existing problems and challenges. Finally, the fourth stage, the Territorial Management Agreements are drawn up using the results of the participatory diagnosis.

Throughout the implementation of the methodology proposed, technical office work is combined with work sessions with political, technical, and socioeconomic actors. This series of steps is for guidance, and they must not be followed strictly, but rather in an adaptive manner, opening up the process to moments of simultaneity, as well as leaps forward and backtracking. The methodology starts out from a participatory idea that emphasises the sheer magnitude of the process and its collective construction. Therefore, although each territory has a different starting point and there is no one-size-fits-all itinerary for the activities to be carried out, certain shared methodological approaches can be presented.

A list of the steps involved and key aspects that are recommended are provided for each of the four stages. These include examples of best practices that supplement the information described.

Figure 3. HuMUS methodology.



Source: Self elaboration.

The first step is the signing of the Mission Soil Manifesto<sup>2</sup> by the authority or authorities involved in the process. Political commitment is very important, especially at a municipal level, and therefore the approval of this document represents a commitment from the outset that facilitates the rest of the process.

*Figure 4. Mission Soil Manifesto.*



## Mission Soil Manifesto

1. Soil is essential for the life of humans and nature. 95% of our food comes from soil. Healthy soils provide us with clean water, good air, sequester carbon thus mitigating and increasing the ability to adapt to climate change, and support biodiversity. Soils also sustain our landscape and cultural heritage and are the basis of our economy and prosperity. We acknowledge that soil is the basis of our well-being. With this Manifesto, we are creating a community that takes care of soils.
2. We need to protect and restore soils. Soils are a fragile resource that need to be carefully managed and safeguarded for future generations. More than 60% of soils in the EU are considered to be in an unhealthy state due to unsustainable management practices, pollution or sealing. Climate change puts further pressure on soils and accelerates land degradation. All types of soil are concerned. No soil should be left behind.
3. Soil protection and restoration need to be embedded in all human activities that have an impact on land. Protecting and improving soils is crucial to sustain the well-being and prosperity of everyone. We can all contribute to halting soil degradation and building a sustainable future based on healthy soils for food, people, nature, and climate. Actions are encouraged at all levels: global, national, regional and local.
4. We support the Mission 'A Soil Deal for Europe' (Mission Soil) and its goal to create 100 living labs and lighthouses by 2030 to promote soil protection and restoration in Europe. We also welcome activities under the Mission to address its specific objectives: reduce desertification, conserve soil organic carbon stocks, stop soil sealing and increase the re-use of urban soils, reduce soil pollution and enhance soil restoration, prevent erosion, improve soil structure to enhance soil biodiversity, reduce the EU global soil footprint, and improve soil literacy in society.
5. We are committed and motivated to contribute to the protection and restoration of soil health in our capacity, sector, and territory as this is a fundamental resource for the place where we live and for our well-being. We will contribute to raise awareness on the importance of soil and enlarge the community actively involved in caring for this precious resource.

*Source: Soil Mission.*

<sup>2</sup> <https://ec.europa.eu/eusurvey/runner/mission-soil-manifesto>

Once the Mission Soil Manifesto has been signed, a dynamising team, which also monitors the whole process, is established in each municipality in which a participatory HuMUS methodology is applied. Our proposal is based on the creation of positions of the Soil Stewards, and these individuals will make up the motivating groups with the HuMUS project local teams. The size of the teams will vary from territory to territory. This report, which acts as a guide, is specially designed for these dynamising teams of Soil Stewards, and a complete open-access online training programme is also being created for them.

The main objectives of these teams are:

- Carrying out monitoring, supervision, and redirection of the participatory process
- Putting forward and debating the different perspectives held by the representatives of institutions and stakeholders on soil health and territorial management
- Facilitating discussion on and negotiation of proposals

### 3.1. Pre-diagnosis

#### 3.1.1.-Pre-diagnosis description

The first stage of the process is a territorial pre-diagnosis that the participatory process is based on (López Medina and Fuentes-Guerra Soldevilla, 2021). This must be developed by the dynamization team with the help of the Soil Steward. Stakeholders could also be involved from the very beginning in the pre-diagnosis if it is possible.

This requires a scenario to be created which enables each territory to be recognised. This must always be carried out in a way that favours participation in actions that are focused on improving soil health and territorial management.

An evaluation of earlier participatory experiences and ongoing ones is needed to facilitate the new participatory process related to soil health and territorial management.

Likewise, pre-existing diagnoses can be considered so that what has already been created is not repeated. This could also encourage stakeholder participation as it would call upon their knowledge of these earlier studies.

#### 3.1.2. Methods for pre-diagnosis development

Pre-diagnosis can be carried out by using the following sub-phases:

##### **SUBPHASE 1. STRATEGIC APPROACH**

##### **a. Preliminary territorial area study**

- Collect works related to soil type, soil use/vegetation cover, and soil health data from each municipality (or municipalities), and publish an overview of the existing instruments under the HuMUS project (e.g., Factsheets with quick and easy methods for carrying out soil health assessments).
- Analyse territorial management in the zone, including plans, ongoing programmes, active or recent projects and processes.
- Search for information using the secondary sources available and Open-Source Intelligence (OSINT).
- Create an initial list of stakeholders that can be called on to draft the Territorial Management Agreement, highlighting those stakeholders with whom any type of relationship already exists.
- Describe existing supra-municipal structures that could have a connection with soil health and territorial management.
- Study the political make-up of the area.

### **b. Initial work sessions with the local authority or authorities**

- Explanation of the Territorial Management Agreement: main focus and purpose, strategic objectives, reach and opportunity.
- Initial identification of problems and challenges facing a territory from an institutional perspective
- Creation of an initial idea of needs and priorities, as well as ongoing and planned actions
- Complete the initial list of stakeholders with new references
- Share the road map for carrying out the work and produce a timeline of important milestones, including potential participatory and communicative actions to be developed.

### **c. Initial study of information from all the municipalities.**

- Drawing conclusions: shared goals, unique features, and local priorities.
- Initial assessment of the strategic direction of the Territorial Management Agreement, including joint challenges and potentialities.
- Analysis of the viability of governance and the participatory process: difficulties and strengths.

### ***Important aspects***

In small municipalities, the greatest level of methodological adaptation takes place at the beginning of the drafting process of a Territorial Management Agreement, which is not the case in metropolitan areas. The human resources available in the different types of authorities vary. Those who hold positions of municipal political responsibility and municipal experts cannot exclusively dedicate themselves to this process, and councillors and mayors sometimes are not remunerated for their work. It is also normal for several municipalities to share experts or services that come from other provincial or regional institutions.

Considering these special circumstances, especially in small rural areas, an initial meeting is required with whomever is in charge of the municipality or rural area and their direct team of experts. The potential reach of the drafting work is established in this initial meeting, and expectations are adapted to the reality of the resources available for the drafting and subsequent execution of the Territorial Management Agreement.

## **SUBPHASE 2. INFORMATION, ANALYSIS, AND TECHNICAL DIAGNOSIS**

Compilation and study of documentary information by using secondary sources, official data, as well as the analysis of planning figures, sectoral studies, development strategies, agenda 21, urban agenda, audits, maps, sociodemographic studies, economic studies, etc.

The following sections contain generic information. The structure can, however, be adapted and adjusted to a local scenario, and therefore to small rural areas or metropolitan contexts.

### **a. Urban and territorial model**

Objective

A correct territorial description must be provided so that the diagnosis and implementation of the Territorial Management Agreement can be carried out.

Key data

For the zonal characterisation of the areas, certain factors such as residential zones, commercial zones, industrial zones, public services, public spaces, agrarian spaces, forestry spaces and green infrastructure need to be defined.

### **b. Natural and cultural heritage**

Objective

Recognise the cultural and natural heritage of the territories as a legacy of their historical processes and identify their capacities and social, economic, and environmental potentialities.

Key data

- Identification of natural protected spaces and their specific legislation.
- Identification of assets of cultural interest (immovable heritage; movable heritage; activities of ethnological interest)
- Recognition of cultural heritage zones (Monuments; Complexes of buildings; Heritage sites)
- Identification of landscape typologies.

### **c. Population and territory**

#### Objective

Recognition of the differences and trends of territorial demographics so that zonal characterisation and its structural dynamic can be identified.

#### Key Data:

- Population evolution and forecast
- Population structure (average age, pyramids)
- Parameters of demographic capacity (youth, old age, replacement rates. synthetic index of demographic capacity)
- Main household indicators

### **d. Economy and society**

#### Objective

Recognition of the differences and trends in activity dynamics and local employment, so that zonal characterisation and its structural dynamic can be identified.

#### Key data:

- Activity and employment.
- Agroecology and extensive livestock farming
- Labour market and hiring.
- Emerging employment sectors.
- Socioeconomic vulnerability affecting individuals
- Business activity

### **e. Climate change**

#### Objective

Considering the evidence of the environmental emergency and warnings which will condition the future of settlements, an analysis of climate change in different territories is required

#### Key data:

- Evolution forecasts from climate groups.
- Evolution of temperatures and rainfall.
- Adaptation measures.

## ***Important aspects***

- Increasing stakeholder mapping

Each mapping that we carry out is a snapshot, taken at a specific moment of a specific group of people. Therefore, each one reflects the reality that the group of people involved represent (regarding issues such as logic, opinion and interests) at the moment it is produced.

Therefore, new mappings, or extensions of the earlier ones, should be carried out that can provide other names using the snowball effect, or other visions held by stakeholders that have been identified (for example, on their relevance and their relationships with other agents.)

If possible, holding short interviews with stakeholders who are points of reference in the field is recommended to collect information and facilitate their later involvements in the participatory process.

- Interaction with local actors

Obviously, when a project starts in a territory, it is because different issues have already arisen there. Institutional actors have already been working on issues or in directions that are concurrent with the Territorial Management Agreements, and measures are already in place. These agreements need to be contextualised in these processes, and there needs to be awareness of possible initial reluctance as overlaps and conflicts about competences can occur.

- Documenting works and sectoral processes

The different departments of the institutions that dynamise the process have been setting up their own projects and programmes for decades. Other authorities have also deployed planning processes in the different territories documenting work done and understanding the ongoing processes, as well as recent processes to achieve complementarities and avoid the same actors becoming overwhelmed by being called to too many meetings over short periods of time, often to discuss similar issues.

- Developing the territorial interface – universities- research centres.

As a part of the initial contact with key actors, teams of teachers and researchers linked to a territory or issues which could potentially be applied to the Territorial Management Agreement are contacted as part of the initial contact with key actors.

- Territorial presence

As this stage is focused on the office work that the sectoral analyses require, a presence in the field must also be established and opportunities to make direct contact with individuals and stakeholders in the territory must be found.

Informal and formal conversations can bring forward opinions and generate trust.

## 3.2. Sociogram - map of actors

### 3.2.1. Sociogram description

In the second step, a sociogram is created that identifies and maps of the main and most important actors involved in soil health. This considers different land uses in the local communities, and adds to the initial list of actors described in the pre-diagnosis. The sociogram includes actors from the public sector (policy makers, advisory services, etc.) at different levels (municipal, provincial, regional); the private sector (producers, cooperatives, logistic services, economic legal, fiscal, technical, territorial planning, restoration, transformation, processing, and conservation consultants); customers (shops, restaurants, canteens, consumer groups, final consumers, etc.); civil society organisations and NGOs (dedicated to agro-ecology, gastronomy, local food products, unemployed people, etc.); research bodies (academia, research centres); public, semi-public, and private companies (start-ups, alternative food networks; other alternative food, nutrition, health and sustainability networks.); ICT providers, etc.

The map of actors is a fixed image that represents the relationships between actors and their affinities and degrees of involvement with the project (Alberich, 2007). The sociogram is constantly changing as new actors join the process, and existing actors change their affinities with the project and with each other. However, the sociogram should be repeated or revised at any time and its evolution needs to be tracked throughout the process.

The mapping technique has been extremely useful for:

1. Carrying out a participatory diagnosis, introducing debates and inviting collective reflection on the role of each entity and organisation in the local area, as well as considering the functions and relationships that are established. Both the fieldwork and the contacts that are formed by the pre-diagnosis can be used by the dynamising team for the construction of the Social Map.
2. Proposing changes. Based on the debates held on the existing situation, new series of actions are proposed. In short, it is a matter of taking a forward-looking position on how current relationships can be changed and creating a pact, which in this project is the Territorial Management Agreement.
3. The Social Map shows where the different relationships are: the most conflictive ones, the most neutral ones, the inexistent ones, the ones that involve differences that can be overcome, and the ones that show the greatest similarities. Therefore, the mapping technique is useful for creating new networks of similarities, ranging from the relationships that are most similar to those that are not, and then building bridges between them (Alberich, 2007)

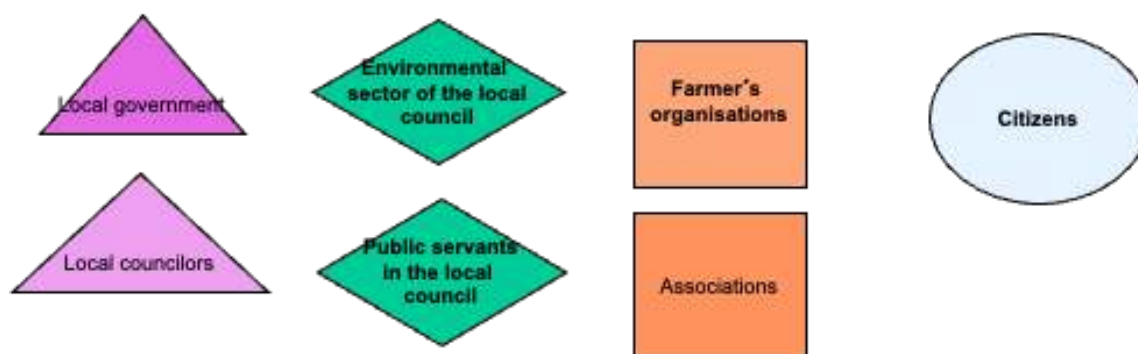
### 3.2.2. Methods for sociogram development- map of actors

If possible, the following subphases include the participatory creation of the sociogram with a group of stakeholders. Depending on the relationships between the stakeholders, the participatory creation of the sociogram can be based on individual interviews or group interviews.

STEP 1: Selection of the stakeholders in the zone (those located there or external stakeholders) who were considered important during the pre-diagnosis for the participatory process.

STEP 2. Differentiation of the actors: Firstly, by considering the typology of their fields, for example, political figures, technical figures, and formal, informal, business associates (shapes and colours can be used for this purpose as in the following figure). Secondly, the perception of the presence, dimension, and importance of the actors (the size of the forms can be used also for this purpose as in the following figure).

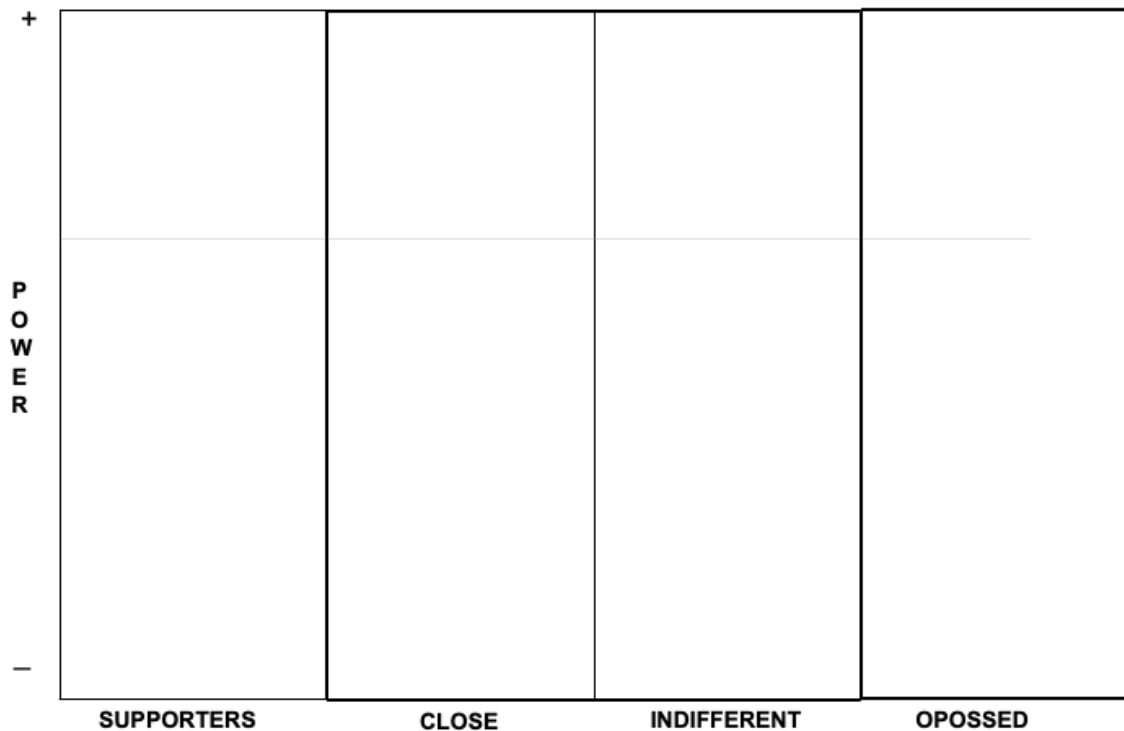
*Figure 5. Differentiation of actors.*



*Source: Self elaboration.*

Step 3. Drawing an axis of coordinates: The perception of the group of their power and importance within the context is represented on the vertical axis; the axis is categorised in four sections that represent the perception of the similarity of the actors regarding soil health and the potential for developing a Territorial Management Agreement (stakeholders who are similar, close indifferent and opposed) are represented on the horizontal axis.

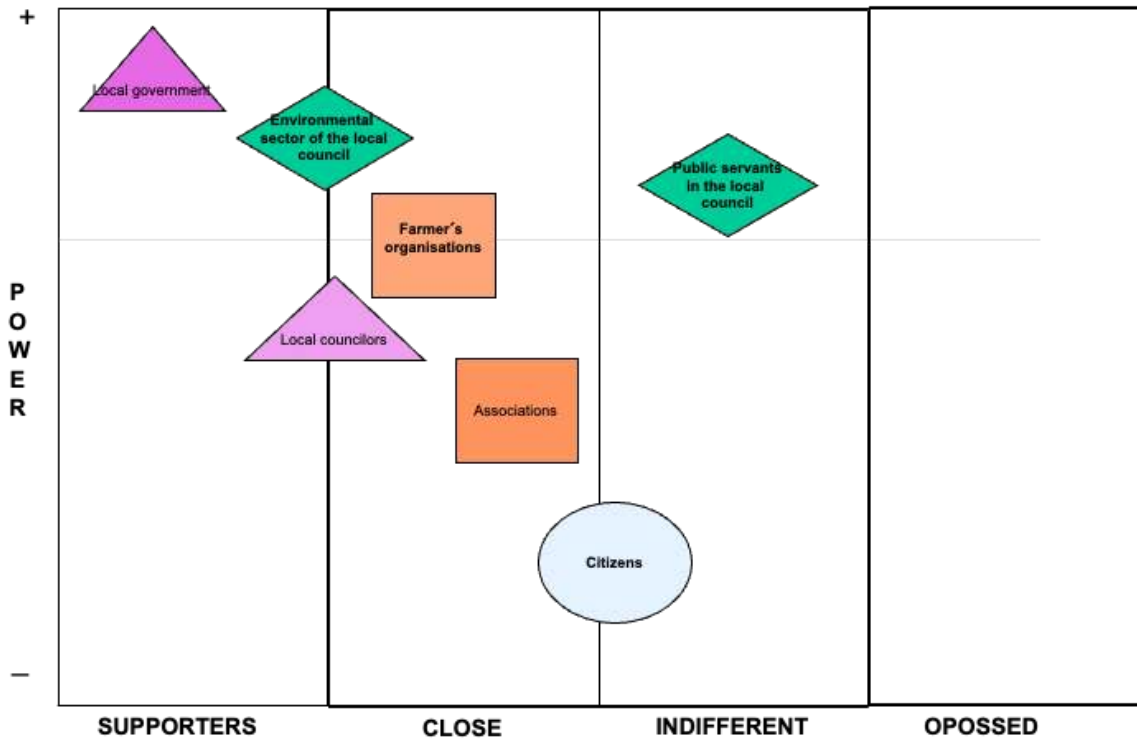
*Figure 6. Axes of the sociogram*



*Source: Self elaboration.*

STEP 4. Drafting of the pre-diagnosis as a team and, if possible, in a participatory manner. The actors defined are located between these axes (in the sociogram). Intermediate positions can be placed between the boxes.

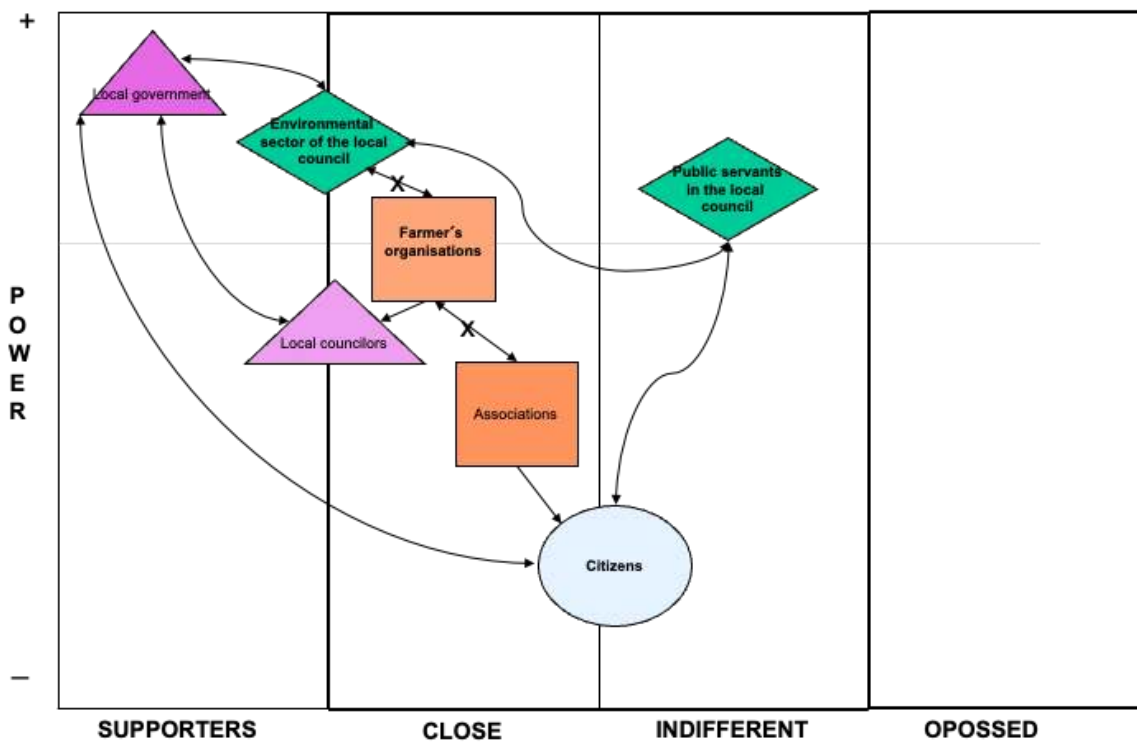
Figure 7. Example of sociogram



Source: Self elaboration.

STEP 5. Drafting the pre-diagnosis as a team, and, if possible, establish the perception of the existing relationships between the actors in a participatory manner, using arrows to connect them. These arrows can differentiate between different types of relationships, such as: relationships of greater and lesser intensity (using thickness for this purpose as in the following figure), discontinued relationships (using dotted lines for this purpose as in the following figure), conflictive relationships (using a cross on the arrow, uni (or bi) directional relationships for this purpose as in the following figure).

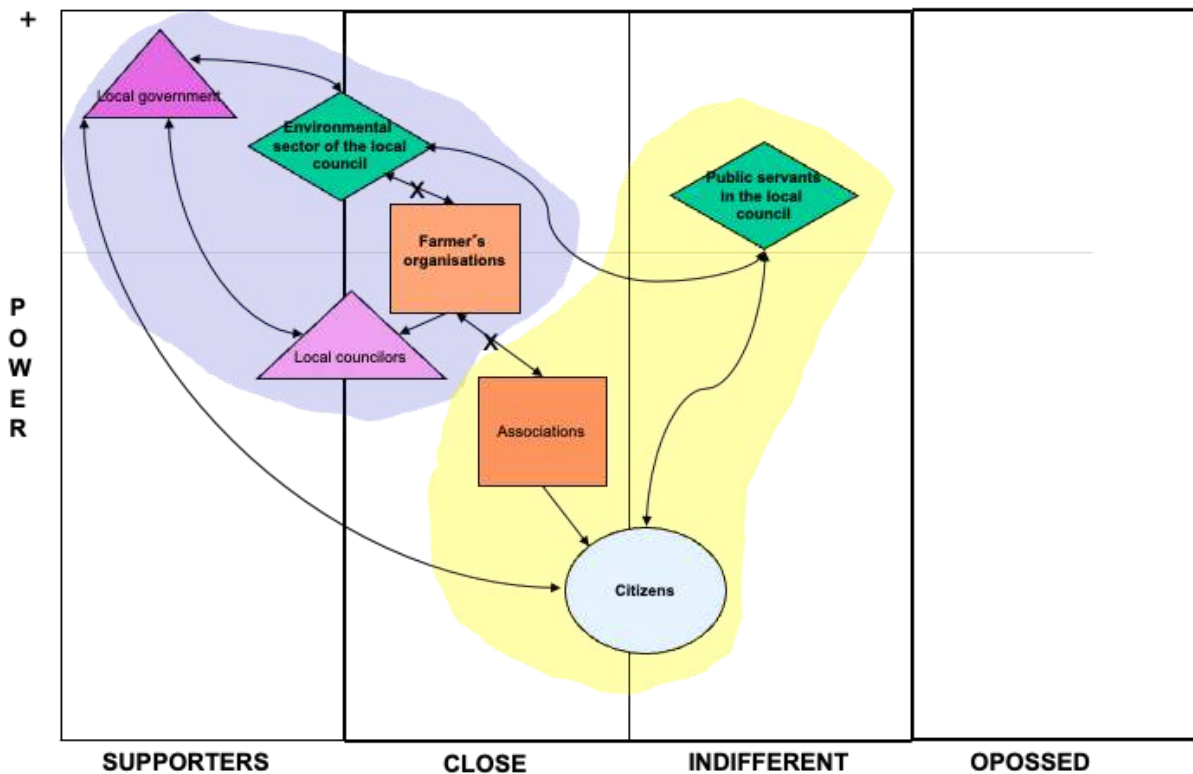
Figure 8. Example of sociogram including existing relationships.



Source: Self elaboration.

STEP 6. Finally, potential alliances that show close relationships between a group of actors are identified for this purpose as in the following figure.

Figure 9. Example of sociogram including potential alliances.



Source: Self elaboration.

### Important aspects

The final sociogram produces a wealth of information on both how power is perceived and the relationships and alliances between groups and their affinity to the proposal of a Territorial Management Agreement to improve soil health.

- If the sociogram is created in a participatory manner, it is important that the group feels that shared understanding has been produced.
- If the sociogram is created in a participatory manner, the dynamic needs to finish by defining group strategies to bring those who are opposed or indifferent to the project closer to its objectives.
- The sociogram is a snapshot (if it were created at another time, it could provide different perceptions), and it belongs to a specific group who have made the sociogram in a participatory manner, (if it was carried out by other groups, it would also be different). It needs to be used as the start of the action and periodically reviewed.
- Finally, gender needs to be considered when identifying actors and their roles.

### 3.3. Participatory diagnosis

#### 3.3.1. Diagnosis outline

A workshop is organised in each territory considered to discuss the results of the pre-diagnosis results and to create a participatory diagnosis with the local stakeholders. The methodology selected is based on the SWOT analysis and can include the tools used in the HuMUS project, such as the visual tool used to assess the regional and local well-being and sustainability ([Regional impact dashboard](#)).

The diagnostic workshops supplement the research process of the pre-diagnosis to establish the starting point on which to base the challenges faced by a territory.

Both those who live in a specific territory and those who do not reside there but, because of their special knowledge, can also provide a shared vision and points of reference in a larger area. A diverse group of actors is recommended as they can provide different visions on the sociogram created in the previous phase.

As a participatory process, the diagnosis becomes a tool of self-diagnosis, as the results it produces are shared by the groups that have created it. This process means that the situation and values of a territory are recognised, and that those participating in the process increase their awareness of the area where the process has taken place (Magnaghi, 2005).

#### 3.3.2. Methods for diagnostic SWOT workshop development

The SWOT matrix is probably the most widely used diagnostic tool in territorial management. It stands for Strengths, Weaknesses, Opportunities, and Threats. After SWOT is identified, a more in-depth diagnosis can be performed using the following questions: Correct weaknesses, Face threats, Maintain strengths, and Take advantage of opportunities.

Therefore, a matrix needs to be created that enables soil health and territorial management to be defined and contextualised using four analytic frameworks: Strengths, weaknesses, Opportunities, and threats, using the content and structure of the pre-diagnosis as a point of reference.

One way in which this technique can be used:

The purpose of the process is considered in a clear and concise way. From this starting point, the group can speak about, using brainstorming, the positive or “successful” aspects of the process. These can be internal (Strengths) and external (Opportunities), and they connect this issue with the territory in question.

The ideas that they agree upon can be written on a board or a screen.

Later on, brainstorming is also used to consider the negative or “risky” aspects. These can be internal (Weaknesses) or external (Threats). These must also be considered, and the results of the debate can be added to the board or screen.

As has been shown, after using SWOT, a more in-depth diagnosis can be performed using new questions from a strategic perspective, and these can be the basis for the Territorial Management Agreements: Correct weaknesses, Face threats, Maintain strengths, and Take advantage of opportunities.

Finally, the diagnostic document and an accountability report must always be handed over to the participants of the process. The whole process needs to be useful and transparent, and this includes handing over this documentation. This fact has to be clear at the beginning of the participatory process and must be completed for every phase.

### ***Important aspects***

The spaces in which and the times when people can (and want to) participate must be considered. It is often better if the space is neutral, it does not need to be from the municipal or regional administration.

How to get people to participate? What is going to challenge them to be a part of this? For example, in an urban setting, improvement of public spaces, peri-urban spaces, and urban agricultural projects can be useful for sparking interest and participation. In a rural setting, the generation of support strategies for agriculture and the commercialisation of products can help encourage participation.

In the operative sphere, working in small groups functions well, and later, in a plenary meeting, the results of this group work can be shared and contrasted by everyone present.

Bringing the process and the results together. In other words, the process is a key factor for the emergence of ideas, and actions are taken within the process to achieve a better result

Finding a way in which agreements can be made between all parties and how these can be brought together to achieve the participation of different actors, whatever level of power they have. The complexity of actors can grow side by side with the process, because if the number and complexity of actors is greater, the results are more reasonable.

As far as possible, formal validation of the participatory diagnosis from the municipalities promoting the Territorial Management Agreement is recommended. This enables the agreements made at each step to be established.

Training is a key part of the work of the dynamising team. A space for channelling technical training must be created. In the HuMUS project, this is an open access online training programme that will be available from February 2024 for Soil Stewards in [humus-project.eu](http://humus-project.eu) . It helps to prevent the difficulties that exist in technical- methodological areas.

Many limitations exist in the area of local government. Making progress is difficult, but if it is made, people feel satisfied.

Differences exist between people, but group management and emotional management can be carried out to achieve interesting results. Spaces can be found in which shared positions can be developed. A shared language is needed so results are to be obtained.

### 3.4. Territorial Management Agreements

As a result of the information gathered in the previous phases, a second, and in some cases a third, workshop needs to be organised, in which solutions for the protection and restoration of soil health are discussed. The aim of these workshops is to develop full Territorial Management Agreements. Trained Soil Stewards lead these workshops to facilitate the generation of ideas, "thinking outside the box", and the identification of viable solutions and specific actions that can be developed by the stakeholders participating in the process or by other actors that are not present at the workshops. The Territorial Management Agreements can be used to implement solutions used in other areas, and other similar regions can be replicated.

In summary, the final Territorial Management Agreement transforms the conclusions of the public workshop(s) into a pact for soil health, a protocol of intent or a memorandum of understanding, which are binding on all signatories. The Territorial Management Agreement contains a set of local actions, which can be implemented, at least in part, during the lifetime of the Pilot Project and in a possible future living lab that could further develop the co-creation process.

This final phase will be detailed in another report by the HuMUS project in 2024.

## 4. Conclusions

As previously mentioned, involving municipalities and stakeholders in improving soil health and the deployment of the Soil Mission is key. Therefore, participatory processes that are attractive, efficient, open, and flexible must be constructed. In order to make this achievable, the HuMUS methodology is a framework proposal that should be adapted to the timing and specific context of any particular municipality where it needs to be applied.

Despite not having discovered a large number of best participatory practices for improving soil health and territorial management, those that are presented in this report provide ideas and references of beneficial experiences that can give support to groups that want to apply the HuMUS methodology. The examples provided can also help groups that simply want to develop participatory processes in their own local contexts. Presenting examples of participation and showing the benefits of involving local communities and stakeholders in the improvement of soil health is an extremely interesting incentive, and also a challenge, and these ideas can help the development of participatory processes.

Nevertheless, the fact that the support for and the dynamisation of these participatory processes comes from municipal authorities raises positive and negative issues that must be considered when these types of projects are being developed.

Firstly, the negative aspects that should be considered and avoided are: limited budgets; the small scale of municipal territorial management; timing of elections; lack of experience and a lack of a culture of participation (in society, in politics, in technical areas, etc); false participation or “washing” in which only information is provided and the opinions of citizens and stakeholders are not actually listened to in decision making; a badly developed process that could disappoint people; and finally, a lack of trust in the authorities.

Secondly, the positive aspects are: local authorities that the general public and stakeholders find approachable; the wide/ranging usefulness of actions and activities at a local scale; types of local administration that are smaller and less complicated than other options; some municipalities see participation as an opportunity; resources are sometimes available for participatory actions; the citizens of municipalities sometimes get used to being part of participatory processes and they come out in defence of them when actions are successful; tangible results (when they appear); opportunity to gain public trust.

Finally, any participatory process that leads to a Territorial Management Agreement becomes a firm foundation for the later development of a living lab and soil district for the development of soil health, as this is, above all, an agreement to take action and increase the levels of citizen awareness on soil health. In this context, both the diagnosis and the proposals approved are extremely useful for preparatory work and identifying prospective settings for living labs and soil districts. At the same time, participatory structures,

relationships between actors and the dynamics generated by these relationships are key for the construction of the subsequent actions that lead to the co-creation of living labs and soil districts. As a result, not only does the HuMUS methodology support the deployment of the Soil Mission at a municipal level, but it also contributes to the development of soil districts and to achieve the objective of creating 100 living labs set out by the Soil Mission (since 2020, there has been a process of creating living labs in the field of agri-ecosystems).

## References

Alberich, T. (2007) "La Investigación-Acción Participativa, método y práctica". *IV Congreso Internacional sobre Investigación – Acción Participativa*. Valladolid.

Calderón, C. (2020) "Unearthing the political: differences, conflicts and power in participatory urban design", *Journal of Urban Design*, 25:1, 50-64, DOI: [10.1080/13574809.2019.1677146](https://doi.org/10.1080/13574809.2019.1677146)

Carmona Gallego, J. (2004): "Del dicho al hecho... ¿hemos andado ese trecho?: Veinte años de lucha ciudadana por el Parque Miraflores". En Encina, J., Rosa, M., y Ávila, M. A., *Democracias participativas e intervención social comunitaria desde Andalucía*. Sevilla. Ed. Atrapasueños.

Cruz Gallach, E. (2008): "Conflictos territoriales y movilizaciones ciudadanas: algunas reflexiones sobre las formas de gobernanza territorial actuales". *Boletín de la AGE* nº48. pp 375-387.

DeLind, L.B., (2002): "Place, work, and civic agriculture: Common fields for cultivation". *Agriculture and Human Values* 2002. vol. 19, pp. 217-224.

European Commission, Directorate-General for Research and Innovation, (2022), "Communication and citizen engagement initiatives in line with the Horizon Europe Mission A Soil Deal for Europe – Report on dissemination and exploitation practices in Member States and associated countries", Publications Office of the European Union, 2022, <https://data.europa.eu/doi/10.2777/704413>

Fanfani, D. and Matarán, A. (2020) "Bioregional planning and design: perspectives on a transitional century". Springer.

INNER-International Network of Eco-Regions. (2020). "Report on Organic Districts: Organic Districts Guidelines". Edited by Bio-Distretto Cilento (IT), Agrobio (PT), Bergerie Nationale (FR), and SEAE (ES). EducEcoRegions Project.

Kabisch, N. (2019) "Transformation of urban brownfields through co-creation: the multi-functional Lene-Voigt Park in Leipzig as a case in point". *Urban Transform* 1, 2. <https://doi.org/10.1186/s42854-019-0002-6>

López Medina, J.M., (2012). "El diseño participativo en programas de rehabilitación de viviendas". PhD Tesis. University of Granada.

López Medina, J.M., and Fuentes-Guerra Soldevilla, R., (2021). "Guía metodológica para la agenda urbana en la provincia de Granada". Diputación de Granada. Granada.

Magnaghi, A., (2005). "The Urban Village: A charter for democracy and local self-sustainable development". Zed Books. London.

Mancebo F. (2014). "Combining sustainability and social justice in the Paris metropolitan region". In: Isenhour C, McDonogh G, Checker M, editors. *Sustainability in the Global City Myth and Practice*. Cambridge University Press.

Matarán Ruiz, A. (2013). "Participación social en la protección activa de los espacios agrarios periurbanos: un estado de la cuestión". *Boletín De La Asociación De Geógrafos Españoles*, (63). <https://doi.org/10.21138/bage.1606>

Moragues-Faus, A. (2020). "Towards a critical governance framework: Unveiling the political and justice dimensions of urban food partnerships". *The Geographical Journal*, 186(1), 73-86. <https://doi.org/10.1111/geoj.12325>

Passaro, A., and Randelli, F. (2022). "Spaces of Governance for Sustainable Transformation of Local Food Systems: The Case of 8 Biodistricts in Tuscany". WP No12/2022. Working Paper - Economics Università Degli Studi Firenze

## ANNEX I. BEST PRACTICE EXAMPLES

## Best practice #1. Participatory Experience of Miraflores Park in Seville, Spain

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

3.- Stop soil sealing and increase re-use of urban soils.

4.- Reduce soil pollution and enhance restoration.

**Where?** Macarena District, Sevilla, Spain.

**When?** 1983 - 1996 (ongoing).

### Who?

Comité Pro Parque Miraflores (Miraflores Park Committee), which includes citizens and neighbourhood associations, with the collaboration of Sevilla local council and the regional administration.

### What?

The recuperation and preparation of an abandoned peri urban space for the creation of a park, the re-use of soil for growing small crops and gardening, and the construction of an educational space and cultural centre.

### How?

For many years, different activities have been taking place, such as, assemblies, demonstrations, movements, campaigns, petition signings, occupation of buildings, green Sundays for cleaning up, the self/management construction of the park, tree planting, agroecological workshops for local people, and educational workshops for children and young people.

The constant movements and demands of the citizens' committee finally managed to persuade the authorities to recover this space, transforming it into a public park where urban allotments and an interpretation centre focused on heritage and environmental education can now be found. Some decisions on the design of the park were agreed upon with the citizens' committee that promoted its creation, meaning that the urban allotments that now exist within it are managed by a gardeners' assembly.

Furthermore, the associations and the schools in the Macarena neighbourhood of Seville, which is next to the park, also take part in the management of the educational and training programmes that are centred on the values of the park, concerning agriculture, heritage elements, and gardening.

### Links and references:

<https://huertalasmoreras.wordpress.com>

Maćkiewicz, B. and Puente Asuero, R. (2021) "Public versus private: Juxtaposing urban allotment gardens as multifunctional nature-based Solutions". Insights from Seville, *Urban Forestry & Urban Greening*, Vol. 65, 127309, ISSN 1618-8667, <https://doi.org/10.1016/j.ufug.2021.127309>

## Best practice #2. Agricultural Park of the South of Milan, IT

### Relevance to the objectives of the EU Mission “A Soil Deal for Europe”:

3.- Stop soil sealing and increase re-use of urban soils.

4.- Reduce soil pollution and enhance restoration.

7.- Reduce the EU global footprint on soils.

**Where?** Milan, Italy.

**When?** 1990.

**Who?** Milan provincial government, 61 municipalities, farmers’ associations, and environmental groups.

### What?

The territorial management plan for the province of Milan and 61 municipalities established the Agricultural Park of the South of Milan on 47,000 hectares of agricultural land in the southern area of the province of Milan, and it was the first known example of an experience of this type.

The objectives of the park were:

To conserve and reinforce agricultural activities, including the commercialisation of local products and the adoption of crops with high levels of environmental compatibility, in accordance with the “Code of Best Agricultural Practices” (article 1999/1257/CE), which provides examples like organic agriculture and biodynamic agriculture. To protect and recognise the value of natural, environmental, and landscape heritage; Preserve, restore and re-establish the river network; Recover and re-use the territorial networks and existing buildings, especially those which had been abandoned; Recover and recognise the value of archeological and monumental heritage assets; Establish a system of public use and acquiring land for public use, the construction of itineraries for enjoying the natural surroundings, with routes for pedestrians and cyclists, and the introduction, or improvement of different types of usage, for instance, leisure, sporting activities, and services.

### How?

The governance structure of the park, in which the municipalities played an important role, included participatory instruments that generated dynamics which involved the general public, ecological groups, and especially farmers. Territorial planning, collaboration networks and short chain commercialisation strategies worked in favour of these agricultural areas set in a metropolitan context that found itself under extreme pressure from urban expansion.

### Links and references:

[www.cittametropolitana.mi.it/parco\\_agricolo\\_sud\\_milano/](http://www.cittametropolitana.mi.it/parco_agricolo_sud_milano/)

## Best practice #3. Organic District of Calenzano (Tuscany, Italy)

### Relevance to the objectives of the EU Mission “A Soil Deal for Europe”:

3.- Stop soil sealing and increase re-use of urban soils.

6.- Improve soil structure to enhance soil biodiversity.

7.- Reduce the EU global footprint on soils.

**Where?** Calenzano, (Florence, Tuscany, Italy).

**When?** 2020-2021

### Who?

The municipality of Calenzano in collaboration with research bodies (University of Florence and National Research Council) with the support of the Tuscany Region in accordance with the Regional Law 51/2019. Including the participation of farmers, agricultural companies, school canteens, companies in the processing and catering supply chain, and associations.

### What?

The process involved the establishment of the Organic District in Calenzano is an example of a best practice in recognising the value of soil from an agricultural perspective and protecting biodiversity, as it has given rise to the creation of a shared and inter-sectoral governance instrument. The objective of the use of this instrument was to define a series of principles which established the foundations for re-designing the entire agro-environmental and food system sustainably, with multi-objective lines. The Calenzano Organic District, recognised by the Tuscany Region, is currently made up of twenty founding members and it is open to new members. The Organic District aims to achieve developments in the fields of agriculture, landscape, and territory by creating agricultural systems that are structured to be resilient to climate change, to conserve biodiversity, and to reverse the trend of soil degradation by using organic practices and sustainable agriculture.

### How?

The participatory processes were carried out using a multi-stakeholder approach which applied the Quadruple Helix methodology contacting with different local actors via databases, targeted invitations and activities open to the public. The participatory process was based on a series of meetings, focus groups, thematic discussions, visits, and information exchanges between the different actors in the area. During the process, the local authorities discussed the priorities to be pursued with the different actors involved so that the agricultural and food systems in Calenzano could be steered towards sustainability and a conversion to organic farming. The participatory process was divided into two phases: two introductory meetings that were part of the pre-diagnostic phase, and the more structured diagnosis and proposal phase, comprised of seven thematic forums/meetings involving different actors and a public conference. A diverse group of actors took part in the process, around 135 participants

were present, and they listened and shared the community's ideas and needs so that a common vision of the sustainable development of the territory could be built.

**Links and references:**

<https://www.comune.calenzano.fi.it/it/page/81626>

## Best practice #4. Participatory process for sustainable forest management in Central Portugal

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

1.- Reduce desertification.

**Where?** Central Portugal.

**When?** 1996 - 2009

**Who?** National Government of Portugal.

### What?

The government carried out a diagnostic study that was used to identify which regions were most severely affected by desertification so that policies aimed at improving soil health could be focused on. Finally, a participatory methodology was used to generate forestry policies and Sustainable Forest Management through citizen decision-making.

### How?

The participatory methodology proposed in this example of best practice aimed to increase stakeholder participation in defining sustainable forest management, especially in fire-prone areas. The process for defining the methodology was divided into four main steps: i) defining the context, i.e. setting local context before participation and identifying the aims and potential outcomes of the use of participatory methodologies; ii) stakeholder analysis and selection, i.e. identifying participants by assessing the roles, interests, and influences of each group of stakeholders; iii) developing a participatory approach and participatory methods, i.e. defining the level of participation, the methods and techniques suitable for each step, and establishing which resources were needed and available; and iv) implementation of the participatory approach.

The participatory methodology included three steps, enabling a continuous process to be established: i) stakeholder perception survey; ii) key stakeholder workshop; iii) community workshops.

The community workshops were organised with very few financial resources and using key stakeholders (e.g. a forestry technician, administration representative, etc.) who had received training as facilitators. Although using an external, professional facilitator could have been beneficial, the creation of a group of local facilitators was very important for guaranteeing the continuity of local participation, and it was also a way in which a culture of grass-roots participation was fostered.

### Links and references:

Valente, S., et al. "Sustainable Forest Management in Portugal: Transition from Global Policies to Local Participatory Strategies." *The International Forestry Review*, vol. 17, no. 3, 2015, pp. 368–83. *JSTOR*, <http://www.jstor.org/stable/43739860>

## Best practice #5. Transformation of urban brownfields through co-creation: the multi-functional Lene-Voigt Park in Leipzig, DE

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

3.- Stop soil sealing and increase re-use of urban soils.

4.- Reduce soil pollution and enhance restoration.

**Where?** city of Leipzig, Germany      **When?** 1998 – 2004

### Who?

The local council and a diverse group of actors including local residents, community groups, planners, decision makers, and researchers.

### What?

This project was a co-creation process for transforming a former railway site into a 11-hectare multifunctional public park to promote new perspectives for sustainable urban regeneration strategies. It included the planning and implementation of a complete participatory process. The final design of the park included different areas each of which focused on the requirements of different users and age groups: main lawn areas for recreational purposes (quiet areas), sports areas and playgrounds (active areas) and side allotments for urban gardening activities.

### How?

The participatory methodologies included local workshops, focus group discussions, semi-structured interviews, site visits, vision building, children's camps and an international planning seminar, in which stakeholders and actors were able to openly present and discuss their needs and desires. The main aim was to address the needs of different age groups such as children and young people and local communities to give them a chance to communicate their views and expectations about a new park. It was the first time in the city of Leipzig that inner-city park areas were made available for individual or community gardening activities and it was a new approach that enabled the city to outsource green management to individual residents.

### Link and references:

[www.leipzig.de/freizeit-kultur-und-tourismus/parks-waelder-und-friedhoefe/parks-und-gruenanlagen/lene-voigt-park/](http://www.leipzig.de/freizeit-kultur-und-tourismus/parks-waelder-und-friedhoefe/parks-und-gruenanlagen/lene-voigt-park/)

Kabisch, N. Transformation of urban brownfields through co-creation: the multifunctional Lene-Voigt Park in Leipzig as a case in point. *Urban Transformation*, Vol. 1, num. 2 (2019). <https://doi.org/10.1186/s42854-019-0002-6>

## Best practice #6. The participatory renewal of public spaces in La Mina neighbourhood (Barcelona, Spain)

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

3.- Stop soil sealing and increase re-use of urban soils.

4.- Reduce soil pollution and enhance restoration.

**Where?** La Mina (Barcelona).      **When?** 2002 - 2006

### Who?

La Mina Neighbourhood Consortium (Barcelona local council and regional administration), including local residents, community leaders, civil servants, and architects.

### What?

The participatory design of public spaces and the decision on investment in public space of the Transformation Plan for La Mina. This was a 10-year urban renewal plan, which included the construction of a *rambla* (a wide street with a promenade in the middle; a typical urban feature in Barcelona) running across the neighbourhood. This was conceived as a new landmark that would resolve the conflicts in existing public spaces, and act as a place where both existing and new residents could socialise. The objective was to revitalise the public life of the neighbourhood.

### How?

Working within a limited budget, the design process was made up of two stages. The aim of the first stage was to analyse public spaces and the public life of the neighbourhood by mapping problems and opportunities. The process included interviews, participant observation and workshops with different actors (a group teenagers from a local school, most of whom were from Roma communities; a group with leaders and members of different community-based organisations; and a group with members from a community-based women's organisation). During the workshops, participants used group-mapping exercises and photo surveys, and discussions were facilitated that identified and analysed the problems and opportunities regarding public spaces in the neighbourhood. The second stage focused on the development of social programmes and design proposals. The design of both stages followed a series of charrette-like workshops involving different groups of residents and community-based organisations. A five-day open house event targeting a larger number of residents and users, plus civil servants and technicians was planned at the end of each stage.

### Links and references:

<http://www.barrimina.cat/>

Camilo Calderon (2020) Unearthing the political: differences, conflicts and power in participatory urban design, *Journal of Urban Design*, 25:1, 50-64, DOI: [10.1080/13574809.2019.1677146](https://doi.org/10.1080/13574809.2019.1677146)

## Best practice #7. Citizen-led, comprehensive land use planning in Willsboro (Adirondack Park), New York, USA

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

3.- stop soil sealing and increase re-use of urban soils.

**Where?** Willsboro, New York on the limits of the Adirondack Park

**When?** 2007 - 2011

### Who?

The local council with the support of a research team from the University of Ohio, and the citizens and stakeholders in the area.

### What?

The project applied the research methodology of participatory action to design a territorial plan for environmental conservation in this municipality that could fight against the urban growth rates that were affecting the environmental and landscape values of the area.

### How?

A process of participatory action research was created that included different stages and methodologies:

- Creation of a steering committee by electing stakeholders, and defining their involvement in the process.
- Creation of a pre-diagnosis by holding sessions to listen to the members of the steering committee.
- Community survey sent by post and online.
- Interviews with experts.
- Creation of participatory mapping by using the observations provided by the general public and by using geographic information systems.
- Visioning sessions considering appreciative inquiry in four meetings and two focus groups held with the agricultural community and senior citizens.
- Definition of a comprehensive plan vision statement.
- Work sessions using geographic information systems to create environmental recommendations and recommendations for soil uses.

- Discussions on specific case studies at round table meetings with the steering committee to validate the methodology used for the participatory action research.

**Links and references:**

Ann H Ruzow Holland (2014) Citizen-led, comprehensive land use planning in New York's Adirondack Park, *Rural Society*, 23:2, 133-150, DOI: [10.5172/rsj.2014.23.2.133](https://doi.org/10.5172/rsj.2014.23.2.133)

## Best practice #8. Participatory urban planning in Kaymaklı (Turkey)

### Relevance to the objectives of the EU Mission “A Soil Deal for Europe”:

3.- Stop soil sealing and increase re-use of urban soils.

4.- Reduce soil pollution and enhance restoration.

8.- Increase soil literacy in society.

**Where?** Municipality of Kaymaklı, Cappadocia region, Turkey.

**When?** 2004

### Who?

A civic association (Beautification, Mutual Aid and Solidarity Association of Kaymaklı) in collaboration with the Municipality of Kaymaklı, with the participation of local authorities, NGOs, women’s organisations, Indigenous people, and other actors

### What?

Soil pollution was detected in the area in 2004, and this seriously affected the economy of Kaymaklı. In turn, employment opportunities, especially for women, who were employed in agricultural activities, were affected.

As a result, a participatory process aimed at empowering women in the area was chosen to produce an action plan.

### How?

This participatory planning process used the Normative Action Research (NAR) strategy in order to involve local women in the process.

The methodology was put into practice by firstly creating a stakeholder map.

Then, a practice-based training programme for women was developed as the main foundation for the process, and this produced collaborative action.

Finally, different urban planning workshops were developed to collectively define the opportunities and threats which could have affected the development of Kaymaklı in the future, and, in the second phase, the participants assessed the strengths and the weaknesses of Kaymaklı.

### Links and references:

Anlı Ataöv, Z. Ezgi Haliloğlu Kahraman, Constructing collaborative processes through experiential learning: Participatory planning in Kaymaklı, Turkey, Habitat International, Volume 33, Issue 4, 2009, pp. 378-386, ISSN 0197-3975.

<https://doi.org/10.1016/j.habitatint.2008.11.001>

## Best practice #9. Participatory characterisation and diagnosis for community territorial planning, Xaltepuxtla, Puebla, Mexico

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

- 1.- Reduce desertification.
- 2.- Conserve and increase soil organic carbon stocks.

**Where?** Xaltepuxtla, Puebla, México.

**When?** 2012

**Who?** University of Chapingo, local, and state government, with the participation of farmers and community leaders.

### What?

The participatory process was developed to define a community territorial planning strategy that considered the important role played by farmers in reducing the impacts of human activity on this territory. Another objective of this process was to define agroforestry projects that have triggered change by providing an alternative to traditional ornamental production systems that have ceased to be profitable.

### How?

It was carried out using the PAR methodology, based on the methodological plan proposed in the basic manual for the CONAFOR Community Territorial Plan (2007), which was made up of three stages:

1. Characterisation-diagnosis carried out using a bibliographical review, field trips, semi-structured interviews, and participatory workshops that considered the history of the community, maps of the land, natural resources available; problems and possible solutions, including an analysis of Strengths, Opportunities, Weaknesses and Threats (SWOT).
2. Outlook, participatory workshops were used to outline the situation regarding trends and how this linked to the situation defined in the diagnosis, as well as where a strategic setting with possible future alternatives could be added.
3. Proposal making: Proposals were created to generate agricultural plans and projects for triggering changes. This was mainly achieved by holding workshops with farmers.

### Links and references:

Valencia Trejo, G. M., Álvarez Sánchez, M. E., Gómez Díaz, J. D., & Cetina Alcalá, V. M. (2020). Caracterización y diagnóstico participativo para el ordenamiento territorial comunitario con enfoque diagnóstico participativo para el ordenamiento territorial comunitario con enfoque agroforestal en Xaltepuxtla, Puebla, México. *AgroProductividad*, 13 (5) <https://doi.org/10.32854/agrop.vi.1535>

## Best practice #10. Participatory practice in the context of local agenda 21: a case study in Leicester, UK

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

3.- Stop soil sealing and increase re-use of urban soils.

**Where?** Leicester, UK.

**When?** 1994-1995.

### Who?

Leicester City Council, an NGO (Environ), Monfort University, and a private company (Leicester Promotions), with the participation of citizens, stakeholders, and experts.

### What?

Develop a local Agenda 21 to address key questions on the built environment, economy and work, energy, landscape and ecology, society and community, transport, waste, and pollution. This required elements that had not been brought to light when the initial environmental assessment of the city was developed. The first step of the participatory process was the identification of the need for community input involving a broad cross-section of the city's population. The second step concerned a broadening of the approach to give more emphasis to social and economic factors, and the third step identified the need for a long term vision and action plans to support these approaches.

### How?

The participatory methodology involved three elements: a snapshot questionnaire that was a short questionnaire asking people for their views on what they most liked about Leicester and the issues that most affected their quality of life. A representative neighbourhood survey of 100 randomly selected residents with a sample framework chosen to ensure that a representative cross-section of Leicester's population was included. Finally, visioning work was carried out with targeted groups that were asked to think about Leicester in terms of what they would really like to change rather than on what they thought they could change.

The public consultation process in Leicester was a major exercise; nearly 2000 individuals and over 100 organisations expressed their views on the city and its future.

### Links and references:

Wild, A. and Marshall, R. (1999), Participatory practice in the context of Local Agenda 21: a case study evaluation of experience in three English local authorities. *Sust. Dev.*, 7: 151-162. [https://doi.org/10.1002/\(SICI\)1099-1719\(199908\)7:3<151::AID-SD111>3.0.CO;2-0](https://doi.org/10.1002/(SICI)1099-1719(199908)7:3<151::AID-SD111>3.0.CO;2-0)

## Best practice #11. Organic District of Fiesole (Tuscany, Italy)

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

- 3.- Stop soil sealing and increase re-use of urban soils
- 4.- Reduce soil pollution and enhance restoration.
- 7.- Reduce the EU global footprint on soils.

**Where?** Fiesole, Tuscany, Italy.

**When?** 2016 - 2021.

### Who?

A group of citizens with the ulterior participation of local authorities, academia and researchers, farmers, business, environmentalist groups, citizen organisations, and social movements.

### What?

The idea of establishing an Organic District in Fiesole came about in 2016 when a group of citizens were motivated to make Fiesole a place that functioned "on a human scale" and to protect a remarkably beautiful, extremely fragile, territory. In 2017, the organising committee carried out the project by creating the Association of the Organic District of Fiesole, in collaboration with the municipal authorities, and two years later it received recognition as the first Organic District in Tuscany, in accordance with the new Regional Law 51/2019 that had recently been approved.

The Organic District of Fiesole is an agreement between farmers, citizens, tourism companies, associations, and local authorities to develop a sustainable management system for local resources, based on an organic production and consumption model.

### How?

Using the Quadruple Helix approach, the local council and the organising committee held citizen assemblies and regular meetings in which citizens and stakeholders could participate. The result was the creation of local legislation making this area the first

Organic District in Tuscany, and it became an example to be followed in the creation of regional legislation and the development of subsequent Organic Districts in the region.

**Links and references:**

[www.distrettobiologicofiesole.it](http://www.distrettobiologicofiesole.it)

## Best practice #12. Sustainable management of mountain pastures in the Basque Country, Spain

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

2.- Conserve and increase soil organic carbon stocks.

5.- Prevent erosion.

6.- Improve soil structure to enhance soil biodiversity.

**Where?** Basque Country, Spain and Iparralde, France.

**When?** 2016–2022.

### Who?

The Basque government and the municipalities that form part of the project, as well as experts and rangers working in protected areas, experts working in agri-management centres, foundations, researchers, representatives of entities that own mountain land, and livestock farmers.

### What?

The objective was to develop a conservation strategy for the mountain pastures in the Basque Country, conserving these areas for raising livestock. Targeted livestock management and stocking rates that were suitable for each individual situation was undoubtedly the best method for ensuring the conservation of grazing habitats (including soil) and the animals associated with them.

### How?

The participatory process started with the diagnosis of the pasture areas and went on to establish needs and objectives by gaining the agreement of local agents and management experts in relatively informal meetings and workshops. However, the Oreka Mendian project highlighted that creating communication channels that could be maintained and formalised was a measure that should be looked at for future development.

Some of the measures developed under this project included: a) the organisation of workshops to involve farmers and landowners in project measures; b) the active participation of landowners in pasture management (some 181 landowners were involved, whose land covers 518 hectares); and c) the development of farm management plans to ensure pastures are used correctly in the long term. The project also included measures for training and actions for stakeholder participation (e.g. the creation of an agri-environmental programme in the field of sustainable rangeland management; communication and landowner and farmer networking, advocacy, and education activities).

### Links and references:

<http://www.lifeorekamendian.eu>

## Best practice #13. Suerte de Saavedra (Spain) Urban Vegetable Gardens

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

3.- Stop soil sealing and increase re-use of urban soils.

4.- Reduce soil pollution and enhance restoration.

**Where?** Badajoz, Extremadura, Spain.      **When?** 2010 – 2019.

### Who?

Local authorities, academia and researchers, farmers, citizen organisations, and social movements.

### What?

It was a collective, pioneering project involving an entire neighbourhood in the city of Badajoz which arose from a neighbourhood association that created community gardens in an area that was abandoned. The objective of the project was to generate new social relationships focused on caring for and correctly using the soil in the area.

These citizens were motivated by two main reasons, on the one hand, the need to improve the image of this (marginal) neighbourhood by involving both the young and the old in this social project; and on the other hand, the use of land (which had had no previous purpose), and to produce and create food sustainably and organically.

This initiative became a great success and created a great community that revolves around three main axes: 1. Caring for the soil (no chemical fertilisers or herbicides are allowed in these gardens), reusing land (that was abandoned), and cultivation (producing and creating food sustainably and organically). 2. Citizens, from the youngest to the oldest, were trained in workshops and seminars which promoted awareness raising, 3. The development of a social movement for the support and improvement of a marginal neighbourhood.

These urban vegetable gardens were assigned at no cost for a period of three years, with the possibility of a three-year extension. Badajoz City Council covered the cost of water for irrigation, while the tools and seeds were provided by the citizens using the vegetable gardens, who were able to plant fruits, vegetables, and aromatic herbs. Twelve of the 50 vegetable gardens on the 4,800 m<sup>2</sup> of land for this project were reserved as a social area for the Manuel Pacheco Primary School, the Social Services Centre, and Neighbourhood Associations (including the Senior Citizens' Association).

### How?

The participatory process started before the construction of the community vegetable gardens and was then established in the Municipal Regulations created for this initiative

and guaranteed by the integration of citizens and stakeholders in the management of this project.

**Links and references:**

<https://prepsoil.eu/communities-of-practice/huertos-urbanos-suerte-de-saavedra-urban-vegetable-gardens>

## Best practice #14. Participatory process for the development of Milan Urban Food Policy Pact in Córdoba (Spain)

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

3.- Stop soil sealing and increase re-use of urban soils.

**Where?** Córdoba (Spain)      **When?** 2015 – 2020.

### Who?

Initiated by the social movements related to food, and dynamized by the Córdoba City Council and the University of Córdoba, with the participation of farmers, grocery stores, cooperatives, restaurants, environmentalist groups, NGOs, citizens, etc.

### What?

The co-production of food policies in the city of Córdoba to develop the Milan Urban Food Policy Pact, including the creation of a formal governance space (the coordination council) with the participation of stakeholders and institutions. This new institution coordinates the development of a process, a strategic proposal and a project called Alimentando Córdoba (Feeding Córdoba) that includes within others: an organic farmers market; a strategy to guarantee the right to food in vulnerable communities; a process to help farmers to switch to local and organic food production; and a strategy to protect peri urban agriculture and soils through an Agricultural Park.

### How?

Several workshops and other participatory activities have been developed with the participation of stakeholders and citizens. In particular three annual conventions were celebrated in the city of Córdoba around the Milán Urban Food Policy Pact. A dialogue process with farmers that are producing food around the city of Córdoba. A dialogue process between the food social movement and the municipal social services to guarantee the right to food for vulnerable communities.

### Links and references:

Vara-Sánchez, I., Gallar, D., García-García, L., Morán, N., and Moragues-Faus, A. (2021). "The co-production of urban food policies: Exploring the emergence of new governance spaces in three Spanish cities". Food Policy. 103. 102120. 10.1016/j.foodpol.2021.102120

<https://www.cordoba.es/documentos-sobre-la-mesa-tecnica-de-trabajo>

## Best practice #15. Agroecological Living laboratory of Varaita valley (Piedmont, Italy)

### Relevance to the objectives of the EU Mission "A Soil Deal for Europe":

2.- Conserve and increase soil organic carbon stocks.

5.- Prevent erosion;

**Where?** Val Varaita, (Piedmont, Italy)      **When?** 2021 - ongoing.

### Who?

Inhabitants, farmers, food producers, educators, restaurateurs, researchers and policy makers who deal with agriculture and food supply chains in Valle Varaita.

### What?

Val Varaita is a territory characterised by repopulation phenomena and new ruralisms: new actors that carry out activities in the food and agriculture sector. Moreover in the Valley it was already developed in 2020 a Course on "Soil Guardians" based on organic and biodynamic practices to enhance soil fertility and good practices.

So the Val Varaita was identified for the recognition and valorization of the biocultural diversity of the Alpine areas.

The main objective of the living lab is to join the skills, paths and visions of the participants in order to share, implement and support the agroecological principles on their territory. According to this, their main aim is to: support those involved in agriculture in mountain areas, improve agri-food supply chains, sustain local tourism, preserve and improve bio-cultural diversity, deal with climate change, make the local activities more sustainable at an environmental, economic and social level, for associations and farms.

In particular, the living lab is developing: relational economics and tourism in low seasons, food sovereignty with specific focus on local cereals and access to land.

### How?

The Living Laboratory was developed as part of a European H2020 project "Agroecology for Europe" and was proposed by the agroecology group of the University of Gastronomic Sciences of Pollenzo with the support of the association "Il Limone Lunare".

A living laboratory (LL) is a working group to develop transdisciplinary research and innovation activities in a territorial, local and participatory context with all the LL actors.

For the establishment of the LL, 3 participatory workshops were carried out in 2021 and 2022. The workshops included different activities regarding the creation, the implementation and the dissemination of the LL, such as: personal mapping according to different questions to develop a prospective diagnosis, common imaginaries,

narrative mapping, thematic workshops to design common imaginaries and actions, and finally common visions to develop an action plan.

**Links and references:**

<https://www.unisg.it/en/ricerca/ae4eu-agroecology-for-europe/>

<https://www.agroecology-europe-hub.org/en/our-understanding-of-living-labs>

<https://www.unisg.it/assets/LL-REPORT1-IT-def.pdf>

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