



D2.1 Case Study Plan

Instructions for performing the case study

30/01/2024

Lead Authors - UNICT

D. Arcidiacono, M. Benadusi, P. Gruppuso, S. Lipari, D. Pappalardo, L. Ruggiero

Contributing Authors

BC3 and CES

Single case study plan Authors

WR, BC3, CER, MRU, UBB, UNICT, UGOT, UT



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- PU = Public
 - PP = Restricted to other programme participants (including the Commission Services)
 - RE = Restricted to a group specified by the consortium (including the Commission Services)
 - CO = Confidential, only for members of the consortium (including the Commission Services)

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Summary

Deliverable **D2.1 Case Study Report** provides an operational set of methods and guidelines organised according to a plan designed to support and monitor research activities and tasks. It facilitates the research of BIOTraCes teams by laying down a common and robust infrastructure in light of WP2's tasks and objectives. Accordingly, the **Report** is divided in three main sections:

1. Timeframe for case studies conduction

A timeframe and a Gantt chart for the conduction of the case studies.

2. Methodological Guide

A methodological guide drawn from D1.4 to implement the different case studies.

3. Task Structure and Analysis

A thorough explanation of tasks and relative research questions concerning WP2.

4. Single case study plans This section includes nine "Single Case Study Plans". They are part of the coordinating activities implemented under WP2 and gather information on the case study at the planning point.

5. Case study monitoring

The section includes nine "Case Study Monitoring forms", as part of the coordinating activities implemented under WP2, Task 2.1 prepared for the Bilateral Meetings held between July and September 2023. They concern preliminary aspects of the project.

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Introduction

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1.0 Timeframe for WP2

This section illustrates a timeframe for work package 2. This is intended to streamline case study conducting, facilitate knowledge sharing and support collective learning in a context of empirical diversity and analytical transdisciplinarity.

The timeframe draws integrally on BIOTraCes project plan and is reported in the GANTT chart below. The chart is divided into four bands of different colours, each corresponding to one of the WP2 tasks, from T2.1 to T2.4.

The chart helps visualise synoptically the temporal organisation of their mutual relations in the achievement of WP2 deliverables, from D2.1 to D2.6.

		2023	2024													2025							2026							
Task	Activity	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
T2.1 Coordination and approach (UNICT)	9 single case study plans																													
	Case study plan (D2.1)		D2.1																											
	9 overall analyses of case studies (D2.5)																								D2.5					
	9 reports of case studies on transformative biodiversity innovations (D2.6)																													D2.6
	Monitoring and support																													
T2.2 Transformative Biodiversity Innovations Analysis	9 documents on results of the biodiversity innovation analysis (D2.2)																													
T2.3 Social-ecological	9 social-ecological system analyses (D2.3)																													
T2.4 Development and	9 analyses on tested of local interventions (D2.4)																													

Table 1 - GANTT Chart

1.1 Task 2.1

The organisation of task 2.1 (M03-40) is shown in the GANTT blue band and it is divided into two different groups of activities.

One group focuses on the achievement of D2.1, D2.5 and D2.6, and it rests on coordinated action between each of BIOTraCes partners and UNICT, as a task leader.

The achievement of D2.1, D2.5 and D2.6 requires that a set of output be produced by both the task leader (UNICT) and all the BIOTraCes partners conducting case study research.

Specifically, for D2.1, BIOTraCes partners will send a single case study plan to the UNICT team. On its end, the UNICT team has included the 9 single case study plans in the deliverable. For D2.5, BIOTraCes partners will produce an overall analysis of their case study by month 36. For D2.6, BIOTraCes partners will produce a report of their case study on transformative biodiversity innovations by month 40.

1.1.1 Monitoring and support activities

Task 2.1 involves a second group of activities which also are reported in the GANTT chart blue band and that will take place cyclically throughout WP2. These activities form part of a monitoring and support system, intended to listen, respond and collectively build upon discoveries, issues and challenges that each research team will come across during case study conduction. These activities should also be understood as instruments to enable the

ongoing exchange of theoretical, analytical and empirical knowledges and promote collective learning processes.

These activities are termed as follows:

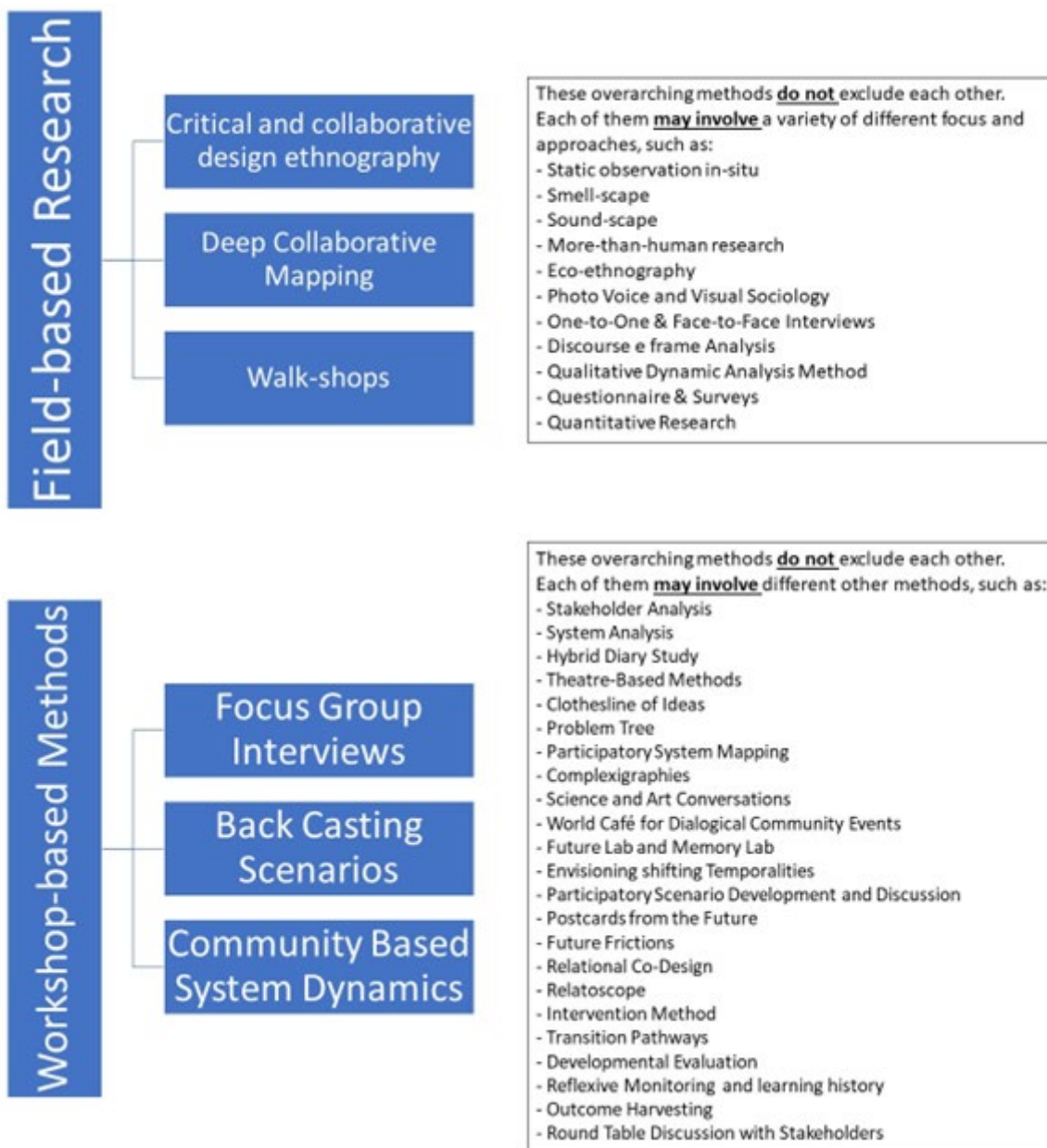
1. **Monitoring forms.** As a basic instrument of listening to better support, forms will be distributed by UNICT to partners every six months. Drawing on the information that partners will share, the UNICT team will be able to understand challenges and needs of every phase more clearly and help research teams address them effectively.
2. **Bilateral meetings.** Based on information gathered through forms, the UNICT team will organise bilateral meetings with each of the 9 research teams every 7 to 8 months. The meetings will be tailored to each team's needs or requests as they may arise during case study conduction.
3. **Meetings between research and societal partners.** This is a self-support activity intended to be carried out jointly by each research team and the corresponding societal partner every six months. By reflecting on case study conduction as well as each other's positionality and intersectionality, both the research teams and societal partners will be able to disclose and mediate each own's perspectives towards fieldwork and the case study.
4. **WP2 multilateral meetings.** These meetings will be the fora where all the 9 research teams will gather periodically. Thanks to them, each team will have the opportunity to share knowledges, techniques and approaches developed during case study conduction as well as needs, issues and challenges encountered. The meetings will offer the opportunity to BIOTraCes researchers to build up on each other's expertise. Researchers may use this space to elucidate the approaches, methods and interpretations they have built upon or applied while conducting their case study. Thanks to the wealth of knowledges that these meetings will predictably make available, research teams will be able to access a wide variety of theoretical, analytical and empirical instruments, which may be crucial in transforming potential challenges or issues into opportunities. These meetings will take place in conjunction with remote or in person consortium meetings.
5. **Reflexivity and learning as a team meetings.** These three meetings will facilitate reflexivity and learning among partners about how their role as researchers has changed, and has been changed by, case study conduction. While the meetings will build towards the achievement of deliverable D5.3 in WP5, they will offer a valuable opportunity to reason collectively on researchers' positionality in the context of case study conduction.

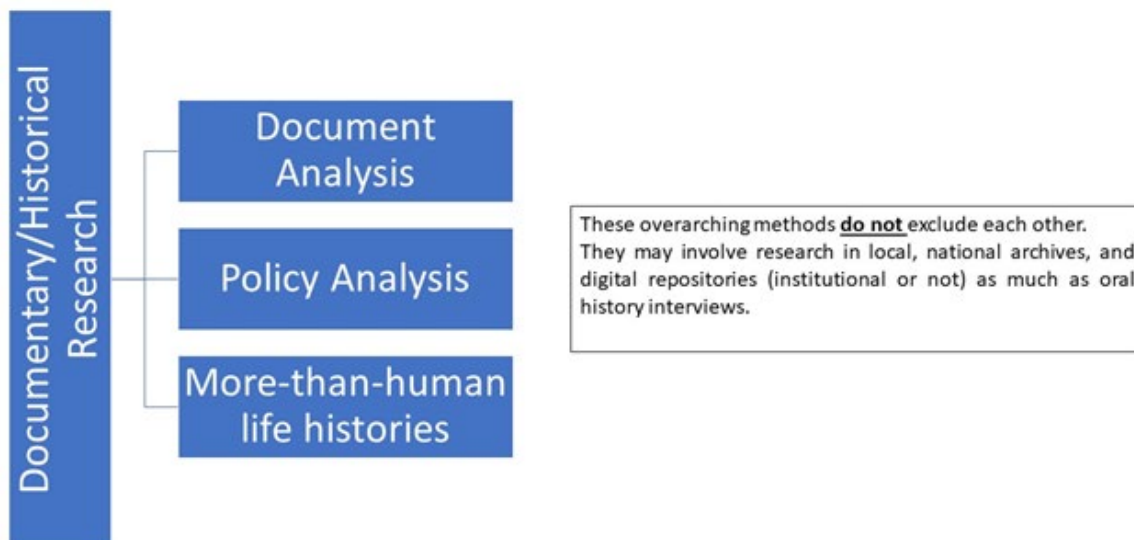
1.2 Task 2.2 to 2.4

The organisation of task 2.2, 2.3 and 2.4 is shown in the GANTT green, yellow and orange bands for the achievement of respectively deliverables D2.2, D2.3 and D2.4.

2.0 Methodological Guide

Drawing upon deliverable *D1.4 Action Research Review. Clustering and Inventory of Methods Based on Experiences and Needs of Consortium Partners*, this section provides a pragmatic methodological plan to implement research in the different case studies. Taking into account the sensibilities and disciplinary backgrounds of the different research teams against BIOTraCes’ main objectives, and aiming to foster a transdisciplinary dialogue, we grouped the methods in D1.4 in three key areas: Field-based Research, Workshop-based Methods, Documentary/historical research. For each area we identified three overarching methods (in blue rectangles) and a list of other approaches, and ‘sub-methods’.





In order to create a common methodological background so as to produce sets of comparable data from a variety of different contexts and case studies, we ask the research teams to **choose at least 1 overarching method for each area**. This choice, at this stage of the project, is not to be understood as a constrain to implement research. Methods can be adjusted and even changed as the research proceeds, according to questions and problems encountered in each case study area, as much as according to cross-pollination/exchanges between different researchers and research teams. Nevertheless, it is important to define and choose kick off methods to start and direct research according to BIOTraCes' main objectives and research questions.

Following this basic criterion, each research team will be able to triangulate 3 overarching methods (1 field-based + 1 workshop-based + 1 documentary based). The research teams can choose different overarching methods for each area, along with the other tools provided in the boxes that are deemed necessary to implement the case study. For example, a research team can choose to implement the case study as follow:

- **Deep Collaborative Mapping + Critical and collaborative design Ethnography** (in combination with Questionnaire & Surveys, One-to-One & face-to face interviews, Qualitative Dynamic Analysis Method, etc.).
- **Backcasting Scenarios** (in combination with Theatre-based methods, Stakeholder analysis, etc.)
- **Document Analysis + More-Than-Human life histories** (implementing research in local archives, digital repositories, and oral history interviews).

Whereas we ask the reader to refer to **D1.4** for the description of each method, in the following section we provide an explanation of the criteria adopted to design this methodological guide.

2.1 Selection of methods and triangulation

This methodological guide responds to BIOTraCes main goal of catalysing transformative change in societies and economies so as to bend the curve of biodiversity decline. In order to do that it is critical to explore the underlying cultural, socioeconomic, political, and historical drivers that cause biodiversity loss. These drivers – or structural factors – reflect values and knowledge systems whose complexity cannot be grasped by implementing only one set of methods. This is why we ask the research teams to implement a methodological triangulation, not to validate one method and its findings against another, but more as a way to bring to life diverse facets of a story, which couldn't be fully comprehended by using only one approach. For each key methodological area, we have selected three overarching methods according to their flexibility, and to the depth of data they can generate when used in combination with other sub methods.

2.1.1 Field-based Research

Field-based Research generates valuable qualitative data based on the material, intimate, and bodily engagement of the researcher in the field site that has proven crucial for complementing quantitative, often overly narrow, science-based approaches on human-environment relations and sustainability (Castree et al 2014). Although associated with anthropology and social sciences, this field-based approach resonates with other disciplinary backgrounds within BIOTraCes recalling what historian of science Robert Kohler has called “residential” scientific practices (Kohler 2011). These kinds of practices invite researchers to know the peculiarity of environments, to encounter their human and non-human inhabitants, and to explore the relations between different coexisting species. Such an approach is critical to understand in depth the everyday activities, struggles, and meanings that can sustain or hinder biodiversity processes. In this sense, **Field-based research**, along with other methodological approaches, is key to fulfil BIOTraCes objectives **O1: Understand the role of diverse values, knowledge systems, power, and behaviour in transformative biodiversity approaches**, and **O2: Demonstrate practices and key principles of transformative change for nature-positive societies**.

For this methodological area we identified three overarching methods. **Critical and collaborative design ethnography** can be time consuming and requires skills and sensibilities that may not be mastered by all research teams in BIOTraCes, this is why we also provided alternative methods, such as **Deep Collaborative Mapping** and **Walkshops**. These methods, although requiring the physical and bodily presence of the researcher in the field-sites, thus producing valuable sets of qualitative data, may be easily implemented by following a protocol. These three overarching methods can be all implemented focusing on specific issues (e.g.: smell-scape, soundscape, more-than-human research, etc.) and in combination with other sub-methods (e.g. Static observation in-situ, Questionnaires & Surveys, Qualitative research etc.).

2.1.2 Workshop-based methods

Workshop-based methods are participatory methods that involve discussions guided by a researcher with more than one individual. They can be performed in formal or informal settings according to different purposes and contexts and can provide valuable data concerning different kinds of issues in a short period of time (Schensul 1999). Maps, photos, and other visual materials, as much as art-based practices, may be used to trigger conversations over particular issues, such as zoning in conservation areas, planning in urban and rural areas, multispecies relations, and system dynamics, for analysing place-making processes, mapping communities, or for negotiating common pathways towards sustainable futures with different stakeholders. These kinds of methods have been widely used in Biodiversity, Ecology, and Conservation research to explore worldviews, perceptions, and attitudes of particular communities through a moderated interaction (Nyumba, Wilson, Derrick, et al. 2018). In fact, it is critical to understand the peripheral role of the researcher during these workshops, acting as facilitators in a conversation between the community of research participants, including researchers.

Workshop-based methods are particularly useful in relation with BioTraces objective **O3: Develop strategies to aid transformative (i.e., integrative, adaptive, inclusive and pluralistic) governance approaches.**

For this methodological area we identified three overarching methods. Whereas **Focus Group Interviews** and **Backcasting Scenarios** may be implemented by following ready-to-use protocols that do not require specific skills and tools, **Community Based System Dynamics** requires instead more specific expertise and it may involve the use of modelling systems and computer simulations (Hovmand 2014) that are not common background of all BIOTraCes research teams.

2.1.3 Documentary/Historical research

Documentary/Historical research is critical to trace socio environmental change in a particular context and thence to understand the structural factors that led to biodiversity loss, degradation, or restoration, such as land use change, vegetation change, and socioeconomic change. Drawing documentary and historical data into fieldwork-based research and workshop-based methods allows to democratise official histories (Portelli 2007) and understandings of socioecological and multispecies relations thus challenging hegemonic and anthropocentric narratives of environmental change (O’Gorman and Gaynor 2020). In this sense it is key to identify archives and to analyse documents especially in relation with environmental policies concerning each case study. Local and national institutions, as much as NGOs, may have valuable archives, holding grey literature, that may contain data on ecological, political, and economic aspects of the selected field sites, whose analysis can complement primary data generated through field-based research and workshop-based methods. Likewise, oral history can be important to

unveil temporal lines that connect the past to the present through contextual narratives and imaginaries (Portelli 2007). By emphasising issues of continuity and change in socio ecological relations and environmental policies, **Documentary/Historical research** contributes particularly to BIOTraCes objectives **O1: Understand the role of diverse values, knowledge systems, power, and behaviour in transformative biodiversity approaches**, and **O2: Demonstrate practices and key principles of transformative change for nature-positive societies**.

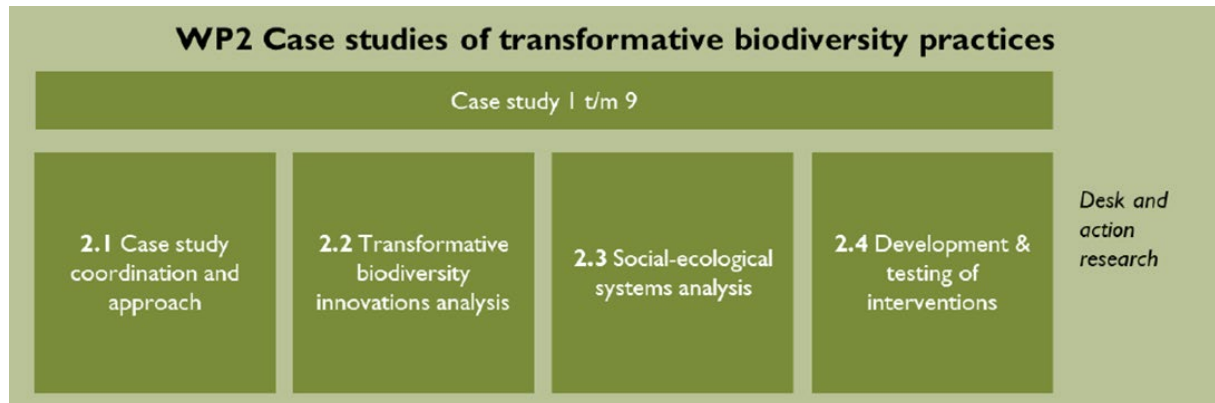
For this methodological area we identified three overarching methods. Whereas **Document Analysis** and **Policy Analysis** are quite broad in scope as they involve work in physical or digital archives, exploring a variety of documents, **More-than-human life histories** is a narrower approach that emphasises the role of other-than-human beings in shaping history as much as socio-ecological change, in this sense it may involve both archival research as much as oral history interviews.

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3.0 Task Structure and Analysis

This section provides an overview of WP2 tasks. For each task we copied as a reminder the list of key issues to be explored from the BIOTraCes main project (in green boxes) and unpacked these issues by providing a list of research questions to keep in mind while implementing the research.



3.1 Task 2.1 Case study coordination and approach

In this task the methodological and conceptual approach described in WP1 will be transformed into an operational set of guidelines and methods how the case should be done in terms of participative observation, interviews, document analysis, living labs, action, empowerment, innovation analysis, power analysis, ecological analysis, experimenting, reflection and learning. It addresses the following three overarching points (green box), indicated in the BIOTraCes general project, whose implementation will produce three deliverables (see - Chapter 1: Timeframe for WP2).

1. Instruct the identification and in-progress implementation of the nine cases, on how to describe and analyse the main components of the social-ecological system in each case.
2. Instructions on how to interact with and empower the civil society organisations and other stakeholders in action research. Empowerment will consist of a combination of providing the resources and sharing knowledge on transformative change. This will be done in living labs and by co-working and co-learning.
3. Synthesize lessons learned over the cases.

3.1.1 Task Deliverables

D2.1 – Document with instructions for performing the case study, applying the theories to the cases.

D2.5 – Document with a synthesis of the biodiversity analysis, SES-analysis and interventions analysis per case study.

D2.6 - Report reflecting on biodiversity innovations, SES analyses and interventions on all case studies.

3.2 Task 2.2 Transformative biodiversity innovations analysis (Lead UniCT)

This task involves an in-depth analysis of the mechanisms that foster or oppose biodiversity innovations at a local level. It addresses the following six overarching points (green box), indicated in the BIOTraCes general project, the chapter and provide a list of key issues and research questions.

1. Analysis of when and how do the diversity of values, including cultural values, local beliefs, social attitudes, hybrid forms of knowledge in the field (expert, local, traditional knowledge) foster inclusion/exclusion mechanisms of other human-nature perspectives on biodiversity restoration.
2. Highlight the intersectional power lock-ins that hinder the development of sustainable biodiversity management, including community consultation on underlying causes, root causes, indirect and direct drivers of change, especially how gender, religion, ethnicity and sexual orientation (interlocking systems of power) are related to the access to biodiversity and the ownership of nature-based solutions.
3. Identification of inclusive measures of sustainable biodiversity that ensure long-term viability and empowering of marginalised groups. Participatory Labs at local level.
4. Description of niche innovators that want to push through. Identification and involvement of (potential) key players at local and regional levels, such as influencers: religious leaders, citizen scientists, environmental indigenous guardians.
5. Identification of scalable bottom-up innovations for transformative change in that sector. This may take the shape of nested case studies, preferably much more than one or two per sector.
6. Analysis of interventions. Describing metrics, experiments/labs, social actions, campaigns, etc. beyond the scope of business-as-usual policies. Participatory Lab on innovations, campaigns and other disruptors.

In this task each research team should **identify, map, and understand** the diversity of human-nature and more-than-human¹ relationships and the plurality of interpretations that social communities give to these relationships. This involves a **holistic understanding** of each field-site explored through a variety of historical and documentary sources, qualitative and quantitative methods, so as to identify **the multifaceted dimensions of place** (sociological, economic, demographic, political, historical, and cultural) through documents, official statistics, historical reconstructions, and testimonials from key research interlocutors.

It is critical to **map marginalised groups and perspectives** in each case study, and to identify potential methods to **trigger their participation in the research**. Likewise, it is also important to **identify the niche innovators** in each case study and to **understand the role they play** in each context². The analysis should understand if the social, economic, and political context in the case studies encourages niche innovators and provides them a safe space to emerge, or if the context hinders at innovators and makes difficult for them to scale up and to express their transformative potential. The spectrum of niche innovators should not be limited to innovators in the technology field but should also include vernacular, popular/social technologies, social innovation, movements, and actors.

Finally, in order to implement this task, it is key **to analyse the interventions** that have already been conducted in each field site to initiate, accelerate, and upscale transformative change and the ones that can be potentially implemented. The **analysis will be diachronic, and** conducted in advance of project actions and after, so to evaluate participation, involvement and degree of conflict between actors and in the area. These indicators could also be supplemented with more specific indicators related to the biodiversity of the area.

This is a list **key questions** to keep in mind while implementing task 2.2:

- What is the transformative biodiversity innovation about? How is it an alternative to the current mainstream? Why is it or could it be “nature positive”? How is it (potentially) transformative?
- What is the social and political profile of niche innovators? Are they part of the social communities of your field sites, or are outsiders? What agency, animals, plants, and technologies perform in the innovators-networks? Is their agency acknowledged?
- What is the social network involved in interventions aimed to inject transformative change? Is there space for new forms of interventions?
- Are there marginalised forms of human-nature relationships in the context of the research? How do the marginalisation dynamics occur?
- How do ecological values and human-nature relations have changed over time in your study area?

- What are the prevailing values regarding biodiversity and environmental justice on the ground? Do these values align with vernacular discourses and understandings?
- Is biodiversity assimilated into a capital asset within the hegemonic economic perspective? Do these economic interpretations affect human-nature relationships, and impact on biodiversity? Are these interpretations challenged in some way by particular social groups and what kind of alternative visions do they propose?
- To what extent are biodiversity innovation interventions coupled with the recognition, celebration, amplification and positive coordination between other forms of diversity (e.g. cultures, values, systems of knowledge and practices). How are they coupled?
- What is the degree of political participation and ecological awareness in your research field-site? Are social communities involved in biodiversity management? At what level and how?
- Who are the main (economic, political, civil society, ...) actors involved in each case study? How do they affect biodiversity (management)?
- Is there equal access to biodiversity innovations?
- How are 'nature', 'biodiversity', and 'ecological degradation' defined and understood in each research field-site? How are ecological restoration and regeneration imagined and defined?

3.2.1 Task Deliverable

D2.2 - Document describing case and field work, with the results of the biodiversity innovation analysis, describing mechanisms of transformation or perpetuation drawn from the field work (total 9).

¹ This expression has been largely used in deliverable related to WP1. 'More-than-human' identifies a variety of approaches that decentres the role of humans in socioecological analysis, and "calls for the cultivation of attentiveness to the diverse living beings and forms of liveliness that constitute our world" (Rose, Deborah Bird, and Thom van Dooren. "Encountering a More-Than-Human World: Ethos and the Arts of Witness." *The Routledge Companion to the Environmental Humanities*. Eds. Ursula K. Heise, Jon Christensen, and Michelle Niemann. London: Routledge, 2017. Pp. 120.

² Niche innovators are developed and carried by small networks of actors that often operate as outsiders, while this condition may allow the flourishing of innovative ideas and practices, it can also pose challenges to the diffusion and scale up process of niche innovations.

3.3 Task 2.3 Social-ecological system (SES) analysis (Lead BC3)

This task analyses the social-ecological system (SES) of each case study to ascertain the ways political, cultural, ecological, and institutional factors interact. It revolves around the following key points **indicated in the overall BIOTraCes project:**

1. Analysis of how the social-ecological system operates (enabling or constraining), how it creates transformative biodiversity innovation options.
2. Power analysis regarding political, cultural, and institutional factors, including power lock-ins, economic barriers, and dominant paradigms in the sector. Analysis of governance structure, market mechanisms, inequalities of power in the access to natural resources, root causes of biodiversity loss, historical paths of environmental degradation and/or restorations.
3. Description of relevant and operationalizable biodiversity indicators (including vulnerability levels) that can be upscaled beyond the local levels, i.e., species richness, richness of species with high conservation value out of the total species richness, richness of invasive species, presence of species that (because of their ecology and tolerance to disturbance) show a significant degree of resistance, habitats with high conservation value.
4. Describing and reviewing available data on the relation between landscape structure and biodiversity at national and regional levels? Spatio-temporal distribution patterns of species and communities (types of habitats, degrees of urbanisation, fragmentations of landscapes, etc.)

Particularly, task 2.3 involves a comparative analysis of the project's nine case studies across the four sectors of possible biodiversity innovations (i.e.: agriculture & food, forestry, water, and innovation) that will help to **identify institutional and structural challenges of power lock-ins**. We will conduct **SES mappings** to each of the nine case studies (the results from WP1 Task 1.5) as part of a **broader analysis that includes power analysis and intersectionality** implemented to describe the different factors that structure social-ecological systems across the case studies. This will assist in comparing the main factors that operate across the studies in terms of their commonalities and idiosyncratic differences and across the four different sectors of biodiversity innovations.

Sector of innovation	Case Study	Type of SES system	Power dynamic between relevant actors	Analysis of governance structure	Commonalities and differences across cases and sectors
Urbanisation	Case 1. UT				
	Case 3. BC3				
	Case 9. WUR				
Agriculture/Food	Case 2. CES				
	Case 4. UBB				
Maritime/ Aquatic	Case 5. MRU				
	Case 8. UNICT				
Forestry	Case 6. UGOT				
	Case 7. CER				

Table 2: Example of comparison between different case studies.

Particular emphasis will be given to **governance aspects** to shed light on the potential of biodiversity innovations to scale up and succeed. **Power dynamics** between relevant actors and broader governance structures will be analysed to identify power lock-ins and potentials across the nine case studies and four sectors. This would involve analysing governance structures, **decision-making processes** in relation to the exploitation of natural resources, establishment of human-nature relations, etc. as root causes of biodiversity loss.

This task also focuses on **identifying operationalizable biodiversity indicators** (e.g.: ecological vulnerability levels and species-based metrics) that enable the measuring of the different biodiversity innovations' impacts. Likewise, available data on the relation between landscape structure and biodiversity at national and regional levels should be reviewed, as much as the **spatial-temporal distribution patterns of species and communities** (types of habitats, degrees of urbanisation, fragmentations of landscapes, etc.).

While implementing task 2.3, research team should keep in mind these **questions**:

- What are the distinctive characters of the SES in each case study area?
- What are the key ecosystems of the study area, the mosaic of land uses and its key ecosystem elements, and how far are the actual ecosystems from their potentials (e.g. quality, stability, etc)?

- How has land-use changed in time? Is land-use connected to factors such as climate change, pollution, and the presence of invasive species? How?
- What are the issues important locally for conservationists? What are their long and short-term objectives? Are there ongoing connections, opportunities of cooperation and existing or potential conflicts with local stakeholders?
- What are the key and secondary factors (social, economic, political, ecological) that cause biodiversity loss?
- What is the temporal trajectory of those factors? What are their drivers? How did they change in time?
- What is the nature of their interactions and what are the implications? How do these interactions unfold over time?
- What are the main structural factors that affect the social-ecological system in each case study (e.g. values, institutions, power relations)?
- What are the governance structures and processes of each SES? Are these embedded in market mechanisms? Are they drivers of biodiversity loss?
- What is the key ecological literature of your case study area concerning human-nature relations and biodiversity? In particular: scientific publications, grey literature (e.g. reports, films, photos etc.), local and traditional knowledge, relevant art works.
- What are the implications of the overlaps and differences amongst the diversity of stakeholders on the SES characterisation for each case study?

3.3.1 Task Deliverable

D2.3 - Document with the application of the conceptual framework to the case and the results of the SES overall analysis (total 9).

3.4 Task 2.4 Development and testing of interventions (Lead CES)

This task contributes to **locally tested interventions** in the nine case studies reflecting with civil society organisations and other key actors in each case on the **achievements and shortages of the performed action research and empowerment**. Accordingly, new intervention methods will be developed and discussed that **address underlying causes of biodiversity loss**. It pivots around 5 key actions, as indicated in the general BIOTraCes project:

1. Evaluation of strategies that are already in action in the transformative niches, and design of manageability of indirect drivers of change in a multisectoral and multi-stakeholders' context.
2. Discussing various enablers and disruptors, found in the cases, and how to exploit them.
3. Taking stock of the failed and success practices from the partners and stakeholders.
4. Reflection and co-learning on the capacity for pluralising, politicising, embedding, and empowering to include indirect drivers (new ToTC), with feedback workshops with the partners and stakeholders of a case.
5. Testing of interventions on the ground towards remote influencers, through joint experimentation, monitoring and evaluation, in a regional event with stakeholder groups, consisting of local authorities, practitioners, activists, local associations.

The implementation of this task provides the consortium partners and the societal partners with the following information:

- A. The extent to which intersectional issues are igniting cultural and political lock-ins towards a regenerative approach.
- B. The level of representativeness of different groups in the co-governance (if it does exist) and in the action plan. The goal is to detect (and further stimulate if needed) the capacity of 'pluralising' the co-governance towards transformative change.
- C. The societal partner's capacity of stimulating the effective participation of minority voices and in so doing of empowering less-represented groups.
- D. The ability of or difficulties in providing the public bodies with a broader sense of why (and how) to engage and empower disadvantaged groups in a process of co-governance.

Particularly, this task involves the **development of general guidelines for the implementation of multi-stakeholders focus-groups** to be discussed with the consortium partners for validation. Once the protocol will be prepared, focus groups will be implemented in each case study with local actors, such as local authorities, practitioners, activists, local associations and grassroots initiatives, local producers and consumers, researchers, local enterprises. These 9 focus groups will allow the consortium to evaluate the ongoing strategies, to co-design a management plan of the indirect drivers of biodiversity loss and to map grassroots initiatives culture considering the socio-political, cultural and economic contexts of each niche. The results of the focus groups will then be systematised in an evaluation document regarding the four items (A, B, C and D), and in the analytical report on needed complementarities regarding intersectionality and project principles.

Likewise, this task will provide guidelines for a feedback workshop with the societal partner - to be delineated with the research partners - in order to refine co-designed strategies and solutions on potential problems of the performed action research and empowerment. A draft of a roadmap for co-governance will result from these feedback workshops, becoming the deliverable 3.4 in WP3.

While implementing task 2.4 these **questions** should be thought as guideposts:

- Is there an unfair partition of environmental benefits and burdens? If so, are economic and social inequalities (e.g.: gender, racial, disability) in the territory related to these? Are there any efforts implemented to reduce these inequalities?

- Have there been concerns regarding gender imbalances, disability issues, older people's needs in the way the space (and the economy) is planned and shaped? Can our action research reduce, through connections between the environment and the social justice agendas, gender imbalances and other asymmetries?
- Are there racially or socially segregated territories? How are they planned in terms of environmental improvement (e.g. production of leisure and public spaces for conviviality, community and edible gardens, increase of public facilities, reduction of landfills in the area, etc)?
- Is there representativeness of different groups in the way the space has been employed, occupied and socially appropriated? What is missing to have a more accurate representativeness? Who is absent and under which circumstances? Is it possible to stimulate a greater involvement of social groups that have been less represented so far? Can our action research increase the representativeness of different groups in the way the space has been planned, designed and employed?
- Are community knowledge (tacit knowledge, empirical knowledge) and popular technologies considered relevant by public bodies and other civil society organisations? Can we make a better use of local knowledge in the design of local strategies aiming at a stronger social cohesion and commitment with solutions towards a transformative change agenda?
- How are the priorities in the local economy designed? Have they been sufficient to address social and environmental issues in the territory? Which forms of environmental injustice remain? How can we promote affirmative policies towards environmental justice in the territory? How can these policies positively pollinate other practices in the surroundings?
- Are there spaces formally or informally used by ordinary citizens to debate, reflect upon and demand improvement from the public bodies?
- Are there interests underlying usual lock-ins towards upscaling regenerative solutions?
- Are there different imaginaries and/or conflicting perspectives about well-being, healthy food, nature conservation, soil management, policy of subsidies, reforestation and land regeneration, water management? If so, how has the prevalence shaped the policy design?
- Which role has the local government played in the regenerative approach? What is its positionality in a broader regional and national political agenda? How can we refine the local development strategies and policies to better suit the regenerative goal?
- How have small and large-sized enterprises been engaged in the regenerative approach? Which are the prevalent concerns? How is it translated into a local enterprise approach? What is the positionality of economic sectors in the region regarding a regenerative approach?

- How can we evaluate the civil society organisations' engagement in the environmental and social agenda?
- What kind of reflexive practices exist to allow the community(es) to co-learn and co-change in its organisation in relation to key indirect drivers? Where do new ideas or initiatives for interventions and change come from? What kind of innovations and interventions seeds emerged but did not follow through? What processes could support or block them?
- How can we co-create strategies for making people, such as the older producers, more comfortable with the experimentation of different solutions for existing challenges (e.g. water and soil management, for example)?
- Can we design qualitative indicators to measure paths towards transformative change.

3.4.1 Task Deliverable

D2.4 - Document accounting for success and failure of the interventions in all case studies (total 9).

4.0 WP2 Single case study plan

The form "Single Case Study Plan" is part of the coordinating activities implemented under WP2, Task 2.1, and it draws on the "Case Study Monitoring" form (see section 5.0 below) prepared for the Bilateral Meetings held between July and September 2023. Whereas the "Case Study Monitoring" concerned preliminary aspects of the project (e.g.: relationships between University teams and societal partners, identification of ecological drivers in the case study area, and modes to foster the participation of vulnerable or marginal groups in the case study), the form "Single Case Study Plan" gets into the thick of WP2, addressing issues specifically related with research in the nine-case study. It aims to facilitate the coordination of research activities while providing each research unit with a reflexive tool to think about the implementation of their single case study.

Particularly, the form addresses the following questions:

- 1. Who are the researchers in your team "directly" involved in the research?**
It is important to understand who is doing what, this is why we ask each team to reflect on the main focus of each researcher during the implementation of the case study.
- 2. How are you planning your research?**
This question goes beyond the research design process and asks each team to reflect on how/if research has been *planned* with the direct participation of researchers and societal partners.
- 3. What methods are you planning to use during research? How are you triangulating those methods?**
We ask to specify the methods you selected for implementing the case study and how you are triangulating those methods (see Methodological Guide on D2.1). Please detail why you chose certain methods in relation with the objectives you set for your own case study.
- 4. Are researchers and the societal partners involved in any training for implementing research methods?**
We ask you to reflect if researchers in your teams are properly trained to implement the case study, and if you are planning to offer specific training to fill any potential methodological gap. Beyond the academic researchers, it may be important to think of societal partners as co-researchers and think of potential *ad hoc* training for them.
- 5. Have you designed any internal system to check on the progress of your research?**
Each team will conduct independent research across the next two years, this is why we ask each research team to reflect on their own 'informal' systems for monitoring and supervising the research, beyond the official meetings planned within WP2.

6. Have you planned any internal timeline to implement your case study research?

Beyond the broader timeline of WP2, it may be important to think of a timeline designed *ad hoc* for the implementation of your own case study that includes and details different phases and the triangulation of methods spread over the research period.

WP2 Monitoring – Single case study plan

Title and area of the case study:

University Partner:

Societal Partner:

1. Who are the researchers in your team “directly” involved in the research?

Specify names, educational/professional background and main research focus in the case study.

2. How are you planning your research?

Specify as much as possible the research planning process and the involvement of the societal partner in this process:

- *Have you organized meetings with the researchers for planning the research?*
- *If yes, what did you discuss? If not, are you going to do that?*
- *Did you discuss your research plan with the societal partner?*
- *If yes, please give detail on the discussion. If not, are you planning to do that?*

3. What methods are you planning to use during research? How are you triangulating those methods?

Specify why you chose certain methods and what are you hoping to achieve by implementing them.

4. Are researchers and the societal partners involved in any training for implementing research methods?

If yes, specify what kind of training. If not, are you planning to offer any training to researchers and partners?

Example: training on how to conduct one-to-one interviews, how to implement workshop-based methods, how to implement quantitative analysis; etc.

5. Have you designed any internal system to check on the progress of your research?

Specify how are you planning to supervise and to monitor the advancement of research.

Example: Organize monthly meetings with researchers directly involved in the research.

6. Have you planned any internal timeline to implement your case study research?

If yes, specify the timeline. If not, are you planning to do that? It may be helpful to prepare a GANTT Chart detailing the timeline of the research. As an example:

Months	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Documentary/Historical research																								
Preliminary fieldwork																								
Analysis of preliminary data																								
Field-based Research																								
Workshop-based methods (focus groups etc)																								
Internal training																								
Internal meetings amongst researchers																								

4.1 Wageningen Environmental Research

WP2 Monitoring – Single case study plan

Title and area of the case study:

Nature-inclusive building – The Netherlands

University Partner:

Wageningen Environmental Research

Societal Partner:

We have more than one societal partner: at the moment mostly involved with:

- De Beuk – eco-community: initiative which represents another 5 groups – they want to speak with one voice in order to realize their dreams.
- Province Overijssel - innovative policy program on nature-inclusive construction/building and
- 'Agenda Natuurinclusief (network with governmental organisations, business organisations, intermediary organisations and other initiatives concerning nature inclusiveness).

Currently the research is most participative with De Beuk and the Province Overijssel.

1. Who are the researchers in your team “directly” involved in the research?

1. Roel During – ecology -> transformed into social scientist, narrative analysis
2. Zoe van Eldik – anthropology, power analysis --- Lead of case study De Beuk
3. Amy Wortel - social-ecology, policy and SES analysis --- Lead of case study Provincie Overijssel
4. Rosalie van Dam – sociology & public administration, policy analysis & transformative change
5. Judith Westerink – landscape governance, transformative change

2. How are you planning your research?

Currently we have an overall plan and two plans of approach related to the two societal partners we are actively working together with 'de Beuk' and 'Provincie Overijssel'. The subplans are composed of inputs from the societal partners and the research team.

These will be discussed with the WR research team on the 25th of January 2024. We will discuss our approach, the aim of the cases and how the cases are contributing to our general research questions. Moreover, we will discuss and define our planning for the upcoming years.

When we have agreed on the plans, we will schedule a meeting with the societal partners to discuss it with them as well, to find an agreement.

3. What methods are you planning to use during research? How are you triangulating those methods?

- Semi-structured interviews. To gain in-depth information from a small number of participants.
- Questionnaires. To gain information from a large number of participants, to diversify our research group.
- Policy analysis, we will combine this with interviews to gain insights on the process of policy making.
- Literature review, to put our data in a broader perspective, we will combine/support methods above with a literature review.
- Hosting workshops, to interact with the sector and gain more knowledge on specific topics.
- Stakeholder analysis, to gain knowledge on the stakeholders of the high impact sector.
- Creating TOTC together with societal partners, to gain insight in their view of the sector and to set up their 'action plan'.

By combining some or several of these methods for each case, we will triangulate the methods.

4. Are researchers and the societal partners involved in any training for implementing research methods?

We will not be involved in any training at the moment, as we perform these research methods daily in our work, but might be again in the future.

5. Have you designed any internal system to check on the progress of your research?

BIOTraCes WR team meets every three weeks. During these meetings, the progress of our case studies will be discussed.

6. Have you planned any internal timeline to implement your case study research?

We will finalize the timeline for the case studies the 25th of January 2024.

Example of our work in progress: (in Dutch since we need to discuss it with our societal partners)

D2.1 – Case Study Plan

31/01/2024



Onderdeel	Beschrijving	Werksaamheden	2024												2025												2026																		
			jan	feb	mar	apr	ma	jun	jul	aug	sep	oct	nov	dec	jan	feb	mar	apr	ma	jun	jul	aug	sep	oct	nov	dec	jan	feb	mar	apr	ma	jun	jul	aug	sep	oct	nov	dec							
1a	Beschrijving programma	Beleidsanalyse																																											
		Interviews houden																																											
		Subrapport schrijven																																											
1b	Impact van programma	Interviews houden																																											
		Questionnaire																																											
		Subrapport schrijven																																											
2a	Root causes	Literatuuronderzoek																																											
		Beleidsonderzoek																																											
		Analyse resultaten																																											
		Subrapport schrijven																																											
2b	Hefbomen	Interviews houden																																											
		Questionnaire																																											
		Subrapport schrijven																																											
2c	TOTC	Workshops																																											
		TOTC opstellen																																											
2d	Potentieel en tegenkracht	Analyse																																											
		Subrapport schrijven																																											
2e	TC: hoge impact	Analyse, input vanuit oa 1a en 1b																																											
Workshops	Obstakels en hefbooms Relaties en machtsstructuren Toekomst schetsen	TER OVERLEG																																											
		TER OVERLEG																																											
		TER OVERLEG																																											
Eindrapp	ortage	Rapport																																											

4.2 Basque Center for Climate Change

WP2 Monitoring – Single case study plan
Title and area of the case study: Urban Schoolyards, Biodiversity Lab
University Partner: Basque Center for Climate Change BC3
Societal partner: Centro de Estudios Ambientales CEA
1. Who are the researchers in your team “directly” involved in the research?
<p><i>Involved in empirical work:</i></p> <p>Julia Neidig, PostDoc (Urban Planning, Urban Political Ecology, Ecological Economics). Focus on institutional governance processes and lock-ins.</p> <p>Liam Ó Riada, PhD Student (Political Economy, Ecological Economics). Focus on plural valuation and co-production of transformative visions.</p>
2. How are you planning your research?
<ul style="list-style-type: none"> - <i>Have you organized meetings with the researchers for planning the research?</i> - <i>If yes, what did you discuss? If not, are you going to do that?</i> - <i>Did you discuss your research plan with the societal partner?</i> - <i>If yes, please give detail on the discussion. If not, are you planning to do that?</i> <p>We are having one to two monthly meetings with the main societal partner CEA, to gather background information regarding the projects and its evolution, to understand better the complexity of stakeholders involved, and to get feedback on research ideas, regarding their usefulness to our societal partner.</p> <p>We are further joining the meetings of the municipal actors that are managing the project of schoolyard greening of several schools, where current developments in the project are discussed. We are currently selecting three to four schools that are in different phases of schoolyard greening and are in the process to reach out and create relationships with the broader and, most importantly, non-institutional educational community, including teachers, parents, kids, and the wider neighborhoods the schools are located in.</p>

Concretely, we have discussed the research plan, and more specifically the time dimension of when to do fieldwork, possible actors, non-scientific contributions, and outcomes. In upcoming meetings with the main societal partner CEA, we will discuss its specific role in the upcoming research.

3. What methods are you planning to use during research? How are you triangulating those methods?

- **Q-methodology:** elicit attitudes towards different future pathways with different values of nature across a wide variety of stakeholders (e.g. teachers, parents, city council members, maintenance personnel). The aim is to reveal the diversity of values of nature and future imaginaries in the schoolyard context and identify transformative potentials.
- **Policy analysis:** with a focus on how society-nature relations are articulated in local planning documents and policy concerning the educational system in the Basque Country and European context. This will illustrate which values of nature are represented / neglected in policy currently.
- **Stakeholder maps and power analysis:** identifying who are the actors involved across scale, institutional and non-institutional. With this method we want to identify how power is distributed and whose goals and interests are served / ignored in the project.
- **Participant observations:** carried out at institutional meetings. Here, the aim is to understand how decisions are made to identify challenges, lock-ins and institutional inertias.
- **Future envisioning workshops:** co-creating alternative pathways towards transformative change building upon plural values and knowledge systems. Specifically, we aim to co-create ideas with both institutional actors and the educational community for using the rewilded schoolyard as a catalyst for a whole-school approach to sustainability, by rethinking how the school is organized and embedded in the community with sustainability in mind.

4. Are researchers and the societal partners involved in any training for implementing research methods?

Julia is receiving training on facilitation and leading group processes.

Liam is receiving training on qualitative data analysis with NVivo and taking a course on design and implementation of transformative research.

So far, no training planned with societal partners.

5. Have you planned any internal system to check on the progress of your research?

We are having BC3-internal two-weekly meetings and currently working on a concrete roadmap for fieldwork implementation.

6. Have you planned any internal timeline to implement your case study research?

In the making.

It may be helpful to prepare a GANTT Chart detailing the timeline of the research. As an example:

MONTHS	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Documentary/Historical research																						
Preliminary fieldwork																						
Analysis of preliminary data																						
Field-based Research																						
Workshop-based methods (focus groups etc)																						
Internal training																						
Internal meetings amongst researchers																						

4.3 Center for Ecological Research

WP2 Monitoring – Single case study plan

Title and area of the case study:

Hungarian traditional herders (Country level)

University Partner: Center for Ecological Research - CER

Societal Partner:

Hungarian herders, especially young and middle-aged ones, and the Hungarian Women Herders group.

1. Who are the researchers in your team “directly” involved in the research?

1. Zsolt Molnár, botanist, ethnoecologist, responsible for overall organization, writing of reports
2. Bálint Sándor, wildlife manager and nature conservation engineer, responsible for field work, forums and writing of reports.

2. How are you planning your research?

We have been building the relationships with societal partners for years, seeking their views on the planning process about our research. We meet regularly in the field (on the farm and pasture), and also at herder festivals. We organized an international gathering between herders and pastoral researchers. We also organized the I. Forum of Hungarian Herders with the participation of herders and interested decision-makers. We discussed the situation of herding, especially for young herders. We looked for possible solutions and tasks to establish pastoralists' advocacy, to create possibilities for the survival and stabilisation of the sector from a human and ecological point of view. Together with the herders we are working on a concrete research and action plan. We are organizing further forums with them on the partial results and further tasks.

3. What methods are you planning to use during research? How are you triangulating those methods?

We are not social scientists, so the application of the methods listed below may a bit deviate from professional social science applications. We have been using most of these methods since 2005 in various local communities, and found them useful and doable. Knowledge co-production and collaborative research are key to us.

Field-based Research – Deep Collaborative Mapping + Walk-shops

Workshop-based Methods – Focus-Group Interviews

- Participatory action research combined with field work
 - One-to-One & Face-to-Face Interviews
 - Community-Based System Dynamics - Knowledge co-production between herders, ecologists, conservationists, regulators and other stakeholders
 - Participatory observations during herding
 - Focus Group Meetings - Dialogue workshops (Conference at Olaszfalu, I. and II. Forum of Hungarian Herders); Networking among herders and between herders and other stakeholders
 - Collaborative research – We discuss with herders, what to study, act and how
- We would like to contribute to the emergence and development of tradition-based innovations, including those related to biodiversity, and the management of biodiversity in protected areas.

4. Are researchers and the societal partners involved in any training for implementing research methods?

No formal training yet, though we had Hungarian and international ethnoecological methodological seminars in the past years, and in our research group there is reciprocal learning among members (senior and younger researchers and doctoral students). With some of the traditional herders we already have methodological discussions how they would like us to work together with them.

5. Have you designed any internal system to check on the progress of your research?

The regular personal meetings with herders and the Forums of Hungarian Herders give us the opportunity to monitor the progress of our research both from our side and from the side of the societal partners. We aim to hold at least 2 forums a year. Furthermore, we are in everyday contact with herders (3-6 personal calls, messenger messages and emails per day), and regularly ask them also for feedback.

6. Have you planned any internal timeline to implement your case study research?

Months	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
Documentary/Historical research																									
Preliminary fieldwork																									
Analysis of preliminary data																									
Field-based Research																									
Workshop-based methods																									
Internal training																									
Internal meetings amongst researchers																									

4.4 Centre for Social Studies

WP2 Monitoring – Single case study plan

Title and area of the case study:

Mértola Future Lab - strategy regarding food supply

University Partner:

Centre for Social Studies, University of Coimbra

Societal Partner:

Terra Sintrópica Association

1. Who are the researchers in your team “directly” involved in the research?

1. Luciane Lucas dos Santos - social sciences, economic sociology, feminist economics
2. Fernanda Belizário - social sciences, communication
3. Fernanda Petrus - architecture, social movements, agroecology
4. Rita Campos - biology, science communication, education
5. Beatriz Caitana - sociology, human rights (particularly of children and youth)
6. Ana Teixeira de Melo - psychology, uncertainty and complexity theories

2. How are you planning your research?

The research planning process has been based on CES team meetings + constant dialogue with the societal partner. Three meetings (online and presential) with the societal partner happened with the goal of refining the set of methods and techniques, as well as the vision on transformative change.

From the conversation with the Terra Sintrópica Association and other community partners related to the main goals of the Mértola Future Lab (eg. The ALSUD Vocacional School, connected with the management of the hunting activity in the region), some decisions were made regarding the research methodology. The idea of developing a SES grounded on Ostrom’s work ramped up. Similarly, we decided to foster a collective field diary, in the sense of gathering the contribution of youngsters, hunters and local farmers towards the multispecies approach, by seizing local knowledges and the opportunities of direct observation of interspecies synergies and dynamics. It is expected that this collective diary brings additional and important information for the syntropic dynamics and techniques, being further applied to vegetable gardens already in place at schools, at organisations of social economy and at the Mértola Agroecological Centre.

3. What methods are you planning to use during research? How are you triangulating those methods?

Departing from a qualitative approach, the chosen methodology for the fieldwork in Mértola will be PAR - participatory action research (Fals Borda, 2001; Leão, 2014; Pereira & Rappaport, 2021), inspired by a multispecies ethnography (Ogden, Hall & Tanita, 2013; Gillespie, 2019; Harris, 2022).

Two additional approaches will be considered in our case study. The first one is the SES (socioecological systems) approach, assumed as relevant for two reasons: 1) for being part of a common ground for comparative analyses among the consortium cases and 2) because the Elinor Ostrom's socio-ecological Framework (2009) may help us to throw light on the thriving community-driven efforts to achieve a sustainable SES through processes of co-governance in Mértola. In this sense, dynamics of power and synergic cooperation can be detected and analysed. The second approach that will inform our methodological perspective is referred from the very beginning in the Biotraces application – the intersectional approach (Brah and Phoenix, 2004; Constance-Huggins, 2011). In the Portuguese case study, intersectional approach can help us understand the lock-ins that come from possible persistent inequalities in Mértola. In this sense, intersectional approach plays the role of identifying perspectives, constraints and imageries associated with positionalities. The co-created action plan (CES + TS + other groups in the Mértola Food Network) is expected to depart from a better comprehension of the materiality of these positionalities for more fine-tuned local development policies and strategies.

1. Data collection methods

The main data collection techniques will be: walkthrough (co-walking + in-depth interviews), photovoice, focus group discussion, socio-ecological system mapping, participant observation, multispecies ethnography.

- a. Walkthrough method (interviewer and interviewee) - to be applied particularly to older villagers, migrants and displaced people and older women. Co-walking interviews are expected to bring to the scene experiences of sociability (or discrimination) in public spaces, as well as images and memories of living in semi-barren landscapes. Ethical concerns with regard to possible traumas will be further detailed. The interviews will be analysed through intersectional analysis in order to detect patterns of inequality and the way it is translated into the landscape production, in the environmental burden, as well as in different spatialities/access conditions to 'resources'. It is also expected that co-walking interviews might be a way of

communicating dissent, memories of the past, uncertainties with regard to the future, unsaid criteria of organising space, resources and everyday life.

- b. Walkthrough method (interviewer and small group of people) – to be applied to small groups of schoolchildren. They are invited to walk through their villages to think about potentialities and barriers to a multispecies environmental justice. Other forms of expression could be evoked such as photos and drawings.
- c. Multispecies ethnography – to be applied to non-human entities (soil – and its living conditions, forest gardens, trees, crops, animals, insects, microorganisms). Data are collected through participant observation (in addition to CES researchers themselves, schoolchildren are invited to engage as co-observers and co-researchers), conversations and interviews. Observation implies, here, the attention towards movements, behaviors and interactions (Hawke, 2022) in the landscape, taken also into account how human-centred interpretative lenses may bias what we notice most (or least). Conversation and interviews (with people) imply, for example, attention to ways through which different people and groups understand the land, the soil fertility, the river and the landscape ecology in Mértola.
- d. Photos, sound recordings, short videos – in the scope of a multispecies ethnography, schoolchildren, with the support of AEC teachers (activities of curricular enrichment), are invited to observe and register interactions, other species' needs and ways of expressions through pictures and sound recordings. Participative methods are thus applied to gather children's contributions. The same challenge is posed to the older people at the senior university, considering their everyday contact with crops, trees and soil. An intergenerational nature diary is initiated, paving the way for a more encompassing collaborative mapping (with charts, tables, images, notes, sketches).
- e. Focus group – to be applied to a group of diversified societal partners integrating the Mértola Food Network. This focus group – that should be applied by other consortium partners to their case study according to the task 2.4 – aims to detect dynamics of power and possible lock-ins in biodiversity restoration and NBS implementation.
- f. SES/collaborative mapping towards expectations – different from the focus groups, to be launched after a period of participatory observation and a set of interviews, SES workshops will be designed to happen at the beginning of the fieldwork, as a form of *collaborative mapping* on (different) long-term expectations, key concepts for food production regenerative process (such as nature, soil fertility, needed crops in Mértola, healthy food, etc), perceptions on syntropic agriculture, imagination on fertile landscapes, employability and biodiversity challenges, among other issues. Based on SES, we also believe to have some inputs on the institutional architecture in Mértola.

- g. Participatory observation – applied to relevant discussions involving social actors at the Mértola Food Network assemblies, this technique aims to detect bottlenecks with regard to ecological transition in Mértola. We believe that the participatory observation should help us detect veiled forms of dissent or consent in the neighbourhoods.

4. Are researchers and the societal partners involved in any training for implementing research methods?

The researchers involved in the field work are already prepared for the qualitative methods. The societal partner, in turn, has demonstrated a great sensitivity to these methods, particularly the ones involving group discussions, scenario methods and visual methodologies. What has been a novelty for all of us is the multispecies approach we decided to take as part of our methodological choice. With regard to the research team, it might be said that we are in contact with the latest theoretical papers and books on the theme, but there are still some gaps related to the more-than-human approaches, that we aim to solve through moments of discussions and reflection.

With regard to the societal partner, the syntropic dynamics adopted for both soil restoration and food production already means a concrete path towards more-than-human approaches. To take advantage of this practical knowledge – and take lessons from it -, CES team aims to organize a **two-day workshop on multispecies approaches in June, in which the societal partner and other key groups are invited to actively participate, sharing their experiences and ongoing learning.** The idea is to make us all more prepared to identify forms of cooperation between species in syntropic practices and benefit from them for the collective field diary. This collective diary, in turn, is a technique CES team aims to implement with the support of the ALSUD vocational school.

Some specific literature has also been part of the literature review – among them, the **“Participatory research in more-than-human worlds”**, edited by Michelle Bastian). It is important to stress, however, that the multispecies approach is not the main methodological perspective to be adopted. Notwithstanding this, we consider that a multispecies approach could deepen our understanding of the indirect drivers of biodiversity loss in Mértola, the nature agency being taken as an actant instead of a mere set of resources.

5. Have you designed any internal system to check on the progress of your research?

In addition to the participatory observation taking place since October, three periods of more intensive field work are expected to happen: in February/March (one-to-one interviews, walkthrough method, participatory observation, SES mapping), May/June (group discussions, collective walkthrough method, collective field diary, participatory observation) and September/October (focus group, participatory observation, action plan evaluation).

After each of these periods – meaning, end of March, June and October -, a research team meeting will take place to evaluate results, reflect upon challenges in the field and make some changes of course where needed.

Given that this is participatory action research and that an action plan is expected to be co-designed and put into practice, moments of reflection together with the societal partner are part of the timeline. Three meetings are planned to happen: after the second and third stages of the fieldwork to discuss the main outputs and the further actions in the neighborhood and a meeting for the evaluation of the action plan.

6. Have you planned any internal timeline to implement your case study research?

Months	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Context Analysis																								
First stage of fieldwork																								
Second stage of fieldwork																								
Third stage of fieldwork																								
Workshop on Multispecies approach																								
Data analysis																								
CES Team Meetings for evaluation of the fieldwork + meetings with the societal partner																								

4.5 Mykolas Romeris University

WP2 Monitoring – Single case study plan

Title and area of the case study: Free flowing rivers (former River dam removal)

University Partner: Environmental Psychology Research Centre at Mykolas Romeris University

Societal Partner: Karolina Gurjzkaitė

1. Who are the researchers in your team 'directly' involved in research?

Dr. Audra Balundė is an environmental psychologist who also holds MSc in developmental psychology. Prior to joining BIOTraCes Audra conducted cross-sectional and longitudinal studies on various aspects of pro-environmental behavior as well as personal, social and contextual factors leading to or preventing people from engagement into pro-environmental behavior. She also engaged in experimental and intervention studies aimed at promoting youths' pro-environmental actions.

Dr. Goda Kaniušonytė is a developmental psychologist who also holds MSc in organizational psychology. Prior to joining BIOTraCes Goda conducted cross-sectional, longitudinal, experimental and intervention studies focused on various surfaces of human development in general and on positive youth development in particular. She also engaged in research in environmental psychology domain.

Dr. Aistė Bakaitytė's PhD studies explored various aspects of post-traumatic growth among women who survived intimate partner's violence. She also holds a degree in forensic psychology. As well as her colleagues, Aistė engaged in research in environmental psychology domain.

Karolina Žemyna Gurjzkaitė, MSc, PhD candidate is a social partner of Lithuania case study. She holds BSc in ecology and conservation as well as MSc in science for sustainable development. Currently she studies PhD in environmental engineering. Karolina is a specialist in free-flowing rivers, river biodiversity and freeing rivers from the dams. She is also interested in habitat restoration, sustainable resources management and policy, with focus on rivers and agriculture. Since 2018, she has been working for Lithuanian environmental NGOs on multiple EU, EEA and privately funded projects aimed at environmental advocacy, communications and habitat restoration. She continues pursuing her interests in rivers by assessing impacts on Lithuanian rivers brought by anthropogenic pressures and climate change.

Jonas Tertelis, MA is a theater director. He holds BA and MA from Lithuanian Academy of Music and Arts. Beyond traditional methods Jonas engages in various alternative theater forms such as applied theater. He explores within his scope of interest to what extent methods of applied theatre can aid in exploring/understanding various pressing and sensitive societal issues. Jonas has experience in working with disadvantaged and/or marginalized communities and engaging these communities into art performances. For one of his applied explorative theater plays Jonas was awarded with the prestigious national award of theater “**Auksinis scenos kryžius [The Golden Cross of the Stage]**”.

All researchers are collaborating as a team. We have not compartmentalized tasks until now because, during this period, numerous co-learning activities and explorations are necessary to better understand the context of river dam removal in Lithuania. Up until now, Audra, Goda, Aistė, and Karolina have been involved in comprehending the case and formulating tentative plans. We explored the narratives surrounding river dams in various realms, including political, social, media, and others. Based on the information gathered and internal team workshops, we periodically reassessed our plans and vision for the case.

Jonas joined our group in October 2023. We have already conducted two workshops (**11 October 2023 – 2 hours long and 9 January 2024 – 4 hours long**) to acquaint ourselves with each other, introduce the case study, and integrate Jonas's knowledge and experience into the current vision of the case study. Additionally, we have reviewed literature on applied theater methods and watched plays directed by Jonas to familiarize ourselves with his working methods and the theory behind them.

2. How are you planning your research?

- Have you organized meetings with the researchers for planning the research?
 - o Overall, we organised 18 internal group meetings (2022/10/20, 2022/12/22, 2023/01/27, 2023/01/31, 2023/03/08, 2023/03/16, 2023/03/27, 2023/04/12, 2023/05/02, 2023/05/11, 2023/06/06, 2023/08/14, 2023/09/05, 2023/10/04, 2023/10/11, 2023/11/28, 2024/01/09, 2024/01/11). In these meetings most part of the discussions directly and indirectly revolved around planning the case study research.
- If yes, what did you discuss? If not, are you going to do that?
 - o During the meetings, we revisited the preliminary research idea. Starting with a broad approach aimed at understanding the issues related to river dam removal, we consistently brainstormed ways to connect more closely with communities. Given our limited experience in working with

participatory action research, we deliberated on the methods we were familiar with and trained to use from qualitative research. We are dedicated to revising our research plan as the case evolves, recognizing that this strategy aligns best with the idiosyncrasies of the case.

- Did you discuss your research plan with the societal partner? If yes, please give detail on the discussion. If not, are you planning to do that?
 - o Societal partner – Karolina Gurjazkaitė – was consistently involved in research planning. Her opinion and contribution were of utmost value because she holds ample knowledge on river dam removal process and possible frictions that can occur when implementing research. She also is knowledgeable on river biodiversity topics from the technical point of view. This allows not to “lose” this point when planning the research.
 - o

3. What methods are you planning to use during research? How are you triangulating those methods?

To address question raised in this box we use part of the text that is already been provided in the document concerning **Task 1.6**. We slightly expand our response based on the recent developments on the case study.

In the case study, the Lithuania team was unfamiliar with both the Participatory Action Research approach and the issues surrounding river dam removal. As a result, we chose an exploratory approach, beginning broadly and gradually incorporating various research methods and techniques. Our journey began with a **review of national and international policy documents** concerning river dam removal. We then **studied national and international cases** where river dams had been removed. To get a comprehensive view, we **monitored both traditional and social media, particularly focusing on video content related to river dam removal within Lithuania**. We organized **co-learning workshops with our societal partners, fostering an exchange of interdisciplinary knowledge about river dam removal**. This was followed by a visit to the dammed river site where we engaged in **participatory observation**. During our visit, we had **informal conversations with locals** and **explored historical local library's resources**. We were particularly interested in historical records from times when the river was undammed. Through our investigations, we realized that varying and potentially conflicting perspectives might exist among stakeholders regarding river dam removal, and possibly biodiversity. Given these differing views, it seemed challenging, based on our project proposal, to unite these groups in joint workshops. Consequently, we explored alternative methods to bring these varied perspectives under one roof. One approach is to conduct **interviews with different stakeholder groups** or their representatives separately. Using the insights from these interviews, a **theatrical performance** could be created together with the

community members who could be both script writers and performers at the same time, and in this process deeper dialog between stakeholders may take place, and even some tensions may be resolved. This **play** would represent these divergent worldviews and knowledge systems, drawing inspiration from **applied theater techniques** (O'Connor & O'Connor, 2009). Because a lot of unknown aspects were present in the beginning, when we started the engaging in our case study (around March 2023), we first took a general approach and as we went deeper into the case we narrowed our focus and constantly revised methods used. We believe that some methods might change as our case study develops, but there are some core methods that most likely will be used without reconsidering them. These methods are as follows: **co-learning with the team, semi-structured interviews, participatory observation, focus groups, participatory system mapping, round table discussions, analysis of historical content (text based, visual, verbal, etc.)**. Please note that we did not aim intentionally to triangulate the sources, but we noticed that when we follow the natural flow of the case study building the triangulation occur naturally as a by-product.

References

O'Connor, P., & O'Connor, B. (2009). Research in Drama Education. *The Journal of Applied Theatre and Performance*, 14(4), 471-477.
<https://doi.org/10.1080/13569780903285966>

4. Are researchers and the societal partner involved in any training for implementing research methods?

Given that MRU team had little experience with and knowledge of Participatory Action Research approach we organized meetings to discuss our gaps and how to fill them. We agreed upon literature that could help us to touch the base. Each team member engaged in individual informal studies on the following literature:

- Banks, S., & Brydon-Miller, M. (Eds.). (2018). *Ethics in participatory research for health and social well-being: Cases and commentaries*. Routledge.
- Burns, D., Howard, J., & Ospina, S. M. (2021). *The SAGE handbook of participatory research and inquiry*. The SAGE Handbook of Participatory Research and Inquiry. SAGE.
- Chevalier, J. M., & Buckles, D. J. (2019). *Participatory action research: Theory and methods for engaged inquiry*. Routledge.
- Cornish, F., Breton, N., Moreno-Tabarez, U., Delgado, J., Rua, M., de-Graft Aikins, A., & Hodgetts, D. (2023). Participatory action research. *Nature Reviews Methods Primers*, 3(1), 34. <https://doi.org/10.1038/s43586-023-00214-1>
- Fine, M., & Torre, M. E. (2021). *Essentials of critical participatory action research*. American Psychological Association. <https://doi.org/10.1037/0000241-000>

- Seppälä, T., Sarantou, M., & Miettinen, S. (2021). Arts-based methods for decolonising participatory research. Taylor & Francis.

Researchers are trained to execute some of the qualitative research methods, such as face-to-face interviews, focus groups, observation, etc. They are also trained to be ethical and considerate while communicating with the participants of the study and prioritize participants’ best interest.

5. Have you planned any internal system to check on the progress of your research?

We do not plan the number of meetings formally. We rather go with the natural research flow and meet when we feel a necessity. Despite this “relaxed” approach it can be seen from the box 2 that MRU team research group engages in timely meetings that are sufficient for the research planning process.

6. Have you planned any internal timeline to implement your case study research?

The proposed plan work as a preliminary bases for MRU team. Yet it will be slightly adjusted as we will move forward with our case research.

It may be helpful to prepare a GANTT Chart detailing the timeline of the research. As an example:

MONTHS	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Documentary/Historical research																						
Preliminary fieldwork																						
Analysis of preliminary data																						
Field-based Research																						
Workshop-based methods (focus groups etc)																						
Internal training																						
Internal meetings amongst researchers																						

4.6 University Babes-Bolyai

WP2 Monitoring – Single case study plan
<p>Title and area of the case study: High Nature Value farmland (HNVf) in Romania; Area of the case study: Saschiz, Mures county; Agriculture, tourism, sustainable food system</p>
<p>University Partner: Babes-Bolyai University (Romania) [Universitatea Babes-Bolyai]</p>
<p>Societal partner: GAL= Grup de Actiune Locala= Local Action Group https://www.tarnava-mare.ro/ https://www.facebook.com/galdealuriletarnavelor/</p>
1. Who are the researchers in your team 'directly' involved in research?
<ol style="list-style-type: none"> 1. Ruxandra Malina Petrescu-Mag: Environmental policy and legislation; Risk communication; Participatory approaches with local communities. 2. Tibor Hartel: Social-ecological systems, Conservation biology, Wood-pastures; Participatory approaches with local communities. 3. Kinga Olga Reti: Environmental Impact Assessment, Bioremediation, Waste Management, Social-ecological systems; Participatory approaches with local communities. 4. Dacia Crina Petrescu: Behaviour change; Sustainable Consumption; Sustainable agri-food system; Participatory approaches with local communities. 5. Iulia Ajtai (postdoctoral researcher position, member of the project since January 1, 2024): Environmental science with focus on GIS; Environmental risk assessment; Participatory approaches with local communities.
2. How are you planning your research?
<ul style="list-style-type: none"> - Have you organized meetings with the researchers for planning the research? - If yes, what did you discuss? If not, are you going to do that? - Did you discuss your research plan with the societal partner? - If yes, please give detail on the discussion. If not, are you planning to do that? <p>Dr. T Hartel has already developed other projects with our societal partner, and he established a good collaboration. With the social partner, Tibi Hartel organized various meetings, workshops and other activities within other projects like (2022-2023): The wood-pastures of Romania: ecology, agricultural perspectives, and sustainable integration into cultural landscape management, financed by Environmental Foundation Deutsche Bundesstiftung Umwelt DBU; 2016-2019: "Sustaining Agricultural Change Through Ecological Engineering and Optimal Use of Natural</p>

Resources (STACCATO)". Considering these previous activities, the confidence level with our societal partner is: Very good.

One preparatory meeting was organized with the representatives of GAL to present the project's objectives and the aims of our case study, establish the method of distribution of the budget for the GAL and the number of workshops we want them to organize for us.

Another meeting was organized in July 2023, when we presented the general framework to apply for the quantitative research approach (a questionnaire applied to a representative sample). We focused on the content of the main variables that we want to include in our questionnaire (e.g., attitudes – here, for example, we discussed about attitudes on conservation practices, using resources in a sustainable way, and protecting the environment; subjective norms (for example, how family, friends, the community, and society's standards about biodiversity conservation and sustainable practices affect them); Perceived behavioral control, and other variables that we considered useful to extend TPB).

Another meeting with the societal partner (GAL) took place to receive the feedback on the final version of the questionnaire and refine the unclear parts.

For the qualitative research, we plan to start to carry out the workshops between April and September 2024.

3. What methods are you planning to use during research? How are you triangulating those methods?

- As we mentioned in the UBB document dedicated to TASK 1.4: Theories and methods for transformative biodiversity innovations analysis, we have chosen TPB due to several potential strengths, highlighted in the scientific literature about biodiversity related issues:
 - a) established framework, meaning that TPB is a well-established and widely used theoretical framework, so researchers are familiar with its concepts and how to use it;
 - b) predictive power: TPB has demonstrated good predictive power in various contexts. For example, researchers can make accurate predictions about how likely it is that people will use innovative practices to protect and conserve biodiversity, if they understand the factors that affect behavior intentions;
 - c) flexibility: TPB can be used to study different types of biodiversity innovations because it can be applied to other behaviors and situations. TPB can teach us a lot about how people make decisions and act, whether using new sustainable practices, participation in conservation programs, or using new tools. The qualitative part of our research will include workshops and interviews with the local people from the study area. We will use system thinking and community-based system dynamics (CBSD) as the conceptual framework. However, CBSD is not set in stone, because depending on the availability, openness etc. of participants, certain methodological changes may occur along the way. We have opted for CBSD because it is a participatory methodology that involves community members in understanding a system. Furthermore, we selected it because CBSD approach recognizes that communities possess valuable knowledge and experience about the systems they live and work in, and this can be leveraged to improve the system's

performance. We will investigate people's views about the causes and effects of HNV farmland loss, the relationships between them, and the solutions they suggest. We will investigate both the direct and indirect causes and effects. Thus, we will obtain a holistic view of the system, as it is understood by the participants. Several aspects related, for example to people's perceptions about biodiversity loss in HNVf, will be asked both in the quantitative questionnaire and in the workshops with the local community.

4. Are researchers and the societal partners involved in any training for implementing research methods

- Members of GAL have already participated in several workshops and one on one interviews (in previous projects: e.g., The wood-pastures of Romania: ecology, agricultural perspectives, and sustainable integration into cultural landscape management, financed by Environmental Foundation Deutsche Bundesstiftung Umwelt DBU; 2016-2019: "Sustaining Agricultural Change Through Ecological Engineering and Optimal Use of Natural Resources (STACCATO)". Members of UBB team have experience in conducting workshops and one on one interviews. However, a work plan related to the allocated time for interviews, workshops, specific guiding questions, the ethical aspects of research, and the best ice-breaking exercises will be developed and discussed among team members.

The quantitative data were collected by a specialized company. Data analysis will be made by the research team.

5. Have you planned any internal system to check on the progress of your research?

UBB has a small team, which has as an advantage the fact that it is easier to coordinate and monitor the work and the disadvantage that all tasks should be fulfilled by a small number of people. We established within our team who are the persons responsible for each task/ activity. We created a WhatsApp group for UBB project members and a Teams group for consultations and feedback on various tasks (e.g., meeting participation, document writing, scientific articles, questionnaire drafting, administrative aspects). We have set deadlines for completing the TPB-related questionnaire and have had a series of meetings within the UBB team to establish the theoretical framework necessary for drafting the questionnaire. We do not have scheduled meetings on a regular basis; we meet whenever there are important matters to discuss. The check of the progress is made through several indicators of results for which we have set deadlines: a) for the quantitative phase: theoretical framework for the questionnaire – created; questionnaire – created; internal (UBB) administrative/procedural aspects – performed to be able to start data collection and pay the costs for the questionnaire; the questionnaire – applied; data base with the answers – received from the market research company; analysis of data – finalized; one scientific paper – sent for publication; b) for qualitative research: theoretical framework for the interview script – created; script interview - created; internal (UBB) administrative/procedural aspects – performed to be able to start the activities and pay the societal partner; workshops and interviews

– implemented; data analysis (verbatim transcriptions, thematical analysis) – done; one scientific paper – sent for publication.

6. Have you planne any internal timeline to implement your case study research?

Yes, until the beginning of 2025.

4.7 University of Catania

WP2 Monitoring – Single case study plan

Title and area of the case study: Citizen based alliance for proactive ecological recovery in the Simeto Valley, Sicily (Italy).

University Partner: University of Catania Department of political and social sciences. (**UNICT - DSPS**)

Societal Partner: Participatory Presidium of the Simeto River agreement

Website: <https://www.presidiosimeto.it/>

1. Who are the researchers in your team 'directly' involved in research?

- Erika Garozzo (PhD student in Geography) she will mainly focus on historicizing the sense of place perceptions and ecological changes through the life-course approach and Oral Histories interviews. She utilizes a set of advancements in geographical qualitative research for questioning place-based biodiversity issues linked to ecological, economic, and societal shifts on diverse and continuous timeframes of multiple crises on a micro-scale on the Simeto valley.
- Dr Paolo Gruppuso (PhD in Social Anthropology): he will mainly focus on environmental history, multispecies forms of sociality, and processes of ecological restoration along the Simeto river.
- Dr Samadhi Lipari (PhD in Human Geography): he will mainly focus the political economy and ecology of the conversion of Simeto valley ecosystem factors into energy vectors and economic value, and how these interplays with inhabiting human and more-than-human communities' lives in protecting, restoring or hampering biodiversity.
- Domenico Pappalardo (PhD student in Cultural Anthropology) he will mainly study water-management systems in the Simeto Valley with a focus on agriculture. With action-research methodologies, together with the societal partner he will implement an ecological recovery process into the Valley based on water resource.

2. How are you planning your research?

We had several meetings amongst the researchers directly involved in the case study and other internal meetings with the wider UNICT research team to discuss individual and collective lines of research. We also organized four meetings/workshops with our societal partners, and some of the Unict researcher took part to a 4 days field trip in the

Simeto River Valley. Further meetings are going to be held in the next week to share our specific lines of research and a proposal for collaboration with the societal partner.

3. What methods are you planning to use during research? How are you triangulating those methods?

- **Deep Collaborative Mapping + Critical and collaborative design Ethnography** (in combination with more-than-human research and focusing on smellscapes and/or soundscapes).
- **Focus Group Interviews + Backcasting Scenarios**
- **Document Analysis** (mainly implementing research in local archives and digital repositories)
- **More-Than-Human life histories** (oral history interviews)
- **In-depth interviews** with different stakeholders, including selected energy photovoltaic and hydro power projects representatives, local project area inhabitants, local authorities, local activists, officers of companies owning energy plants.
- **Network and sensitivity analysis** to understand how different factors influence ecosystem economic valorisation and actors positioning.
- **Descriptive statistics**

After a preliminary survey in relevant archives, these methods will be integrated all along the research period and framed within an ethnographic approach. Ethnographic fieldwork will allow to identify the main stakeholders so to arrange workshops, and to conduct individual interviews. Spending time along the riverbanks by implementing individual and collaborative deep mapping processes will enable more-than-human research focusing on river agency, and multispecies entanglements. Likewise, walking along the river with different kind of actors will unveil hidden practices, such as fishing or hunting, that may hinder at, or collide with, restoration processes.

4. Are researchers and the societal partners involved in any training for implementing research methods?

Whenever necessary, relevant training will be offered to the societal partner so to implement effective collaborative research.

5. Have you planned any internal system to check on the progress of your research?

Reports and monthly meetings amongst researches.

6. Have you planned any internal timeline to implement your case study research?

D2.1 – Case Study Plan

31/01/2024



MONTHS	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
Documentary/Historical research																							
Preliminary fieldwork																							
Analysis of preliminary data																							
Field-based Research																							
Workshop-based methods and in depth-interviews																							
Internal training																							
Network and sensitivity analysis																							
Internal meetings amongst researchers																							

4.8 University of Gothenburg

WP2 Monitoring – Single case study plan

Title and area of the case study:

Context-based solutions for forest biodiversity, case study of private forest owners in Western Sweden

University Partner: University of Gothenburg (UGOT)

Societal Partner:

Individual private forest owners in Western Sweden, no formal organisation

1. Who are the researchers in your team “directly” involved in the research?

Oscar Jacobsson, PhD Human Geography, responsible for the case study, including theoretical framework, empirical work and analysis.

Katarina Haugen, Associate professor Human Geography, responsible of coordination with other WPs, also involved in all parts of the case study.

Marie Stenseke, Professor Human Geography, primarily involved in the analysis, overall contribution of the case and developing the theoretical framework.

2. How are you planning your research?

- We are planning to have regular meetings but have not yet formulated a plan for this. Since we are few researchers involved and work in the same office building, at least Oscar and Katarina will have weekly contact with each other. Since we do not have a formal societal partner, but are working with individuals at the moment, we have not coordinated our plans with them.

3. What methods are you planning to use during research? How are you triangulating those methods?

The main first bulk of our empirical work will involve one-to-one and face-to-face interviews in the field, at forest properties or at the place of residence of the individual forest owners. This will provide answers to many of the questions that the case study initially seeks to explore, such as views on biodiversity and how the forest owners relate this to their own forests. We will also conduct specific field visits to forest properties together with the forest owners, to initiate discussion and to enable the forest owners to share their insight into the specific condition of their forests. Although we are unfamiliar with the method, we think that this aligns rather well with the method of walk-shops.

In this initial stage, we will also conduct documentary and historical research, some of which has already been done in 2023. For us, this involves a close inspection of national, regional and (if existing) local forest policies in the studied areas, as well as pure historical research in regional and national archives to analyse the historical development of the studied forests, at least since the 19th century.

Policy analysis in this case provides information on the framework within which the studied forest owners act, the space that is available for different kinds of actions regarding forestry as well the restrictions involved. The historical dimension is important for an adequate critical perspective of current local to national discussions on forest biodiversity, as well as opening up an arena for potential fruitful discussions with the forest owners themselves.

At a later stage, we will involve interviewed forest owners in seminars and workshops, such as focus-group interviews. Here, we will also try to involve different larger stakeholders and organizations, but the plans are not set in stone at the moment, since we want to assess the possibilities in the field first. However, it is crucial for the project to try to engage the forest owners in discussion with each other, also between our three case study areas, and in discussion with other stakeholders.

These three overarching methods will then be used to triangulate the research results and will provide a solid base for further discussions.

4. Are researchers and the societal partners involved in any training for implementing research methods?

No, not any formal training. Some review and training in both interviews and workshops will be required for Oscar Jacobsson, who is a post-doc researcher and have mainly dealt with documentary and historical research in his previous work.

5. Have you designed any internal system to check on the progress of your research?

No, we will have to develop that. But again, we are a small research team and will have regular contact and updates with each other.

6. Have you planned any internal timeline to implement your case study research?

We have not yet set up a timeline for our case study but will do so in the coming weeks.

4.9 University of Twente

WP2 Monitoring – Single case study plan
Title and area of the case study: Lutkemeer polder / Foodpark Amsterdam, the Netherlands
University Partner: University of Twente
Societal PArtners: Foodpark Amsterdam (FPA)
1. Who are the researchers in your team 'directly' involved in research?
<p>Esther Turnhout – Professor & Chain Science, Technology and Society, research interest in societal transformations for curbing biodiversity loss</p> <p>Tamalone van den Eijnden – PhD researcher – main research interests in the project: understanding transformational change processes towards new economies (e.g. the commons) from within by means of PAR, collaboration, and creative methods. I am particularly interested in how uncertainty and uneasiness operate and may be operationalized in situations of change on a legal, political, affective, and intellectual level.</p> <p>Corelia Baibarac-Duignan – Assistant professor of regional knowledge and innovation ecosystems – main research interest in the project: the co-creation of alternative imaginaries of sustainable futures through creative engagement with bottom-up initiatives (how might such initiatives spark / transform the collective imagination?)</p>
2. How are you planning your research?
<ul style="list-style-type: none"> - Have you organized meetings with the researchers for planning the research? Since January 2023, the UT research team has met in multiple occasions to discuss the planning of the research; initial meetings have been held with the FPA team to plan activities in relation to their ongoing and/or planned initiatives; Tamalone has been closely involved and attended FPA's planning meetings. - If yes, what did you discuss? If not, are you going to do that? as above – further meetings will soon be planned to discuss the specifics of the activities, while being mindful of the timeline of initiatives and external pressures of FPA. One of the outcomes has been that Corelia and Tamalone will take the lead in an artistic collaboration FPA has set up with the Institute 'Waag Future Lab' for the period February – April 2024. The artist has not been selected yet, but we are looking for a person that would be happy to collaborate on artistic research. The

outcomes of the artistic research – participatory and together with the relevant neighborhood - will be used by FPA for the development of their plans and tender application. For us, this will provide an opportunity to take part in and learn from participatory artistic methods directly related to Foodpark Amsterdam and listen to voices that oftentimes remain unheard in relation to the future of the area.

- Another outcome is the symposium we are organizing on the 9th of February 2024, which responds in several ways to the 'needs' identified by our societal partner, while also providing us with theoretical and empirical material we can use to situate our research within a broader context.
- For spring 2024, we are planning a biodiversity monitoring workshop ('bioblitz') that has been discussed with the societal partner and will be led by Esther. This workshop can be used as an initial stage in a longer-term citizen science project, as another way of engaging the neighborhood and other citizens with biodiversity as supported and/or enhanced by FPA. We are also planning on initiating a process of reflexive monitoring, which will be led by Esther.
- Did you discuss your research plan with the societal partner? The societal partner is also co-researcher (FPA) – refer to the above. In this way, research plans are co-developed.
- If yes, please give detail on the discussion. If not, are you planning to do that? refer to the above

3. What methods are you planning to use during research? How are you triangulating those methods?

Field-based research:

1. We have conducted fieldwork (observations, informal discussions / interviews, ...). We use these methods to understand Foodpark Amsterdam, the larger network in which they are operating. This gives us with a deep understanding of the initiative Foodpark Amsterdam and builds a strong relation of trust. Moreover, it provides important cues about what knowledge and expertise is available and what we could bring to the initiative.

Workshop-based research

2. Socio-ecological systems mapping workshop, which allowed us to have a collective systematic conversation about the SES of Foodpark Amsterdam. It also sparked conversations about research needs and generated open research questions.
3. Speculative visioning workshop and symposium on bottom-up urban agriculture initiatives and forms of collaboration between activist initiatives, researchers and municipalities (9 February) this will help to map the larger research context

around FPA and co-create a manifesto about collaboration, which can be used beyond our specific collaboration with FPA,

4. participatory and experiential mappings and visioning workshops (with Waag artist); this will give us insight how future visions can be co-created with the neighborhood of Amsterdam Nieuw West. It will also give us insight into the voices and visions of social actors that due to intersecting dynamics of marginalization often remain unheard in sustainability conversations around biodiversity.

Document-based research

5. policy analysis of policy documents around Amsterdam’s green and social visions will be contrasted with the market dynamics which municipality follows. This will exemplify that re-imagining our relationship to land goes much deeper than imagining green city maps but requires a deep re-thinking of our economic practices.

4. Are researchers and the societal partners involved in any training for implementing research methods?

Tamalone follows the usual training for a PhD candidate in Science and Technology Studies in the Netherlands. Besides that, we have not conducted training and we do not consider this necessary within the context of the research approach we have taken, which is centred on participatory action research and the co-creation of context-appropriate methods. For the latter, we have been working with artists and designers as mediators and co-producers of research methods.

5. Have you planned any internal system to check on the progress of your research?

We will organize monthly meetings with the entire UT team, enhanced by bi-weekly meetings with the PhD candidate (Tamalone and Corelia). In addition, meetings will be set up between the UT team and FPA every 6 weeks to follow the research progress on the ground.

6. Have you planned any internal timeline to implement your case study research?

Some notes on the way we filled in this chart:

- Some preliminary documentary/historical research been done, the biggest chunk will be done when the fieldwork period will get less busy.
- Preliminary fieldwork has been conducted in the first months of 2023.
- Internal training now refers to PhD trainings Tamalone is following.

MONTHS	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	
Documentary/Historical research																								
Preliminary fieldwork																								
Analysis of preliminary data																								
Field-based Research																								
Workshop-based methods																								
Internal training																								
Internal meetings amongst researchers																								

5.0 WP2 Case Study Monitoring

The form “Case Study Monitoring” is part of the coordinating activities implemented under WP2, Task 2.1 prepared for the Bilateral Meetings held between July and September 2023. This form concerns preliminary aspects of the project (e.g.: relationships between university teams and societal partners, identification of ecological drivers in the case study area, and modes to foster the participation of vulnerable or marginal groups in the case study).

5.1 Wageningen Environmental Research

WP 2 – CASE STUDY MONITORING
<p>TITLE AND AREA OF THE CASE STUDY: Nature-inclusive building Case is not only area oriented, but also much more about a domain, that’s why we choose to have a case study which consists of several aspects.</p> <ul style="list-style-type: none"> - An initiative to realise an eco-community (which is an initiative concerning a location in Wageningen) - An innovative provincial policy program concerning nature inclusive construction (doesn’t concern an area, but more a theme-> what does an innovative provincial policy initiative concerning nature inclusive construction encounter in realising its objectives – the approach of this policy initiative is very societal, so they start with societal partners and from there formulate policy) - A (national) network concerning nature inclusive building
<p>RESEARCH PARTNER: Wageningen Environmental Research</p>
<p>SOCIETAL PARTNER (if you have one): More than one societal partners: at the moment mostly involved with:</p> <ul style="list-style-type: none"> - De Beuk – eco-community: initiative which represents another 5 groups – they want to speak with one voice in order to realize their dreams. - Province Overijssel - innovative policy program on nature-inclusive construction/building) and - ‘Netwerk Duurzaam Door’ / Agenda Nature-inclusive- theme nature inclusive building (network with governmental organisations, business organisations, intermediary organisations and other initiatives concerning nature inclusive building).

At the moment the research is most participative with De Beuk and there is a lot of cooperation with Province Overijssel.

1. WHO ARE THE RESEARCHERS IN YOUR TEAM "DIRECTLY" INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND)

1. Roel During – ecology -> transformed into social scientist
2. Zoe van Eldik – anthropology
3. Amy Wortel - social-ecology
4. Rosalie van Dam – sociology & public administration
5. Judith Westerink – landscape governance.

2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERRED TO HAVE ONE?

We have chosen these societal partners for a variety of reasons:

- We have deliberately chosen the construction sector to focus on, because, according to the minister, in the coming years one million houses are to be built.
- The Eco community De Beuk has been chosen because they are in a very early phase of their strategy and planning activities. We expected to find many barriers in their practice. Another reason is that one of the members is chairing the ecovillage foundation in the province of Gelderland, and this could yield deeper levels of information.
- We have chosen Overijssel as the province with the highest ambitions on nature inclusion, and because the province is positioned between the policy levels of national and municipal, with national regulations they cannot change, and social practices for better or for worse embedded in local politics.
- On a national level we chose to cooperate with DuurzaamDoor, which is a substantial program for a nature inclusive and sustainable society, which has a certain level of independence, and many times runs at odds with regulations.

2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY

De Beuk is an association of members, with four persons in the board, and a board of support with five persons. De Beuk functions as a working platform for five different organizations: Visiongroup Ecovillage Wageningen, Cooperative association of Ecovillages in province Gelderland, Platform Sustainable Wageningen, Tiny House Wageningen, Tussen de Bomen (Translated: In between the trees)

Their goal is to create an ecologically sustainable community on the Dorschkamp, as they believe this is the best way to preserve the natural beauty of the area, both during and after construction. This kind of community consists of people who value and prioritize nature and the environment and integrate sustainability into their daily lives. It is a dream that many people in Wageningen have cherished for a long time. They envision a neighborhood where living, working and caring for each other are seamlessly integrated. As a center of sustainability innovation, they believe that Wageningen is the perfect place to create space for these kinds of sustainable communities that are gaining popularity worldwide.

Founders are among others: Pablo van Neste and Pauline Saltet. They have been operating for about five years in the field.

De Beuk is financially independent. Besides the organizations in their own structure, they cooperate with a housing cooperation in Wageningen, with WUR, they have good contacts with the State Forestry Organization (SBB), who is landowner, they cooperate with local politicians, cooperation is often driven by single issues that emerge at a certain stage, and by personal contacts.

Overijssel Natuurinclusief and DuurzaamDoor are governmental programs. They work with the total of the building sector: architects, constructors, project developers, etc.
3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?
The Beuk: getting beyond the initial stage of cooperation: there is a lot of trust on both sides, but it can be improved to arrive at the deepest level of communication on their motives and on their views on housing and living with nature in actual society. Overijssel Natuurinclusief: initial level of cooperation. Several student groups have been working for them. BIOTraCes will contribute to a symposium they are organizing. DuurzaamDoor: very preliminary stage of cooperation due to illnesses of several of their leading actors.
4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?
We are considering analyzing the existing much more fundamental Eco community that resides at the place where the Eco community wants to realize its plan.
5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?
Impacts are manifold: <ul style="list-style-type: none"> - Space use for buildings and houses causing fragmentation of habitats. - Changing water systems - Traffic effects - Pollution effects (e.g. use of pesticides in gardening; wastewater) - Climate effects (heath stress islands) - Removing old trees and replanting young trees (adding CO2 to the atmosphere)
6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?
De Beuk, numerous visits, countless Emails, about five online meetings, student group on ecology, knowledge sharing about food-forests, visit of the BIOTraCes partnership to the site, etc. Etc. Overijssel: brainstorm on cooperation, moderating a discussion on nature inclusion between province and national program, two student groups working on a nature inclusive park and evaluation their Green Caravan Initiative, numerous emails. DuurzaamDoor: one meeting with the responsible policy officer who is funding the program, one meeting online with one of the members active in nature inclusive building, one online meeting with the secretary on how to collaborate. The appointments made in that last conversation did not last, due to illnesses.
6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?
No workshops until now. We focus on documenting the processes and identifying blockages, finding opportunities, getting acquainted and building trust.
7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?
No not yet.
8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?
No.

9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?

De Beuk: we are documenting the planning process in Wageningen almost on a weekly basis and how the Eco community finds its place in it. Most of the time we are responding to their needs, by involving students and asking colleagues to share knowledge (e.g. on food forests).

10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?

Many of the members of the Beuk are struggling to find suitable housing for their respected 'phase and style of living.' This has to do with their age (most identify as an 'older person' – whom have to reside within financial restrains because they depend on their (national/person) pension, or 'young starter'- who are restrained by their busy schedule and relative low wages), but also because they value nature inclusive living in exceptional high regards. Most of them also deviate from idealizing the mainstream 'nuclear family frame' and rather strive towards more communal way of living.

We are considering involving an existing ecovillage in Wageningen, which is extremely disregarded on a municipal level. The common opinion is that they live in a complete mess and are some kind of aliens.

Also, a center for asylum seeking people is currently placed on the intended building area. There are no well thought out plans to incorporate their viewpoints in this study yet, as the center will move and faces many issues outside of the research scope (e.g. current political debates on migration). However, the movement of the center could also turn out something to consider along the way.

10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?

In our case study the exclusion by coincidence of younger people, or less fortunate people from the housing market plays a significant role. The system is blind to their interests. The initiative of the Beuk intends to incorporate social housing as a vital, integrated part of their plans.

11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSENT, CONCERN, ETC.)?

Most of the barriers have to do with ecology and regulations. We expect to solve them by sharing the knowledge that is present within the whole of Wageningen University and Research.

One big barrier is the organizational culture in the public administration. This can be solved in due time with the mere presence of WUR in the backstages of the initiative.

There are several legal barriers. We plan to consult the provincial and national programs for that and if that does not help, to consult a lawyer.

This relates to our empowerment activities. Empowerment ideas may also (preferably) be formulated by our partner(s).

12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?

As said above, we are monitoring the process our societal partner De Beuk is participating in.

<p>Additionally, we are monitoring the effects of the work of Overijssel Natuurlijk, by means of student projects.</p>
<p>13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?</p>
<p>The moment we finish our first preliminary products we would highly appreciate your cross-reading. You might help to articulate the most fundamental questions we may overlook.</p> <p>To extract the lessons to take on board in the Theory of Transformative Change.</p>
<p>13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15th TO SEPTEMBER 15th ?</p>
<p>-</p>
<p>14. Deliverable 2.1, the "Case study plan" (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?</p>
<p>A set of definitions on concepts we use, such as bio-innovations, SES, power, that don't academize the observations of the case, but allow to systematize and perform grounded theory.</p> <p>Instructions on how to get to the deepest level of change mechanisms by going beyond what is scientifically accepted in a causality framework, based on:</p> <ul style="list-style-type: none"> - Epistemic innovations - Conceptual innovations - Moral innovations
<p>15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.</p>
<p>The photo is ok, but not so interesting and appealing. Maybe replace it later by a photo of the people of De Beuk or by a plan for an eco-community.</p>
<p>Many Thanks</p>

5.2 Basque Center for Climate Change

<p>WP 2 – CASE STUDY MONITORING</p>
<p>TITLE AND AREA OF THE CASE STUDY: Renaturalization of urban schoolyards, Vitoria-Gasteiz, Spain</p>
<p>UNIVERSITY PARTNER: Basque Center for Climate Change (BC3)</p>
<p>SOCIETAL PARTNER (if you have one): Environmental Studies Center (CEA)</p>
<p>1. WHO ARE THE RESEARCHERS IN YOUR TEAM "DIRECTLY" INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND</p>

1. Julia Neidig (critical social sciences, urban planning, urban political ecology) (contact person for WP2)
2. Liam O ´ Riada (economics and political science à PhD student)
3. Unai Pascual (ecological economics)

2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERABLE TO HAVE ONE?

The CEA has a long trajectory in working on environmental innovations in an urban context to create green habitats of high quality, especially working in the area of urban green infrastructures, environmental education and participatory approaches to greening cities. They started working on a schoolyard greening in 2020, with the first pilot projects in 2021 and with a long-term vision of implementing elements of nature in most schoolyards across the city.

2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY

The CEA is an environmental think-tank of the municipality of Vitoria-Gasteiz. It's been founded in 1986, with the idea to implement greening as a long-term strategy in urban planning. Over the course of nearly 40 years, they managed to create an international urban brand around greening in Vitoria-Gasteiz, especially through the 2012 European Green Capital Award. While being (on paper) politically independent, they receive their money from the city council (hence their budget strongly depends on the local government). Given its successful greening interventions throughout the last few decades (that brought significant economic return to the city), it's work is now acknowledged across political parties. Today, the CEA has around 20 employees that cooperate with the different city departments (mostly Dep.of public space, education, participation), and is member of several international networks around urban experimentation. As far as I know, there is no collaboration with private bodies.

(for a more critical perspective on the role of CEA in urban environmental planning, you can also look at our [paper](#) which we also turned in a little [video](#))

3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?

Both Julia and Unai collaborated with the CEA in previous projects and already have established relationships with the different team members. The case study of renaturalization is an interdepartmental collaboration, in which the CEA was the initiator of the project, but now takes a secondary role, the leading entity is the Department of education. The BC3 team already joined several meetings with the different institutional municipal actors involved in the case study and created a working relationship with the key institutional actors beyond the CEA. Given the characteristics of our specific case study that from the beginning is highly embedded in an institutional context (of the public schooling system) stems also the necessity to build strong connections with the institutional partners, also to understand the complex context and related power dynamics.

4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?

We are highly aware of the constraints of the top-down driven process of urban schoolyard greening, and hence plan to engage with those directly impacted by the renaturalized schoolyards, i.e., kids, teachers, families, and neighborhoods. We are still selecting the specific school(s) we are planning to focus/accompany throughout BIOTraCes (as there are a total of 10 schools that are in different phases of implementation: some are finished, others under construction, others in the beginning

of a participatory process. Two schools of Vitoria-Gasteiz further implemented green schoolyards without institutional involvement). Once this decision is made, we will start developing relationships with non-institutional relevant actors.

5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?

Urbanization processes and planning/education paradigms that neglected natural environment as a crucial in building high quality urban zones and inclusive school curricula. Since several decades, there is a lack of green elements in urban schoolyards and surrounding neighborhoods that also increase urban heat islands and a general disconnection from nature of urban residents (and especially kids).

6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?

- Emails
- Participation in interdepartmental meeting (Julia participated more in an observing role)
- Meetings between CEA and BC3
- Fieldtrips to the three pilot schoolyards together with people from CEA and Dep. Of Education, first interaction with directors and teachers at the schools.
- First participatory mapping workshop with institutional actors.
- One-on-one interactions (informal interviews, conversations) to gather information around the institutional context and challenges they encountered already.

6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?

From the list above, two meetings with the CEA were used to define expectations, modes of communications, brainstorming regarding BIOTraCes. Participants were the BC3 team (Liam, Unai and Julia) and four persons from CEA that are directly involved in the schoolyard greening process. The first meeting was in January, the second in March. We further used to the SES mapping workshop in May to continue conversations from these meetings. Further, Julia interacted on a one-on-one basis with members of CEA to clarify expectations.

7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?

Not sure what's meant with "public workshop".

We did a SES mental mapping workshop, to visualize different meanings of nature, stakeholder groups and the interactions/relationships with each other.

8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?

-

9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?

We used a participant observation approach in interdepartmental meetings to understand dynamics and relationships between the different actors. We took field notes in a field diary. So far, this has been an exploratory, grounded-theory approach, that also serves as a tool of auto-reflection of the researchers to keep track of the case study involvement over the four years and the relationship between researchers and stakeholders.

No results yet!
10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?
The schools selected for the renaturalization of their yards, are all vulnerable schools, either through their location in low-income neighborhoods and because of an over-average percentage of foreign-born pupils. We are currently discussing how to approach families and kids from these schools, but this needs a close and careful cooperation and relationship with teachers and directors of the respective school. Once we selected the specific cases, we will plan how to build up these relationships.
10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?
Environmental education of children in the public school system is at the core of our case study. Liam's PhD will be focusing on the educational aspect of the greening interventions, the exact methodology will be decided in the following months.
11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSENT, CONCERN, ETC.)?
We follow the ethical review guidelines from BC3 and use informed consent sheets with project partners.
12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?
Not yet, but we are in process of designing them.
13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?
-
13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15TH TO SEPTEMBER 15TH ?
I (Julia) would preferably meet in July. Despite the 18 th of July, my agenda is still quite free, so whatever time fits you!
14. Deliverable 2.1, the "Case study plan" (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?
<ul style="list-style-type: none"> - How to connect case studies to the PEPE framework? Where lies the potential in each case study to enhance thinking on each of the four principles? - What are the shared conceptual frameworks across research teams that facilitate cross-comparison?

15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.

The photo on the website works for us!

Many Thanks

5.3 Center for Ecological Research

WP 2 – CASE STUDY MONITORING

TITLE AND AREA OF THE CASE STUDY: Hungarian traditional herders (country level)

UNIVERSITY PARTNER: Centre for Ecological Research

SOCIETAL PARTNER (if you have one): Hungarian herders, especially young and middle-aged ones and the Hungarian Women Herders group

1. WHO ARE THE RESEARCHERS IN YOUR TEAM "DIRECTLY" INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND)

1. Zsolt Molnár, botanist, ethnoecologist
2. Bálint Sándor, wildlife manager, cattle herder apprentice

2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERRED TO HAVE ONE?

Because this is an area(herding) and social group (herders) in desperate need for fundamental (transformative) change. An additional advantage is that we have longer-term collaborative partnership.

2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY

No legal status, informal networks mostly at regional scale, tacit mission: increased respect, better livelihoods, more fair regulations, safer future for their livelihoods, keeping identities; networking has a long tradition but never reached a formal level, ca. 500 traditional herders in the country (ageing rapidly), ca. 50 more active in networking, looser or stronger collaborations with rangers in protected areas but no formal relationship with national parks, regular participation at traditional festivals, some focusing on herding, increasing representation in media.

3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?

>5-15 years of collaborations with individuals and smaller informal groups, well developed trust with many of them.

4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?

Yes, national parks, agricultural ministry and its institutions, agricultural secondary schools, conservation NGOs, media experts.

5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?

Over, under and improper grazing causing homogenization, species compositional changes (including loss of sensitive species and spread of generalists and weeds),

however, heavy grazing sometimes benefits rare, protected species (mud specialist plants, wader birds, amphibians).

6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?

Many and many types of meetings, both informal and formal meetings, e.g. related to IPBES (Europe and Central Asia Assessment, Global Assessment, in 2014-2018), joint preparation of scientific publications, slow films, media report and articles etc., long-term knowledge co-production is ongoing for >10 years mostly on topics related to herding practices and related knowledge and its relationship with conservation management, and how to change harmful and perverse agricultural regulations time has come to spread up policy changes and be prepared for the next EU CAP period and for the UN IYRP.

6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?

It is ongoing, we had many telephone calls and personal meetings (mostly on the pasture) in the last 2 years, they were already involved during the project submission phase.

7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?

Yes, as part of an international workshop of herders and scientists working with herders (participants from: Hungary, Spain, UK, Germany, Lebanon, Iran). Objectives: cross-cultural networking, identifying local, regional and global drivers, challenges and opportunities of traditional herders. Methods: co-planning of the workshop with herders, presentations at the workshop (also by the herders, several of them presenting for the first time), informal discussions on a festival day following the workshop, pasture visits to three traditional herders (three days after the meeting); with the social partner we also participated at the workshop of the Carpathian Convention in Romania, where she presented their group's objectives and activities.

8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?

Yes, see above, the next workshop is planned in mid-September.

9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?

Yes, it is ongoing, a review on women's role in traditional herding since the 1960s to be submitted to the journal *Martor* (Romanian Peasant Museum), data collection and writing is led by Ibolya Sáfián, the group leader of women herders (the social partner); research on the impact of agricultural practices and barriers to change it; research and filming is under way on herders' bell knowledge and its relationship with grazing practice, identity, self-esteem etc.; a high-ranked scientific paper is close to publication on social injustices imposed on traditional knowledge holders in Europe (minor revision sent back to Biological Conservation).

10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?

Traditional herders belong to a vulnerable group, the key challenge is to bring in the non-marginalized groups into our discussions.

<p>10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?</p>
<p>Here we focus on young and middle-aged herders, orders are our advisors, and some teenagers have also already joined our programs and meetings (real children are not relevant in our case).</p>
<p>11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSENT, CONCERN, ETC.)?</p>
<p>Capacity building is ongoing with herders, how they can communicate with foreign fellow herders, local and international scientists and media, and decisions makers at various levels; and media articles and films are being produced to inform the wider public about the actual and potential role, traditional knowledge and specific values of traditional herders.</p>
<p>12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?</p>
<p>Because we follow the co-design, collaborative action research, collaborative collection and analysis of data and co-publication/co-dissemination framework, we regularly have reflexive discussions what we have achieved, how we progress (methods: collaborative research, knowledge co-production, participatory field work, common presentations at conferences and workshops, common trips to abroad, informal meetings at festivals or with families); I heard about more structured reflexive evaluations, I am open to use them, but I am not experienced yet.</p>
<p>13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?</p>
<p>Thanks for asking; nothing specific at the moment, but discussions and consultations always help to develop ideas, break lock-ins in the progress of a case study, so thank you.</p>
<p>13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15th TO SEPTEMBER 15th?</p>
<p>Late August and early September, thank you, in advance.</p>
<p>14. Deliverable 2.1, the "Case study plan" (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?</p>
<p>I don't exactly know; I always like to learn.</p>
<p>15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.</p>
<p>I do not know this photo... it is not about us... (only the film)</p>
<p>Many Thanks</p>

5.4 Centre for Social Studies

WP 2 – CASE STUDY MONITORING
TITLE AND AREA OF THE CASE STUDY: Mértola Future Lab - strategy regarding food supply
UNIVERSITY PARTNER: Centre for Social Studies (CES), University of Coimbra
SOCIETAL PARTNER: Terra Sintrópica Association
1. WHO ARE THE RESEARCHERS IN YOUR TEAM “DIRECTLY” INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND)
<ol style="list-style-type: none"> 1. Luciane Lucas dos Santos - social sciences, economic sociology 2. Fernanda Belizário - social sciences, communication 3. Fernanda Petrus - architecture, social movements, agroecology 4. Rita Campos - biology, science communication, education
2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERABLE TO HAVE ONE?
<p>The main societal partner in Mértola is a non-profit association focused on regeneration called Terra Sintrópica Association (TSA). It is worth recalling, however, that our case involves a set of societal partners in Mértola, besides TSA, namely the Mértola Municipal Council, Santana de Cambas' Community Meeting House, the grouping of primary schools and the Mértola Food Network. All of them are engaged in the Mértola Future Lab, a kind of collective and local strategy “towards ecological transition, adaptation to climate change and fight against desertification” (see the institutional site).</p> <p>Created in 2018, The Terra Sintropica Association aims to foster “regenerative community processes in the semi-arid region”, grounded on the idea of a syntropic agriculture. The co-founders of this initiative are Katharina Serafimova, Marta Cortegano, António Coelho and Nuno Roxo. A group of 16 people – with different backgrounds - currently animates the ongoing projects in the association. Katharina Serafimova is the president of the Association and Marta Cortegano is in charge of the ecological transition projects. Among the projects in which TSA participates, we stress: 1. the Agroecology and Regeneration Center for the Semi-Arid (with a community garden for experimentation and demonstration of syntropic agriculture), 2. PREC - a restaurant and grocery store where local food sovereignty is put into practice, 3. Forest Gardens as part of extracurricular activities at local schools, 4. Mértola Food Network, in which many partners are engaged into a participative governance model towards food sovereignty in Mértola; 5. Therapeutic gardens, a project in which the whole community is invited to be part of and where the tacit knowledges and the imagination of the elderly people are brought to the scene in order to stimulate other ways of doing things in the villages. It is worth stressing two concerns in the TSA: the intergenerational approach and the perspective of valuing diversity. This latter perspective can be seen in the project Shelterland where Afghan refugees are welcomed to participate in regenerative activities and stimulated to achieve professional integration in Portugal.</p> <p>With regard to partners and sponsors, it can be said that there is a vast group of entities and organisations - some of them participating in the Mértola Food Network as well. Among the partners, we stress: Mértola Municipality, Mértola Parish Council, Alsud</p>

vocational school, Association of the Guadiana Valley's undertakings, Permaculture for Refugees, Lisbon Vocational School on Hotels and Tourism, Santana de Cambas' Community Meeting House, CiBio - Research Center in Biodiversity and Genetic Resources, ESDIME

- Agency for the local development of Southwest Alentejo, Mértola's Archeological Site, Mértola Biological Station, CCDesert - Competence Center in the Fight against Desertification, CAI - Support Center for older people in Moreanes, Orchard of Flavours (an edible botanical garden), CIMBAL - Intermunicipal community of Baixo Alentejo, ATBG - Terras do Baixo Guadiana Association, Alentejo XXI - Association for the Integrated Development of the Countryside, Rota do Guadiana Integrated Development Association, Terras Dentro Integrated Development Association, DRAP Alentejo - Alentejo Regional Directorate for Agriculture and Fisheries, Ourique Municipality, Cumeadas - Association of Forest Owners of Baixo Guadiana Hillsides, and Mértola Holy House of Mercy, Rebundance Creative Leadership Program.

It might be said that the viability of the Terra Sintrópica Association in the long term comes from national and international funding sources, namely: foundation grants provided by Stiftung Drittes Millennium and Leopold Bachmann Stiftung, projects supported by the European Regional Development Fund (ERDF) through the COMPETE 2020 - Operational Competitiveness Programme, cross-border cooperation projects (as the Interreg Program Espanha-Portugal, POCTEP), and funds from national programs as is the case of Healthy Neighborhoods Programme.

2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY

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3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?

The relationship with the Terra Sintropic Association is at an early stage. Although at the outset of a process, a certain level of confidence might be said to be achieved due to the total transparency we have had from the very beginning. Perceptions, key concepts, perspectives have been discussed before moving forward. We have been careful about dissemination strategies and fieldwork rhythms not to seem intrusive in the community, especially after being informed that the societal partner faced confidentiality problems in a previous research project.

4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?

There is a set of social actors and institutions to be involved in the process. Besides the societal partner, Terra Sintrópica Association, and the community itself (dwellers in the village, children, older people, immigrants, women), we aim to include organisations (associations and civic networks) and public bodies into the action plan design resulting from collective processes. We particularly refer to Mértola Municipality, Santana de Cambas' Community Meeting House, ESDIME, Mértola Food Network, Association of the Guadiana Valley's undertakings and the local schools. In terms of geographical coverage, the CES team expects to encompass the 9 parishes (Alcaria Ruiva, Corte do Pinto, Espírito Santo, Mértola, Santana de Cambas, São João dos Caldeireiros, São Miguel do Pinheiro, São Pedro de Solis, and São Sebastião dos Carros), primarily focusing on the village of Mértola. Other surrounding districts - such as Alcoutim and Castro Verde - might casually be involved if the societal partner considers it relevant for the action plan. Due to the project deadline, it will not apply to the fieldwork.

It is also worth recalling that the district of Mértola is engaged in a diversified set of projects associated with biodiversity loss - ecosystems regeneration, adaptation plan for climate change, education for agroecological transition, decarbonisation of food supply,

wildlife resource management. All of them can be said to be handled to a certain extent in the Mértola Future Lab. The CES Team will however focus on the food production and distribution and on the way the participative governance model in Mértola has addressed a local strategy towards ecological transition.

5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?

Mértola is a district which presents the following problems: high vulnerability to desertification and water shortage, degradation of natural resources, soil erosion and loss of fertility due to intensive agriculture. In the past, the exploitation of pyrites in São Domingos - one of the parishes in the district of Mértola - contributed to water and air pollution whose remaining consequences the municipality has tried to combat so far.

6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?

Excluding a meeting in the format of workshop, we had about 5 meetings, 3 of them face-to-face in Mértola. These meetings aimed to share our intentions as a group and discuss forms of entry in the community, including the participation as observers in the next Mértola Food Network assembly. We agreed on having the action plan's goals, methods, and forms of dissemination collectively discussed and decided. About the research fieldwork, methods, key concepts and forms of community participation were also initially discussed. Having talked with Terra Sintropica Association about possible contributions of the multispecies environmental justice framework for BIOTraCes, the possibility of a multispecies ethnography was briefly considered. But this methodological approach was not effectively discussed so far.

6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?

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7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?

Yes, we had a first workshop with the societal partner on June 12th. Four goals animated this workshop, namely: 1. to discuss key concepts such as transformative change*; 2. to reflect upon methodological issues to be taken into account in Mértola; 3. ethical concerns regarding the research and the action plan; 4. possible CES contributions towards a regenerative model in Mértola. Unfortunately, only the first two goals were adequately covered during the meeting. A second workshop (and maybe a third one) will happen not only to cover the goals 3 and 4 but also to cover the building of a SES, as suggested by the deliverable 1.6.

With regard to the method/technique, Miro was used as a tool for visual collaboration and co-creation. Two people from Terra Sintrópica Association (1 coordinator + 1 activist) + 1 expert in environmental issues in Portuguese communities + 5 researchers from the CES team.

Results: besides a collective document produced at Miro pointing out relevant aspects to be part of a common sense of transformative change in Mértola, there was decided that we should outline a collective agreement draft about many issues to be discussed at the Assembly of Mértola Food Network, with the possibility of having a mixed group (with researchers, activists from Terra Sintropica and other groups represented in the Mértola Food Network) to follow up the main decisions and to decide in case of conflicts.

8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?

We planned to have a second workshop in October.

9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?

Despite the fact that we had a 3-day visit to Mértola in February, having interviewed some key actors (members of Terra Sintropica Association and Santana de Cambas' Meeting House) and had informal talks with others, the official start of fieldwork will happen in the middle of October. It is also worth mentioning that some of us will be at the Annual Meeting of the Degrowth Network, to be held in Mértola.

The fieldwork will be grounded on a qualitative approach and the methodology of participatory action research (PAR), inspired by a multispecies ethnography. The conceptual framework we aim to depart from is the PAR as thought by Orlando Fals Borda. In addition to PAR, other approaches will be considered in our case study, namely: SES (socioecological systems) and intersectional perspective. SES are expected to help us understand the dynamics of power and collaboration. Intersectional perspective, in turn, will identify perspectives/constraints/imaginaries associated with positionalities.

The main data collection techniques will be walkthrough (co-walking + in-depth interviews), photovoice, focus group, participant observation. To detect vested interests, institutional lock-ins and forms of making minorities' interests and rights unseen, feminist critical discourse analysis will be applied to interviews and documents. The perspective selected so far is the one proposed by Sara Mills because of her focus on bias analysis.

Some of these preliminary choices on methods and techniques may change after dialogue roundtables with societal partners during fieldwork conducted in Mértola.

10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?

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10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?

Terra Sintrópica Association has developed a very sensitive work in order to stimulate older people to test syntropic agriculture techniques. Schools are also encouraged to have children participating in syntropic agriculture (forest gardens) as a complementary activity. Similarly, they have a multidimensional programme for refugee reception, validating their agency and sense of belonging.

These activities, methodologies and perspectives adopted by the societal partner pave the way for a fieldwork aligned with an intersectional approach. This perspective seems to be more accurate to identify minorities' constraints both in participation processes and policies towards socio-environmental justice.

As such, we aim to take benefit from the atmosphere of cooperation in Mértola, by making use of the following methods:

1) walkthrough method (older villagers, migrants and displaced people, older women): co-walking interviews to bring to the scene experiences of sociability (or discrimination) in public spaces, images and memories of living in semi-barren landscapes, imagination of what could be a healthy neighbourhood, to name but a few.

2) walkthrough method: small groups of children being invited to walk through their villages to think about potentialities and barriers to a multispecies environmental justice.
 3) Multispecies ethnography: considering the societal partner's sensitivity towards interspecies harmony (syntropic agriculture), we consider that a multispecies approach can be tried out during fieldwork.

11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSSENT, CONCERN, ETC.)?

1. We aim to guarantee that other means than oral and written forms of expression are available (drawing, pictures, life stories). Relevant groups in Mértola (older villagers, for example) might not feel comfortable in spaces where hierarchical positions and technical knowledge prevail.
 2. Participatory observation should help us detect veiled forms of dissent or consent in the neighbourhoods.
 3. We believe that focus groups could help us detect dynamics of power and dissent that could constitute bias or indirect drivers for biodiversity loss.
 4. We will deviate from collective activities that, focusing on a common future, might veil different constraints or mismatched scenarios of future by vulnerable individuals on behalf of a common, average citizen perspective.
 5. Co-walks interviews will be part of our tools in order to give the interviewees more elements for communicating dissent, memories of the past, uncertainties with regard to the future, unsaid criteria of organising space and everyday life.

12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?

None monitoring was done so far because we are at an early stage of relationship with the societal partner.
 However, as said previously, we have had a workshop grounded on the idea of co-learning. They were invited to participate from the very beginning in our discussions on transformative change, methodologies and action strategies in the territory.

We intend to adopt feedback workshops in order to fine-tune the action plan. It also implies to involve other key actors in this feedback.

13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?

Although different methodologies could be used and adapted to the case studies, we could benefit (as a group) from a common ground on the missing points to be answered by techniques and methods. We aim to reinforce this concern through task 2.4.

As WP leader, it would be nice if UNICT could lead a workshop for (thorny) common questions with regard to power issues and lock-ins to environmental justice in the neighborhoods. A discussion on the conditions/limits for our methodological choices to provide feasible answers to thorny questions could help us to be more prepared for the challenge of unveiling difficulties for NBS implementation.

13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15th TO SEPTEMBER 15th ?

Our meeting already happened on September 7th.

14. Deliverable 2.1, the "Case study plan" (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-

studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?

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15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.

-

Many Thanks

5.5 Mykolas Romeris University

WP 2 – CASE STUDY MONITORING

TITLE AND AREA OF THE CASE STUDY: Social opportunities in ecological recovery

UNIVERSITY PARTNER: Mykolas Romeris University

SOCIETAL PARTNER (if you have one): Karolina Gurjazkaitė

1. WHO ARE THE RESEARCHERS IN YOUR TEAM "DIRECTLY" INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND)

1. Audra Balundė, Environmental psychology
2. Goda Kaniušonytė, Psychology
3. Aistė Bakaitytė, Psychology

2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERRED TO HAVE ONE?

Karolina Gurjazkaitė is an experienced professional in river dam removal cases. She possesses extensive knowledge about various factors relevant to river dam removal, including social, community, policy, and other relevant aspects. Karolina maintains regular contact with representatives from communities, policy experts, and international experts in river dam removal. Additionally, she holds expertise in biodiversity, making her a valuable contributor to the development of a local case study.

2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY

Karolina joined the project as a representative of the NGO GILU. The main aim of the organization is to advocate for the conservation of river biodiversity at all levels. Currently, she works as an independent expert.

3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?

We have a strong relationship with our societal partner. She has the necessary knowledge and expertise in the area of dam removal to help us proceed with this case study. We already work hand in hand with her on our case study by having joint discussions on the problematic areas, possible methods of the study, and discussing case study in general. All of this helps us to build mutual trust.

4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?

We are planning to involve more stakeholders, such as politicians, who are related to the matters of damn removal; local businesses, because the damn removal is directly related to their survival or thriving; local artists (cultural center, theater, library) and other public figures that are interested in the damn area. Also there are people who would be directly affected if damn were removed, thus we will try to establish contact with them.

5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?

River biodiversity is disappearing, from big charismatic fish sorts to microorganisms; in this way, the entire river biosystem is degrading, affecting surrounding areas as well, creating uninhabitable swamps.

6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?

Emails, online and live meetings, planning workshop, participatory observation.

6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?

BIOTraCes: 1st local group meeting, Thursday, December 22, 2022·11:00 – 12:30. Kick-off meeting; decided on work strategy.

BIOTraCes: 2nd local group meeting, Friday, January 27, 2023·10:00 – 11:00. Discussing possible course of action with the case study.

BIOTraCes: 3rd local group meeting, Tuesday, February 14, 2023·10:30 – 11:30. Local workshop planning.

BIOTraCes: 4th local group meeting, Thursday, March 2·10:00 – 16:00. Local workshop. The social partner presented an analysis of problems related to river dam removal in Lithuania.

Additionally, they provided examples of both good and bad practices from case studies where river dams were removed.

BIOTraCes: 5th local group meeting, Thursday, May 11:10:00 – 12:45. We discussed the application of participatory action research to our case study, explored relevant literature, finalized the choice of a case location, and began planning for participatory observation.

BIOTraCes: 6th participatory observation, Friday, June 16-17:12:00 – 20:00. During our first visit to the case study location, we conducted general observations of the location and explored the local history by visiting the local businesses and the library. We also had the opportunity to delve into the archives at the local library.

7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?

No

8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?

Our societal partner is an independent expert, thus, workshops with her are described in Q6a.

9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?

We conducted our first participatory observation. We are still processing our data.

10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?

We have not yet identified less represented or marginalized groups in our case study.

10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?

We are planning to use methods that are inclusive for all involved groups. E.g. visiting the river dam location where local people from various SES groups spend their time.

11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSENT, CONCERN, ETC.)?

In our case we are not approached these matters, because our case study is still in too early stage.

12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?

1. No 2. We still haven't decided on any particular method, thus monitoring of activities will follow accordingly.

13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?

We would like some examples on the IRB approval form. And some guidance on application of particular specific PAR methods we will use in our case (in the later stages).

13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15TH TO SEPTEMBER 15TH ?

Given our other commitments but also commitments with the case study and workshops, the nearest possible date for bilateral meeting is 25th of September.

14. Deliverable 2.1, the "Case study plan" (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?

- A leaflet outlining the step-by-step process of planning a case study.
- List of key literature on how to plan a case study.
- List of examples on how to plan a case study.

15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.

Yes - for the time being we are happy with the current picture. But later when we will get all necessary permissions and approvals, we would like this picture to be replaced with the one representing the local river dam we work on.

Many Thanks

5.6 University Babes-Bolyai

WP 2 – CASE STUDY MONITORING

<p>TITLE AND AREA OF THE CASE STUDY: High Nature Value farmland (HNvf) in Romania; Area of the case study: Saschiz, Mures county</p>
<p>UNIVERSITY PARTNER: Babes-Bolyai University (Romania)</p>
<p>SOCIETAL PARTNER: GAL= Grup de Actiune Locala= Local Action Group (https://www.tarnava-mare.ro/) https://www.facebook.com/galdealuriletarnavelor/</p>
<p>1. WHO ARE THE RESEARCHERS IN YOUR TEAM "DIRECTLY" INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND EDUCATIONAL/PROFESSIONAL BACKGROUND)</p>
<p>1. Ruxandra Malina Petrescu-Mag; Environmental policy and legislation; Risk communication 2. Tibor Hartel; Social-ecological systems, Conservation biology, Wood-pastures 3. Kinga Olga Reti; Environmental Impact Assessment, Bioremediation, Waste Management, Social-ecological systems 4. Dacinia Crina Petrescu; Behaviour change; Sustainable Consumption; Sustainable agri-food system</p>
<p>2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERRED TO HAVE ONE?</p>
<p>Due to GAL's ability to provide a framework to connecting with the local community and the experience gained in other projects, which laid the foundation for a relationship built on trust.</p>
<p>2A. BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY</p>
<p>The Dealurile Târnavelor Local Action Group Association (GAL) was established as a public-private partnership in 2007 in accordance with the LEADER program, the founding members having human resources, logistics and expertise for the realization of a Local Development Strategy. The GAL currently includes 47 members, of which: 8 UATs/PUBLIC PARTNERS, 21 representatives of the private environment, 18 NGOs: associations and foundations. Non-governmental organizations, with activity in various fields, have an important share in the partnership: Agriculture: Taurine Hunter Breeders Association, Romanian Hungarian Farmers Association – Albești branch, Association for the promotion of professional and technological values in agriculture and rural development, Valea Târnavelor Beekeeping Association Environment: ADEPT Transilvania Foundation, EcoTransilvania Association, ProPark-Foundation for Protected Areas. Culture/folklore: Romanian Folkloric Association, German Democratic Forum Sighisoara, Hunters Cultural Association – Hejasfalvi Kulturális Egyesület Sport: Gaz Metan Daneş Sports Association Social: ProBiertan Association, Lukas Hospital Laslea Christian Medical Association, CasApold Association, Speranța Gemina Association Tourism: Târnavă Mare Tourism Association Women's association: Association Vecintatea Femelor din Saschiz Youth association: Association Vecinatatea Tinerilor din Saschiz AGRICULTURE is a priority sector for the development of the territory, the relevant associative form in this field being the Transylvanian Farmer Agricultural Cooperative. The private sector is represented in the largest proportion by micro-enterprises and small enterprises in various fields: agriculture, forestry, carpentry, installations, trade, tourism, manufacture of textile articles/crafts.</p>

<p>3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?</p> <p>Dr. T Hartel has already developed other projects with them and established a good collaboration. Confidence level: Very good</p>
<p>4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL REALITIES? IF SO, WHICH ONES?</p> <p>No.</p>
<p>5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?</p> <p>Several key drivers of biodiversity loss can impact these areas. Here are some of the ecological impacts associated with these drivers:</p> <ul style="list-style-type: none"> - Habitat loss and fragmentation: High nature farmland areas experience habitat loss due to, e.g., land clearing, or removal of hedgerows. This loss reduces the availability of suitable habitats for a range of species, affecting their population sizes and distribution. - Intensive farming practices: High-input agricultural practices, such as the use of synthetic fertilizers, pesticides, and herbicides, negatively impact on biodiversity. Excessive fertilization, for example, can lead to eutrophication of water bodies. - Monoculture: The prevalence of monocultures (a single crop dominates large areas) in HNVf, reduces habitat diversity and negatively impacts biodiversity.
<p>6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?</p> <p>Live meetings, WhatsApp conversations, calls, one Zoom meeting.</p>
<p>6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?</p> <p>One preparatory meeting was organized to present the project's objectives and the RO case study aims, establish the method of distribution of the budget for the GAL and the number of workshops we want them to organize for us.</p>
<p>7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?</p> <p>No.</p>
<p>8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?</p> <p>We do not have a partner organization.</p> <p>With the social partner, Tibi Hartel organized various meetings, workshops and other activities for various projects like, 2022-2023: The wood-pastures of Romania: ecology, agricultural perspectives, and sustainable integration into cultural landscape management, financed by Environmental Foundation Deutsche Bundesstiftung Umwelt DBU; 2016-2019: "Sustaining Agricultural Change Through Ecological Engineering and Optimal Use of Natural Resources (STACCATO)".</p>
<p>9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?</p> <p>Yes, we identified a variable of interest for investigation, we reviewed the literature, we drafted a questionnaire, and we prepared the first draft of the interview script.</p>

We wrote and submitted a research paper about land degradation where we used the methodology that we want to implement in the study area (Community-based system dynamics).

10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?

- Tailored communication: we will adapt the script for the interviews to be culturally sensitive and accessible to the target groups.
- Building trust and relationships: Establish trust and build relationships with the target groups (a step already accomplished through the previous research projects implemented in the study area). Open communication, active listening, and a safe and supportive environment will contribute to building trust. Overall, the societal partner will facilitate connections and enhance credibility.
- Ethical Considerations: we will ensure the ethical practices throughout the research project; we will obtain informed consent in a culturally appropriate manner, respect privacy and confidentiality, and prioritize the comfort of participants.

10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?

The societal partner will facilitate their participation because they trust GAL. Same strategies as those mentioned above will be applied.

11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSENT, CONCERN, ETC.)?

To tackle these barriers requires a complex approach that promotes inclusivity, empathy, and open dialogue. We will use a combination of some of the following:

- Acknowledge the existing barriers, such as power dynamics, discrimination, cultural biases, or social norms that hinder certain people from being heard.
- Foster empathy and sensitivity by understanding the position, challenges, and perspectives of marginalized groups.
- Create inclusive spaces by encouraging people to express diverse perspectives. We will use inclusive language, equitable participation, and actively seeking out and valuing different viewpoints.

Reflect and adapt: Assess the effectiveness of our approach and seek feedback.


12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT WITH THE SOCIETAL PARTNER UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?

Not in this project.

13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED FOR IN THE DEVELOPMENT OF YOUR CASE STUDY?

Nomination of the specific information that we must provide from the case study, for example, "people's level of awareness on....", "barriers to", "local people strategies to cope with", "local people understanding of".

Confirm that the question/statements in our script provides the required information to fulfill WP2 tasks objectives.

<p>13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15TH TO SEPTEMBER 15TH ?</p>	
<p>July 18 – July 28, 2023</p>	
<p>14. Deliverable 2.1, the “Case study plan” (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?</p>	
<p>For example, provide a template for the case study report, including the main aspects to be addressed, present the goals of the case study plan and its relation to the overall project’ aims, include some details about the steps for implementing the case study plan (e.g., timeline and responsibilities).</p>	
<p>15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.</p>	
	<p>For the moment we can keep it like that. We would like to change it this summer, because the photo suggests more the image of an intensive agriculture model than HNVfarming.</p>
<p>HIGH NATURE VALUE FARMING</p>	
<p>Many Thanks</p>	

5.7 University of Catania

<p>WP 2 – CASE STUDY MONITORING</p>	
<p>TITLE AND AREA OF THE CASE STUDY: Citizen based alliance for proactive ecological recovery in the Simeto Valley (Sicily - ITA).</p>	
<p>UNIVERSITY PARTNER: University of Catania - Department of political and social sciences (UniCT - DSPS).</p>	
<p>SOCIETAL PARTNER: Participatory Presidium of the Simeto River Agreement Website: https://www.presidiosimeto.it/</p>	
<p>1. WHO ARE THE RESEARCHERS IN YOUR TEAM “DIRECTLY” INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND</p>	

1. **Mara Benadusi** - Prof. in Cultural Anthropology
2. **Davide Luca Arcidiacono** - Prof. in Sociology of Economic Processes
3. **Christian Mulder** - Prof. of Ecology
4. **Maria Rizza** - Researcher in Political Economy
5. **Luca Ruggiero** - Prof. in Economic and Political Geography
6. **Antonio Vesco** - Researcher in Cultural Anthropology
7. **Domenico Pappalardo** - Phd student in Anthropology

2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERRED TO HAVE ONE?

Yes, our societal partner is the Participatory Presidium of the Simeto River Agreement.

2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY

The Participatory Presidium is a Third Sector Entity (ETS) for social Promotion based in south-eastern Sicily. The Presidium is an 'umbrella' organization which brings together several activists and community organizers, as well as numerous local associations involved in environmental protection, heritage and cultural promotion activities. The Presidium is responsible for the so-called Simeto River Agreement, an alliance of grassroots civil society associations, local municipalities and research institutions aimed at experimenting how to take care of the Simeto valley in the wake of several threats that hinder a positive cohabitation. Its shared mission is the activation of forms of participatory democracy based on citizens' active role in territorial planning, and on a shared protection of the fluvial ecosystem.

Trajectories of collective activism in the valley can be traced back to 2002, with the rise of local movements fighting against waste treatment facilities in the area. This season of protest mobilization against construction and energy companies as well as against regional governments involved in the plan for a big incinerator has given way to the emergence of a structured agreement: an alliance envisioning new forms of political, social and economic development in the valley; an alliance focusing on the river itself as a shared collective entity to be safeguarded and restored thanks to the direct involvement of civil society organizations and sensitive citizens.

3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?

The Presidium of the Simeto River Agreement has been promoting action-research initiatives for over a decade, with UniCT as a key partner since its early foundation. However, until a few years ago the Presidium had the Department of Engineering as its key referent point at the University of Catania. Our Department of Social and Political Sciences established a direct collaboration with the Presidium only three years ago, in 2020, thanks to an interdepartmental transdisciplinary research project called 'REVERSE. The anthropocene upside-down: Responsible research, VERSatile Knowledge, Enviromental futures in action', and several training activities implemented in the context of the Erasmus Mundus Master TEMA+ in 2022.

The Biotraces project started eight months ago and, up to now, the DSPS research team has focused on furthering a relationship of trust with the Presidium, and on together identifying specific action-research questions, areas and research methodologies. We are also reflecting with the Presidium on the better strategy to capitalize on the close collaboration with them to move towards a greater involvement of other fringes of the local civil society (farmers, vulnerable groups, youth).

During its ten-year activity, thanks to the collaboration established with the University (mostly with other departments, such as Planning and Engineering, and the Department of Agriculture), the Presidium has been training several activists as researchers. These inside-researchers have exercised a strong brokerage role in connecting local civil society and the academy. Collaboration with the DSPS may represent a crucial pillar in this trajectory. Indeed, as a transdisciplinary group of anthropologists, sociologists, geographers, economic scientists, and ecologists, we have the potential of integrating the knowledge already gained thanks to a long-term community-university partnership with different perspectives, research sensitivities and approaches, directed linked to the social sciences and humanities. Last but not least, although present in previous participatory mappings in the valley, the topic of fluvial biodiversity was not at the core of the initiatives promoted by the Presidium in the past. The Presidium is also interested in mapping old and new vulnerabilities, including groups that were not taking part in participatory action-research before. We believe we are best suited to give a positive answer to these needs.

4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?

The Simeto Valley is an extensive and heterogeneous territory. As mentioned above, being an umbrella organization, the Participatory Presidium is composed of various social groups, and is networked with local municipal councils and research institutions as well. However, there are many other realities in the project area with which it is important to build a connection.

Above all, it is necessary to strengthen and intensify collaboration with marginal realities, which hardly take part in politics or are poorly represented, among these a vast network of farmers and rural realities which were not reached by the Presidium until now, and instead they should be listened to. In addition, at a local and regional level there are several institutional bodies who manage the river basin, its dams and the course of the river itself, directly modifying the environment with their policies and practices. The BioTraCes case study will move in this direction. Last but not least, if we want to produce nature-positive transformative changes in the valley, political parties and local administrations must be involved as well.

5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?

In the Simeto Valley there are several drivers that reduce biodiversity, from global warming and desertification, up to landscape fragmentation and environmental pollution.

One of the main threats comes from irresponsible environmental planning and management activities. Indeed, as has happened with other rivers in the world, the Simeto landscape has been reshaped and highly modified through anthropic transformations. Large-scale agricultural activities and the use of fertilizers on the soil, as well as the presence of waste treatment plants and the runoff from the growing urban areas, have strongly impacted the fluvial ecosystem. "As a consequence, the river's minimum flow has been highly affected and water quality has been lowered" (Pappalardo 2018). This dynamic was already underway from the mid-twentieth century.

Incorrect management of water resources and the dam system, as well as the lowering of a direct care connection with the river have contributed to reduce the level of water under the minimum vital flow, compromising aquatic species such as birds that use wetlands as a nesting area along the migratory routes between Africa and Northern Europe. This weak management of the river basin is also associated with illegal spills of water, an activity that pollutes the river, and with illegal withdrawals by farmers that use water for hydrophobic crops such as oranges and other citrus, reducing once again the flow and river vital parameters.

Indeed, another critical element for biodiversity is linked precisely to agriculture, and most of all to the implementation of citrus monoculture that, in the last century, has reduced the biodiversity of plant species both through massive use of soil and pesticides. Furthermore, the economic crisis in the agricultural sector has led to an abandonment phenomenon that exposes the territory to other risks, such as fires and an increase in desertification processes. Last, but not least, in the area there is a constant threat from organized crime which still exercises control over the territory and is involved in various economic speculation activities, including waste management.

6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?

Up to date, there have been several informal contacts with the Participatory Presidium, and we have also established a shared communication platform: a) a mailing list was created which includes all the researchers involved in the case study as well as the Presidium key reference figures; b) we opened a chat on WhatsApp for shorter and practical communications. In addition, we have launched a communication campaign for promoting the project through our social networks (both the DSPS and the Presidium itself).

In case of public field activities, invitation emails were sent to all the Presidium contacts through their mailing list. Workshop activities (see below) were also opened to other stakeholders in the valley: farmers, local organizations for the protection of biodiversity (such as LIPU, the local branch of the Italian League for Birds Protection; the Simeto Biodistrict, a biological agriculture association; Casa delle Acque and Saja, two farmers cooperatives; and SiciliAntica, an association for heritage protection and study). During these initial field activities, researchers were able to observe local dynamics, and to capture explicit and implicit social codes regulating relationships within the Presidium network.

This month (July 2023) we have also enrolled one of the Presidium members, Domenico Pappalardo, in our research team. He will start his PhD in anthropology with us in August, actively participating in the case study. We believe that this further joint venture will reinforce our cooperation, and strengthen partnership in the valley

6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?

1st Meeting - January 28, meeting on the banks of the river with some activists of the Participatory Presidium, and in particular with the videomakers of a local association called 'La Locomotiva'. In previous online meetings we chose together the key elements in the video: 'Esiste un Fiume', and later on we shot it.

2nd Meeting - February 25 at the 'Agorà social farm' in Santa Maria di Licodia (CT): meeting with a representation of the Participatory Presidium, mainly those responsible for the Presidium core activities and projects. The meeting was the first opportunity to present the Biotraces project to our societal partner, and to take common agreements for future collaboration.

3rd Meeting - March 22 online meeting to define timelines and methods for the initial mapping workshop, with the participation of several Presidium members.

4th Meeting - 14 April online. Since we had a lot of decisions to make, the meeting of March 12 continued on the 14th of April. Topics and participants were the same as on the 3rd.

5th Meeting - June 6 online meeting to analyze the results of the first workshop (see below), and to define the research questions to ask in the second workshop, on the basis of the main critical issues emerged in the first mapping exercise.

7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?

1st Workshop - April 29, 2023

The first workshop took place in Paternò (CT) at the headquarter of the Presidium, in the 'Museo della Civiltà Contadina' located within the complex of a refurbished slaughterhouse. The participants were members from our societal partner, but also several farmers from the Simeto Valley and some activists from associations that deal with environmental protection and other similar issues (i.e. bird protection - LIPU) or with the management of the water basin. After an introduction on Biotraces, we started our first exercise of community mapping. On a large map of the valley, participants were asked to identify areas of high environmental risk and areas of biodiversity resistance or where it is possible to intervene to bend the curve of biodiversity. Then, all the participants began to illustrate and motivate their mapping choices individually. This phase, initially foreseen as short, has turned into a series of very thick and dense interventions full of ideas for research. The areas identified in the mapping were many and all presented different peculiarities. All the interventions were recorded, annotated, and at the end a synthesis was made.

2nd Workshop - June 17, 2023

This second workshop can be considered a continuation of the first meeting. It took place in 'Villa delle Favare' in Biancavilla (CT), another municipality in the valley, and mainly involved activists from the Participatory Presidium. The absence of those who had attended the first meeting on 29 April and the low participation of other citizens was the main object of our discussion.

Initially, we did an in-depth collective analysis of the issues emerging in the first workshop, and we reflected on specific areas where it would be strategic to intervene with BioTraCes. Then, some of the Presidium members commented on a key symbolic object we had asked them to bring for the workshop to explain what they consider most relevant for the River protection and restoration. Finally, due to the low external participation of community members, the group afforded the question of how to improve

the active involvement of the society at large. The workshop thus turned out to be an important moment for self-reflection (both for us and the Presidium itself). We tried to identify reasons behind the low attendance of community members, and to envision possible approaches for enlarging citizens' participation in the future.

8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?

No. So far, just the aforementioned two workshops have been organized.

9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?

The real case study research is at a preliminary stage. The goal of this exploratory phase is to learn more about the study area and strengthen the connections with the societal partner by also spreading knowledge of the Biotraces project through a wider audience.

The first community mapping exercise serves to identify areas of interest for research, and to give a voice to some of the Valley's stakeholders. This mapping was followed by a deep listening and collaborative analysis of the key-elements emerging during the meeting.

It is still too early to illustrate the results, but the topic of aquatic resources represented by the 'body of water' in the hydrographic basin of the Simeto is deeply intertwined with other themes: the anthropic spaces of cultivated soil, on the one side, and the presence of urban centers in the valley, on the other side. Another issue emerged is the ambivalent nature of humans in the field of biodiversity. The intervention in agriculture, as well as in the management of water basins, does not seem to be univocal in its meanings. Indeed, it can represent at the same time a threat and an opportunity.

10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?

This area can be considered entirely marginal, as it is economically disadvantaged, affected by a strong "mafia stigma", and also subject to extractive economic activities. However, we need to better understand how much this mafia stigma is actually connected to the activities of mafia groups in the strict sense, or if instead it is a sort of self-attributed label, and in case what role this self-representation plays in the socio-political mechanics in the valley.

There is also a widespread phenomenon of migration in the valley. This phenomenon however seems almost invisible as well as underrepresented by local institutions. It is therefore necessary to better analyze it, especially because migrants are often involved in illegal hiring ('caporalato') in the agricultural sector. Reaching these marginal actors is certainly possible through trade unions (CGIL, and others).

10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?

Regarding children, by listening to them, reaching them in the places where they live and spend their time (schools, social clubs, parks and squares), and also by actively involving them in action-research activities. Several schools are already in partnership with the Presidium; the same is true for local scout groups. We can build on these contacts, and on the existing trust relations for including them in our mapping exercises and future research activities.

Regarding elderly people, the best way is to involve them as activators of memory and storytelling. In each municipality there are squares or places where elders meet at certain hours, and we will try to meet them there.

Joining elders and children is also a possible strategy. In future labs and memory labs we intend to do this.

11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSSENT, CONCERN, ETC.)?

For the moment we are using an anonymous form. At the end of each workshop we ask the participants to reply to this form in a circle, giving them enough time to reflect and write down their comments. In the form they can also express their concerns and dissent about the issues discussed and the approach used during the workshop, or about other critical matters. This is a very sensitive question, and surely, we will consider other methodologies in the future.

12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?

We are monitoring participation in each activity. At the end of each workshop, for instance, the research team and the Presidium representatives together produced minutes summarizing the main results, but also reflecting on the aspects of greatest interest and on eventual limitations emerged (level of participation, variety of actors involved, degrees of engagement in respect to the proposed activities, potential underlying conflicts, hidden dimensions in communication, etc.). This reflection is always fundamental before organizing the next activity.

13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?

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13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15th TO SEPTEMBER 15th?

We will have an internal meeting to further discuss this topic before the 15th of September

Many Thanks

5.8 University of Gothenburg

WP 2 – CASE STUDY MONITORING

TITLE AND AREA OF THE CASE STUDY: Holistic place-based forest views in south-western Sweden

UNIVERSITY PARTNER: University of Gothenburg

SOCIETAL PARTNER (if you have one): -

<p>1. WHO ARE THE RESEARCHERS IN YOUR TEAM "DIRECTLY" INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND)</p>
<p>1. Oscar Jacobsson, PhD Human Geography 2. Marie Stenseke, Professor Human Geography (will only be partly involved directly) 3. We will be joined by another researcher this autumn</p>
<p>2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERABLE TO HAVE ONE?</p>
<p>The Swedish case involves interacting with several individual forest owners in three case study areas in South-western Sweden. Many forest owners (but not all) are connected to an organization called Södra Skogsägarna, which has strong ties to the forest industry. Since we want to emphasize the voices of the forest owners themselves and not the voice of the forest industry, we decided to interact directly with the forest owners rather than the organizations that they are connected to. Our aim is to first establish individual relations with the forest owners and find out that way what organizations they are tied to, where their interests lie, if they collaborate in other ways, what their restrictions are and what other stakeholders that are involved. From that, we are going to work our way upwards and connect forest-owners with institutions and organizations through workshops.</p>
<p>2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY</p>
<p>-</p>
<p>3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?</p>
<p>Since we have not started fieldwork, we have no established relations as of yet.</p>
<p>4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?</p>
<p>We are planning to have an initial workshop this autumn, where – depending on the format – will also involve experts from the County Administrative Board and the Swedish Forest Agency. At a later stage we also plan to involve both of these along with forest industry organisations such as Södra Skogsägarna, and perhaps also the Swedish Society for Nature Conservation and WWF.</p>
<p>5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?</p>
<p>Forestry intensification with monocultural forests leading to reduction of habitat connectivity, loss of specific habitats and the removal of dead wood. Draining of forest wetlands for forestry purposes. Changes in species composition are related to forestry land uses but also climate change. From a historical perspective, large parts of forests in south-western Sweden have been used as grazing grounds for cattle before ca 1900, after which forestry has intensified and also forests planted on previously deforested areas. Today, forest grazing is rarely practiced which means that high biodiversity values has been lost during the last 100 years.</p>
<p>6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?</p>
<p>No interactions with the individual forest owners, but meetings and attendance of workshops for other projects with representatives from the Forest Agency etc.</p>

6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?
-
7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?
No.
8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?
No, but we are planning a workshop in September.
9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?
In one of our case study areas on the island of Hisingen north of Gothenburg we have conducted historical background research for the development of forest biodiversity. This serves as background information which is important to understand the development of the forest on Hisingen and its future prospects. The city of Gothenburg owns large tracts of forests on Hisingen adjacent to individually owned forest plots, and the city has grand plans for forest biodiversity in this area. The historical background research, conducted through aerial photos, historical maps and historical literature revealed that the island was almost completely lacking forests between 1600-1900, where instead the island consisted of rugged rocky hills, grazing lands and heathlands. When this area was reforested through plantation during the 20 th century for industrial purposes many previously developed biodiversity values have been lost. What the city wants to create now is something new, while older biodiversity values are more or less ignored. It will be interesting to see if or how individual forest owners reflect on this development.
10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?
Individual small forest owners have been a previously rather overlooked group in the public forestry debate in Sweden, and their own perspectives have also been somewhat ignored in previous research. We aim to include their own ideas and perspectives and bring forth this "marginal" perspective in Swedish forestry. Apart from this, we have not yet identified any marginalized group in our case study, but we will see what is encountered in the field and develop strategies if applicable to our case.
10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?
Among other methods, we will go out into field and start working with a snowballing method of selecting respondents for our interviews. This will likely connect us to forest owners of different characteristics and ages. We are not planning to involve children in this research.
11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSSENT, CONCERN, ETC.)?
Recognizing that small-scale forest owners is a diverse category of people, we will initially approach them through unstructured interviews, focusing on open-ended questions around some central themes but giving much space for the respondents own thinking. We will be careful not to impose our own views or values on the respondents,

especially considering the somewhat polarized forestry debate in Sweden which also connects to other political questions. Instead, we will try to create an inclusive space for different/differing views in order to enable participants to more fully express their views.

12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?

We will continually evaluate our methods and adapt them as we go along.

13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?

When it comes to the workshops where individuals will also connect and discuss with each other any ideas on how to create such a space would be very much welcome. This will also eventually include other stakeholders, which further emphasizes the necessity to create inclusive spaces for differing views.

13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15th TO SEPTEMBER 15th ?

August 23, 27-31, September 3, 4.

14. Deliverable 2.1, the "Case study plan" (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?

It is very important to describe what kind and type of output that will be needed from the case studies for the larger project. This should be carefully coordinated with both WP1 (especially Task 1.7) and WP3. It is especially important that this is coordinated closely with what type of information is needed for the analysis in the different tasks of WP3.

15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.

We would prefer another photo, but don't have one available at the moment. We will get back to you with this at a later stage.

Many Thanks

5.9 University of Twente

WP 2 – CASE STUDY MONITORING

TITLE AND AREA OF THE CASE STUDY: Foodpark Amsterdam; Neighbourhood Amsterdam Nieuw West

UNIVERSITY PARTNER: University of Twente (Corelia Baibarac-Duignan, Esther Turnhout, Tamalone van den Eijnden)

SOCIETAL PARTNER (if you have one): Foodpark Amsterdam (Natasha, Jeffrey, Iris, Teije, Danny Prisoka, Bonnie, Lucie, and more)

1. WHO ARE THE RESEARCHERS IN YOUR TEAM “DIRECTLY” INVOLVED IN THE CASE STUDY? (SPECIFY NAMES AND THEIR EDUCATIONAL/PROFESSIONAL BACKGROUND)

1. Esther Turnhout, Professor and chair of Science, Technology and Society at the Section of Knowledge, Transformation & Society (KiTeS)
2. Corelia Baibarac-Duignan, Assistant Professor on Regional Knowledge and Innovation Ecosystems at the Section of Knowledge, Transformation & Society (KiTeS).
3. Tamalone van den Eijnden, PhD Candidate at the Section of Knowledge, Transformation & Society (KiTeS).

2. WHY DID YOU SELECT THIS SPECIFIC SOCIAL PARTNER FOR THE DEVELOPMENT OF YOUR CASE STUDY? IF YOU DO NOT HAVE A SOCIETAL PARTNER YET WHY IN YOUR CASE IT WAS NOT POSSIBLE OR NECESSARY OR PREFERRED TO HAVE ONE?

We selected Foodpark Amsterdam as our societal partner because of their ongoing activist work to retain a plot of land at the edge of the city as an agro-ecological commons. This allows us to follow in practice, on the ground, how transformative change might occur by exploring the PEPE principles of the BioTraCes framework in relation to a specific example.

2A. (ONLY IF YES TO Q2) BRIEFLY DESCRIBE THE SOCIETAL PARTNER OF YOUR CASE STUDY

Foodpark Amsterdam in its current form, exists since summer 2021. It is a citizen initiative that aims to turn a fertile piece of agricultural land, the Lutkemeerpolder, into a food commons, a place for urban agriculture, biodiversity, social recreation and justice. In their efforts, to turn 43 hectares of the Lutkemeerpolder into a commons-governed food park, the initiative Foodpark Amsterdam aims to reverse the municipality’s current plans of turning the land into an industrial area for the building of distribution centres. The following organizations are listed on the website of Foodpark Amsterdam as co-initiators and represent important alliances: Grond van Bestaan, Voedsel Anders, Food Council MRA, Behoud Lutkemeer, Toekomst Boeren, Slow Food.

3. AT WHAT STAGE IS THE RELATIONSHIP WITH YOUR SOCIETAL PARTNER? WHAT LEVEL OF CONFIDENCE OR TRUST DO YOU HAVE ACHIEVED?

There is a strong general level of trust about each other’s intentions and values, as for example also our mutually affirmative online presence shows. In terms of rhetoric we – academic and societal partners – seem to be much in line.

Esther and Natasha from Foodpark Amsterdam already knew each other before this collaboration, so there was already a good level of trust before the BioTraCes collaboration started.

As Tamalone is following daily contact, weekly meetings, and important events, there is also a high level of trust in terms of sharing information and difficulties (in this sense, there is trust that no relevant information is withheld from us as researchers). On various occasions, they also told Tamalone that they trust her to represent the position of Foodpark Amsterdam (so they also trust us that we deal carefully with their information). There is also trust that financial resources will be spent in mutual agreement and to mutual benefits. However, as this last part has not been formalized yet, there also remain some questions which still need to be clarified.

4. BESIDES THE LOCAL PARTNER INDICATED IN THE PROJECT, DO YOU HAVE OR PLAN TO INVOLVE OTHER TERRITORIAL GROUPS? IF SO, WHICH ONES?

Generally, we are also involved with the other partners of Foodpark Amsterdam through fieldwork activities, as events are sometimes hosted through these organizations. An event that organized dialogue around the topics of food and freedom, for example, was organized Jeffrey’s network with Slow Food. Our social-ecological-mapping took place in

the localities of Futurelab Waag where Teije works in his daytime job (Teije volunteers for Foodpark Amsterdam outside his job).

We are also in the initial phases of planning a collaboration that might lead to a comparison with Food Forest in Utrecht.

As it is unclear at this stage how long the initiative of Foodpark Amsterdam might continue in its current form (because distribution centres may be built any time in the contested area) it might be the case that towards the end of 2023 we decide to expand our research interest and potentially shift our focus towards Foodpark Amsterdam Partners or related initiatives.

5. WHAT IS THE ECOLOGICAL IMPACT OF KEY DRIVERS OF BIODIVERSITY LOSS IN YOUR CASE STUDY AREA?

Land use change: The area used to be an agricultural area but recently the ordinance plan was changed to "industrial area" zoning. In the ordinance plan of 2000, the land use of the Lutkemeerpolder has been changed from agricultural area to industrial area for local businesses that need to be near Schiphol airport. This zoning was further changed in 2013, when any kind of company was invited to settle in the area. So far, no company settled there, however, topsoil in parts of the area has been removed, an asphalt road has been installed, and electric cables were laid.

[Bestemmingsplan lutkemeerpolder web.pdf \(behoudlutkemeer.nl\)](#)

6. WHAT KINDS OF INTERACTION DID YOU HAVE WITH YOUR SOCIETAL PARTNER OR OTHER RELEVANT STAKEHOLDERS UNTIL NOW?

Emails: About our collaboration and their general collaboration

Online Meetings: Weekly internal meetings of Foodpark Amsterdam are often online, in which Tamalone participates.

WhatsApp contact: Tamalone is part of the WhatsApp group of Foodpark Amsterdam

Interviews: Many informal interviews, 7 recorded ones (including the video interviews for the Foodpark Amsterdam Trailor)

Participatory observation: During weekly meetings since February 2023; in addition: 26.02.2023 Screening of Onder het Maaiveld; 26.02.2023 Lutkemeerrommetje; 02.03.2023 Danny's presentation of Bodemplan in progress in van Eesteren Museum; 12.03.2023 Certificat from Partu of the Animals and distribution centre monument; 13.03.2023 Brainstorm with Rebellious civil servants at Waag; 26.03.2023 Guided Tour around the polder with Iris and climate eggs market from Bodemzicht; 02.04.2023 Première of Meer in Film Hallen

5.05.2023 Liberation Dinner and Food Sovereignty; 08.05.2023 Presentation of Bodemplan in Pakhuis de Zwijger; 01.07.2023 Free the Soil Festival.

SES Workshop with core members of Foodmaker Amsterdam: 2.30h workshop at Waag with six core members of Foodpark Amsterdam

6A. (If applicable) HOW MANY PREPARATORY MEETINGS HAVE YOU CARRIED OUT WITH YOUR SOCIETAL PARTNER FOR CO-DESIGNING YOUR PARTICIPATORY ACTION-PRESEARCH?

In February 2023, when we did the video recording for the BioTraCes kick-off meeting, we also set aside some time to talk about our collaboration and research. We expanded on this initial discussion during the SES-Mapping workshop, in June.

7. HAVE YOU ALREADY ORGANIZED A FIRST PUBLIC WORKSHOP WITH YOUR SOCIETAL PARTNER?

Creative Design Workshop "Listening to the Soil". Organized by Corelia and Tamalone in collaboration with designer Lisa Mandemaker who led the workshop and conceptualized in dialogue with Foodpark Amsterdam around their current theme of giving soil a voice. The workshop took place within the territory of the Lutkemeerpolder. Participants: 40 pupils (most of them 16 years old) from local school, including many young people that recently moved to the Netherlands (as refugees, or otherwise).

8. HAVE YOU ORGANIZED ANY OTHER WORKSHOP WITH YOUR PARTNER ORGANIZATION?

During our SES workshop, we employed a mapping technique that was structured into three phases: on a very big piece of paper that covered an entire table and provided space for 7 participants, we started by asking all members of Foodpark Amsterdam (including Tamalone) to draw themselves in relation to Foodpark Amsterdam. This formed the outer circle. After that, in the middle ring, we mapped different types of relations between different elements of the SES, which we categorized into relations of power, synergies, conflict, and open questions. Finally, in the middle of the paper, we identified challenges and opportunities for Foodpark Amsterdam to successfully operate within the SES and implement their vision of turning the Lutkemeerpolder into a common.

9. HAVE YOU ALREADY STARTED ANY RESEARCH ACTIVITY ON THE CASE STUDY?

We will be using creative design, futuring and storytelling methods to broaden and shift perspectives, pluralize visions of the future and challenge dominant visions (e.g., about land use, biodiversity, green space in the city). One research interest is to understand how different sensorial modes of engagement afford different modes of deliberation, mobilizing different forms of knowledge and including different interlocutors (including more-than-human ones).

10A. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF LESS REPRESENTED AND MARGINALIZED GROUPS IN THE CASE STUDY, LIKE MIGRANTS, MINORITY RELIGIOUS GROUPS, VERY LOW STATUS FAMILIES, ETC.?

For a first design workshop (titled "Listening to the Soil") we invited pupils from a local school, who included children with migration and refugee backgrounds that (for the large majority) don't speak Dutch as their native tongue. Also, for our next activities, we aim to involve the culturally diverse and generally low-income population of Amsterdam Nieuw West, which illustrates marginalized populations in the Netherlands.

This might mean that we also have to locate a few activities within the neighbourhood and bring Foodpark Amsterdam in such a way closer to the participants, as Lutkemeerpolder is somewhat far from the actual neighbourhood and public transport connections are not in place, so walking or cycling would be otherwise necessary but possibly a hurdle at first for many.

10B. HOW DO YOU AIM TO FOSTER THE PARTICIPATION OF SOCIAL GROUPS THAT TRADITIONALLY DO NOT HAVE VOICE IN THE PUBLIC ARENA SUCH AS CHILDREN, ELDERLY PEOPLE, ETC.?

Doing activities that are particularly relevant to that specific age group. For example, the workshop "Listening to the Soil" was specifically designed for teenagers.

11. HOW DO YOU INTEND TO APPROACH POTENTIAL BARRIER-CONDITIONS THAT AFFECT THE CAPABILITY OF INDIVIDUALS AND GROUPS TO EXPRESS THEMSELVES IN THE PUBLIC ARENA (I.E. COMMUNICATING CONSENT, DISSENT, CONCERN, ETC.)?

We make it very clear that we are interested in the group process than in statements by individuals, so we allow people to participate in the various activities even if they do not want to be part of the overall research. There can be language barriers, so we also offer the workshops in different languages (Dutch and English), while in future activities we will consider also non-language centred methods (e.g., making and other creative activities).

12. HAVE YOU DONE ANY MONITORING OR EVALUATION ON THE ACTIVITIES CARRIED OUT UNTIL NOW, AND ON THEIR ABILITY TO DEVELOP A CO-LEARNING PROCESS? OR DID YOU PLAN TO DO ANY?

Photos were made from various activities. From the workshop "Listening to the Soil" short reflections from the students were gathered. Esther wrote a workshop report of the SES mapping workshop.
Tamalone irregularly made journal entries, but she aims to do this more regularly.

13. WHAT KIND OF SUPPORT FROM US DO YOU THINK YOU WILL NEED IN THE DEVELOPMENT OF YOUR CASE STUDY?

Sharing of best practices and lessons learned (from success and failure).

13. WE ARE PLANNING TO ORGANIZE BILATERAL MEETINGS WITH EACH PARTNER. WHAT ARE YOUR PREFERRED DATES OR WEEKS TO MEET OUR TEAM - FROM JULY 15TH TO SEPTEMBER 15TH?

From the 22nd of August onwards (with minimum 2-week notice and a doodle poll)

14. Deliverable 2.1, the "Case study plan" (deadline month 14), is expected to instruct the identification and in-progress implementation of the nine case-studies, explaining how to describe and analyze the main components of the social-ecological system in each case. In synthesis, the guide is a document with instructions for performing the case study, applying BioTracCes approaches and theories to the cases. WHAT DO YOU THINK SHOULD BE INCLUDED IN THIS GUIDE?

A critical reflection on case planning and the purpose of case studies (which may result from these forms to vary across partners), including how the contextual diversity will be addressed by the instructions to account for difference and local specificities, while allowing for some form of comparison.

15. In the Project Website there is a photo representing your case study, do you like it? Do you prefer to select another photo that really represent the research area and the specificity of your case? If yes, please send a high-resolution photo in annex with this form.

It is fine.

Many Thanks